LIBRARY OF PARLIAMENT

Canada. Parl. H.of C. Standing Comm.on Mines, Forests & Waters, 1959. Minutes of proceedings & evidence.
J 103 H7 1959 M5

DATE
1965
Apr 28

NAME - NOM
[redacted] M.P.

Canada. Parl. H.of C. Standing Comm.on Mines, Forests and Waters, 1959.

J
103
H7
1959
M5
A1

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament
1959

RECEIVED
FEB 24 1959
LIBRARY OF PARLIAMENT

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 1

THURSDAY, FEBRUARY 12, 1959
TUESDAY, FEBRUARY 17, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESS:

Hon. Paul Comtois, Minister.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20569-0—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

ORDERS OF REFERENCE

HOUSE OF COMMONS,
TUESDAY, February 10, 1959.

Resolved,—That the following Members do compose the Standing Committee on Mines, Forests and Waters:

Messrs.

Aiken,	Latour,	Murphy,
Baskin,	Leduc,	Nielsen,
Cadieu,	MacInnis,	Payne,
Coates,	MacRae,	Richard (*St. Maurice-Laflèche*),
Doucett,	Martel,	Roberge,
Drouin,	Martin (*Timmins*),	Robichaud,
Dumas,	Martineau,	Simpson,
Garland,	McFarlane,	Slogan,
Godin,	McGregor,	Stearns,
Granger,	McQuillan,	Woolliams—35.
Gundlock,	Mitchell,	
Kindt,	Muir (*Cape Breton North and Victoria*),	
Korchinski,		

(Quorum 10)

MONDAY, February 9, 1959.

Ordered,—That the said Committee be empowered to examine and inquire into all such matters and things as may be referred to it by the House, and to report from day to day its observations and opinions thereon, with power to send for persons, papers and records.

TUESDAY, February 10, 1959.

Ordered,—That the name of Mr. Hardie be substituted for that of Mr. Garland on the Standing Committee on Mines, Forests and Waters.

FRIDAY, February 13, 1959.

Ordered,—That Items numbered 186 to 213 inclusive, as listed in the Main Estimates of 1959-1960, relating to the Department of Mines and Technical Surveys, be withdrawn from the Committee of Supply and referred to the Standing Committee on Mines, Forests and Waters, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

MONDAY, February 16, 1959.

Ordered,—That the Standing Committee on Mines, Forests and Waters be empowered to print such papers and evidence as may be ordered by it, and that Standing Order 66 be suspended in relation thereto; and that the said Committee be granted leave to sit while the House is sitting.

LÉON J. RAYMOND,
Clerk of the House.

Attest.

20569-0—1½

REPORT TO THE HOUSE

THURSDAY, February 12, 1959.

The Standing Committee on Mines, Forests and Waters has the honour to present the following as its

FIRST REPORT

Your Committee recommends:

1. That it be empowered to print such papers and evidence as may be ordered by the Committee, and that Standing Order 66 be suspended in relation thereto.

2. That it be granted leave to sit while the House is sitting.

Respectfully submitted.

J. W. MURPHY,
Chairman.

MINUTES OF PROCEEDINGS

THURSDAY, February 12, 1959.
(1)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day.

Members present: Messrs. Aiken, Dumas, Granger, Gundlock, Hardie, Kindt, Korchinski, McFarlane, McGregor, McQuillan, Mitchell, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Payne, Richard (*St. Maurice-Lafleche*), Roberge, Simpson, Slogan, Stearns and Woolliams—(21).

Mr. Nielsen moved, seconded by Mr. McFarlane,

That Mr. Murphy be Chairman of the Committee.

Nominations having been closed on motion of Mr. Woolliams, seconded by Mr. Korchinski, Mr. Murphy was declared to have been elected Chairman, and he took the Chair.

The Chairman expressed his appreciation of the honour which had been conferred on him. He then read the Orders of Reference whereby the Committee had been activated and given certain powers.

On motion of Mr. Stearns, seconded by Mr. Payne,

Resolved,—That Mr. Nielsen be Vice-chairman of the Committee.

On motion of Mr. Woolliams, seconded by Mr. Aiken,

Resolved,—That the Committee recommend to the House that it be empowered to print such papers and evidence as may be ordered by the Committee, and that Standing Order 66 be suspended in relation thereto.

On motion of Mr. Aiken, seconded by Mr. Kindt,

Resolved (unanimously),—That the Committee recommend to the House that it be granted leave to sit while the House is sitting.

On Motion of Mr. Muir (*Cape Breton North and Victoria*), seconded by Mr. Aiken,

Resolved,—That a Subcommittee on Agenda and Procedure be appointed, comprising the Chairman and Messrs. Coates, Dumas, Latour, Martin (*Timmins*), Mitchell and Nielsen.

It was agreed that two films on northern Canada be shown at the next meeting of the Committee.

At 11.15 o'clock a.m. the Committee adjourned to the call of the Chair.

TUESDAY, February 17, 1959.
(2)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Cadieu, Coates, Doucett, Drouin, Dumas, Godin, Gundlock, Hardie, Korchinski, Kindt, Leduc, MacInnis, MacRae, Martel, Martineau, McFarlane, McGregor, Murphy, Nielsen, Robichaud and Slogan—(22).

In attendance: The Honourable Paul Comtois, Minister, and officials of the Department of Mines and Technical Surveys.

The Chairman read the Order of Reference dated February 13 whereby the 1959-60 Estimates of the Department of Mines and Technical Surveys were referred to the Committee.

The Chairman presented the First Report of the Subcommittee on Agenda and Procedure, as follows:

"Your Subcommittee recommends;

(1) That the Main Committee meet on Tuesday, February 17, and on Thursday, February 19, and subsequently as the Main Committee may determine.

(2) That the Main Committee order printed 750 copies in English and 250 copies in French of its Minutes of Proceedings and Evidence on the 1959-60 Estimates of the Department of Mines and Technical Surveys.

The said report of the Subcommittee was concurred in on motion of Mr. Dumas, seconded by Mr. MacInnis.

On motion of Mr. Coates, seconded by Mr. MacRae, the Committee agreed that its next meeting on Thursday, February 19, be at 10.00 a.m., and that subsequent meetings be at such times as may be recommended by the Subcommittee.

The Chairman reminded the Committee that the report of the Committee on the Estimates of the Department of Northern Affairs and National Resources during the 1958 session had included a recommendation that the Committee be activated during succeeding sessions with a larger membership than at present; he stated that he had this matter under consideration with the appropriate authorities with a view to the Committee being increased from 35 to 45 members.

A report of the Chairman, intituled "From Sarnia to the Atlantic Ocean", on his trip in August, 1958 through the Yukon and the Northwest Territories to inspect certain roads and to open new school facilities on behalf of the Minister of Northern Affairs and Natural Resources, was read to the Committee. On motion of Mr. Kindt, seconded by Mr. Aiken, the said report was ordered to be printed in the proceedings of the Committee of this date.

There followed the showing of the following films, namely,

Northern Giant—a record of a trip through the Yukon and the Northwest Territories in August 1958 to inspect certain roads and to open new school facilities.

Down North—on the economic development of the Mackenzie District.

Item 186—Departmental Administration—of the 1959-60 Estimates of the Department of Mines and Technical Surveys was called.

The Minister made a statement regarding the operations of his department and of the responsibilities of his department and of himself as its Minister.

On behalf of the Committee Mr. Dumas thanked the Minister for his interesting statement on the operations of his department, and the Chairman for his very instructive report on his trip through northern Canada during the past summer and for the showing of the film, Northern Giant, which resulted therefrom.

The Committee concurred in the suggestion that at its next meeting, the Committee consider Items 200 and 201 concerning the Geological Survey of Canada, as Dr. Harrison, the Director of that branch, would have to be away from Ottawa on duty thereafter; and that, thereafter, the Committee ask questions and make comments on the statements of the Minister which he had just presented.

It was agreed that the Subcommittee on Agenda and Procedure meet at 7.45 p.m. this evening to consider and recommend the times and dates of future meetings of the Committee.

At 12.55 o'clock p.m. the Committee adjourned until 10.00 o'clock a.m. on Thursday, February 19, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

TUESDAY, February 17, 1959.
11.00 a.m.

The CHAIRMAN: Gentlemen, it is eleven o'clock. The first item on the agenda is the order of reference, dated February 13, 1959, which is:

> "That items numbered 186 to 213, inclusive, as listed in the main estimates for 1959-1960, relating to the Department of Mines and Technical Surveys, be withdrawn from the committee of Supply and be referred to the Standing Committee on Mines, Forests and Waters, saving always the powers of the Committee of Supply in relation to the voting of public moneys."

The report of the sub-committee on agenda—that is our steering committee—is as follows: We met in my office on last Thursday. The sub-committee recommends that the main committee meet on Tuesday, February 17, Thursday, February 19, and subsequently as the main committee may determine.

The sub-committee also recommends that the main committee order to be printed 750 copies in English and 250 copies in French of our minutes of proceedings and evidence in connection with the 1959-60 main estimates of the Department of Mines and Technical Surveys.

Is that agreeable?

Mr. DUMAS: I so move, Mr. Chairman.

The CHAIRMAN: Do we have a seconder?

Mr. MACINNIS: I second the motion, Mr. Chairman.

The CHAIRMAN: All in favour? I declare the motion carried. Now we must take a moment to decide as to the dates and times of meetings subsequent to next Thursday. You may, if you wish, suggest an earlier meeting for Thursday, let us say, at 10 o'clock? What about that?

Mr. DUMAS: Ten o'clock would be all right, Mr. Chairman.

The CHAIRMAN: Is that agreeable to the other members of the committee? We have a lot of work to do. Will someone so move?

Mr. COATES: I so move, Mr. Chairman.

Mr. MACRAE: I second the motion, Mr. Chairman.

The CHAIRMAN: All in favour? I declare the motion carried.

May I say that in view of the fact that there are quite a number of members who would like to serve on this committee—I did not speak to you before about this, Mr. Dumas. I am sorry, I just learned about it on Saturday in our official report to the house—we asked that the committee be enlarged, among other recommendations; and it has been suggested in view of the desire of many members to serve on the committee that we enlarge it to, let us say, 45, which would be ten more than we already have. That would give a wider distribution from all the provinces—and we do have the Yukon and Northwest Territories represented.

Does that idea meet with your approval?

Mr. DUMAS: Will this question be brought to the attention of the whips?

The CHAIRMAN: It will be; and they will take it up with the House Leader. It has to be a motion before the house by way of a resolution.

How would it be if the sub-committee met some time this week and decided upon meetings next week? Would that be all right with you, Mr. Nielsen?

Mr. NIELSEN: Yes.

The CHAIRMAN: In view of the showing of two pictures this morning, as I said last week—even good pictures are not often seen by interested people if they are shown at an inconvenient time—it was suggested that we should show this morning two pictures, one taken of the trip to the Yukon and the Northwest Territories, when I represented the minister, and when we had a television team from Regina. The picture will cover a good part of the area which some of you members, I hope, will be able to take in this year on our proposed trip to the Yukon and the Northwest Territories.

The other film was taken by the National Film Board of Ottawa about a year and a half ago. In fact, in preparation it took about a year and a half to make.

I thought before we showed these pictures I should make my report to you concerning my trip.

Will you please distribute these copies, Mr. Jones? I have for distribution to the members of the committee mimeographed copies of my report, and the Clerk of our committee might perhaps read it, if you would like to have that done. I would like to have it on our record as part of our proceedings.

The CHAIRMAN: Now I shall ask Mr. Jones to read this report.

CLERK OF THE COMMITTEE: Mr. Chairman and members of the committee: This report is entitled "From Sarnia to the Arctic Ocean", it was written by Mr. J. W. Murphy, M.P., and it reads as follows:

FROM SARNIA TO THE ARCTIC OCEAN

One of Sarnia's most famous sons was a former Prime Minister of Canada—Alexander Mackenzie. The name had already been a famous one in Canadian history through the discovery of the great river that bears the name of one of the Prime Minister's clansmen—another Alexander Mackenzie. He travelled to the Arctic to discover an entirely new part of this country—and in September of this year, with perhaps as much wonderment and not a great deal more knowledge, I set out to do the same.

One of the most heartening things in the last few years in Canada has been the growing realization by Canadians everywhere of the importance of the tremendous area that lies north of all our provinces. For some ninety years the achievement of the task of Confederation in linking the east and west of Canada has occupied all our efforts and energies—occupied them so much that we tended to forget that we were only living and working in a tiny portion of this vast country. Canadians did not become fully aware of their inheritance until the present Prime Minister of Canada, the Right Honourable John Diefenbaker, drew their attention to the vastness that lay still undeveloped—and to the great wealth that it undoubtedly holds. This new realization—and the hopes and aspirations that are attached to it—has been called "The Vision"—by some in disparagement. It is not something to disparage. The Bible says that "without vision the people perish." While it would be far from true to suggest that Canada would perish without an awareness of the possibilities that the vision of northern growth holds, it would certainly be true to say that Canada can never achieve the full growth and stature of which it is capable unless it assesses the wealth that it has in the north and takes the measures that are necessary to give it reality.

To see this great area that holds so much of hope and yet is so largely unknown by Canadians everywhere, I left Edmonton by air on September 8th and the same evening landed in Whitehorse, the capital of the Yukon Territory. No one who lands there can help but be impressed with the bustle and energy, the coming and going, the constant activity that is a part of the place. Only fifteen years ago it was a sleepy town of three or four hundred. Today it is

a growing city of nearly six thousand. In the old part log cabins, shacks, and mouldering husks of stern-wheel steamers stand side by side with the new diesel locomotives of the White Pass and Yukon Railway, a large office and administration building that is already too small, and an imposing new hospital that is to serve not only Whitehorse but all the Yukon Territory. The city's growth has required a bridge to be put across the Yukon River to a new subdivision on the east side—a subdivision with tree-lined streets and houses that would fit in any community in the south. A few miles upstream is standing evidence of the country's confidence in the growth of the Yukon Territory—a new power plant being built by the Northern Canada Power Commission to harness the waters of the Yukon River as they flow over the rapids that were made famous in the Klondike gold rush. Whitehorse is a good place to begin such a tour. It brings disillusionment to anyone who thinks of the north as an area of ice and snow and dog teams. It sets the tone—a tone of bustle, of growth, and of optimism.

After two busy days in Whitehorse I moved on by air—down stream along the Yukon River that once carried all the traffic of the Yukon Territory and now has not a single cargo vessel moving on it. All the traffic of the Yukon—machinery, mine concentrates, food, and all the other necessities of life—move either by air or by truck over the steadily growing network of roads and highways. At Carmacks a bridge is being built across the Yukon River at a cost of over $800,000—soon to be followed by two other bridges that will eliminate the ferries that limit the use of the main artery of the Yukon—the road from Whitehorse to Dawson.

The heaviest traffic on the road comes from the United Keno Hill mine at Elsa—a mine that is the largest silver mine in Canada and one of the largest in the entire world. An idea of the wealth of the ore that is produced in this mine can be gained when one realizes that it is capable of being competitive after going by truck for three hundred miles to Whitehorse, then by narrow gauge railway for one hundred and fifty miles to Skagway, by boat about one thousand miles to Vancouver, and finally by train another three hundred miles or so to Trail for smelting. This presents a perfect demonstration of the point made by the Honourable Alvin Hamilton speaking to the Northern Development Conference in Edmonton on September 17th, when he said:

> In spite of what I have just said, the hard truth is that the mineral resources of the territories are still relatively unprospected and unexplored. Since economic expansion will depend in large measure on the rate at which their exploration progresses, we are eager to help in hastening the process. It is clear that the most effective way of doing this is also the surest way of promoting the development of known resources. That is by reducing the problems facing the northern economy.
>
> The chief problem, and in many ways the only important one, is transportation. The limited transportation facilities in the territories today leave almost their whole area inaccessible to economic development. Where they do exist, the distances from markets and sources of supply and the small, unbalanced volume of traffic make transportation the largest single cost item in mining and other industrial operations. Transportation is the main reason why the territorial economy is a high-cost economy, and reducing the problem it presents is the great key to future development.

One of the main purposes of my trip, indeed, was to see the routes of some of the roads the government plans to build in the northern territories—and to witness the progress of a few that are already under way. The Minister of Northern Affairs had hoped to do this himself but the pressure of duties in Ottawa made it necessary for him to stay behind and I had the good fortune to take his place.

Close to the point of origin of one of the principal roads now being planned is Dawson—perhaps the most famous place in the entire Canadian north. After the discovery of gold on the Klondike in 1898, it grew within three years to be a city of twenty-seven thousand people—the fourth largest city in Canada west of Toronto. Today Dawson's glory is a thing of the past. It is a town of perhaps five or six hundred people, with buildings that bear witness to its former greatness, and memories that call them back. However, Dawson is far from dead. Gold is still mined by hydraulic means and through the use of some of the largest dredges in the world—dredges that stand as high as seven or eight storey buildings. West of Dawson a new discovery of asbestos is being investigated and may shortly come into production. But by far the most interesting thing lies north of Dawson—an area quite unsettled and almost unknown where there are prospects that there may well be a very large and very rich oil and gas area. It is into this region that the government now plans to construct one of its new development roads.

Speaking of this area in Edmonton on September 17th Mr. Hamilton said:

> The world's greatest search for oil and gas, in terms of the area involved, is right now under way in the Yukon and the Mackenzie district of the Northwest Territories. Conducted by ground parties, helicopters and other aircraft, it covers more than 70,000,000 acres, or about half the area of this province of Alberta and extends from the 60th parallel to the delta of the Mackenzie river on the Arctic coast. This exploration has been gaining momentum for the past eight years, and most recently the area covered by oil exploration permits has doubled in just one year. Expenditures on exploration now total several million dollars annually and will mount substantially higher in the future.

The road to reach the central part of this area would begin about twenty-five miles east of Dawson and go straight north from there to cross the Arctic Circle. I flew over it at low altitude—up the valley of the North Klondike river across the height of land to the Blackstone and Peel rivers and over the high barren plateau that is the Eagle plain. The entire route has been surveyed and much will soon be cleared. With its completion the costs of exploration and development will come down sharply and the prospects of early operation will greatly increase.

From the Eagle plain it is only a skip and a jump—as things go in the north—across the Richardson mountains to Fort McPherson which lies at the edge of the Mackenzie delta. It will be a rugged route to put a road through, but one day it may be worthwhile to carry the transportation link across from Eagle plain. When and if that day comes, the northern part of the Yukon will have two channels of access—one from the Pacific and the southern Yukon —and the other by way of the Mackenzie river from the north.

At Fort McPherson it was my privilege on behalf of the Minister of Northern Affairs to open one of the new hostels that the government is building to provide for the education of Eskimo and Indian children who until now have not had adequate opportunity for the training that will enable them to face the future. Our failure to educate these children was not perhaps too serious as long as they could live adequately in their traditional way by hunting and fishing. Those days, unfortunately are past, and the people must be adjusted to something new. Speaking of them in Edmonton on September 18, the commissioner of the Northwest Territories, Mr. Gordon Robertson, had this to say:

> The standard of living of the northern Indians and of our Canadian Eskimos is far below the national average—indeed below what is regarded as poverty anywhere else. For many of them life has become precarious because of the drastic decline in the supply of caribou, the

diminishing prices of furs and other factors which I will not elaborate at this time. Indeed, the catastrophic deterioration of their economy is one of the real tragedies of Canada today. The government is doing everything in its power to ease the plight of those Eskimos and Indians who are faced with hardship and to raise their standard of health, education and economic position. Northern development activities are closely tied in with these efforts because they help to improve communications and to provide new methods of earning a livelihood for people who can no longer sustain themselves from their traditional pursuits of hunting, trapping and fishing. Therefore in planning government expenditures of the north we must consider not only the physical development aspect but also the possible consequence for our native population.

One hundred Indian children from the lower Mackenzie River and the northern Yukon will live in the hostel at Fort McPherson and receive their education at the school there. Some of them will come from Old Crow in the Yukon which it was also my privilege to visit. But not all the children of Old Crow will go to Fort McPherson, for a new day school is going to be built in their own village. It will be built of logs—cut by the Indians themselves and erected by them. While I was there we consulted the Indians as to the place they wanted the school to be—and it is going to be built where they want it. As the sun poured down and made it impossible to believe that I was north of the Arctic Circle, I turned the first sod.

Most of the Indians of Fort McPherson saw us off as we left for Aklavik, about fifty miles due north. Flying over the delta of the Mackenzie River is an unforgettable experience. The vast array of lakes and twisting river channels that, like a sponge, soak up the drainage of half a continent from Alberta and Saskatchewan through the entire length of the Northwest Territories, is something once seen never to be forgotten. In the midst of it is the town of Aklavik —built on a bank of silt, surrounded by water, and quite incapable of becoming the administrative centre that is needed at the northern end of the Mackenzie River. To have built anything more there would have been throwing good money after bad, so the government decided to move the administrative facilities to a completely new town—Inuvik on the east side of the delta.

Before visiting Inuvik I had a look at the Arctic Ocean at Tuktoyaktuk. There one gets some impression of what the DEW line has meant to northern Canada. It is the location of one of the DEW line stations and it is also the harbour from which supplies move east and west in the short summer season to bring all the needed commodities to the stations along the coast. As I flew over the harbour with the bright autumn sun pouring down, six large vessels to carry oil and dry cargo rode at anchor—their summer task of supplying the line completed. It is because of all this growth in the farthest north—both military and civil—that a new town had to be created near the mouth of the Mackenzie River.

Inuvik is as different from both Aklavik and Tuktoyaktuk as anything could be. It has a superb location on the rising bank of land east of the Mackenzie. The area is covered with white birch and spruce that make it as attractive as any town 2,000 miles to the south—and with skill and care these trees have been preserved to break the wind and add to the amenities of this first modern Canadian town within the Arctic Circle.

Inuvik will be a novel town in many ways. None of its large buildings and few of its houses will have a chimney—for all of them will be heated from one large central plant. Out of that plant through "utilidors" running above the ground will come steam circulating at 350° temperature. The steam in its insulated lines will keep the sewer and water lines above freezing so

that they can provide the needed utilities for the entire town. When the steam lines enter each house or building they will, through heat exchangers, provide the heat that is needed to keep all the schools, offices, and living accommodation warm. There is no other town like it in Canada and it will be a centre of which Canadians can well be proud when it opens, probably about 1960.

The school, too, will be something novel. It has twenty-five rooms and it will be attended by Indians, Eskimos, white children and children of every mixture of blood that the north has to offer. There will be no colour line in Inuvik and the children will grow up thinking of one another, not as Eskimos or Indians, but as fellow Canadians doing a job in the new north. The Indian and Eskimo children may come as much as one thousand miles away to live in two new hostels that are nearly complete—each to be the home of 250 children as they go to school and receive the training that will equip them for the future.

From Inuvik it was with genuine regret that I left the Arctic Circle and flew "up south" to Norman Wells where the first producing oil wells in Canada's northern territories provide the supplies for all the lower Mackenzie and the Arctic coast. From there we flew south to Fort Simpson—perhaps the most attractive settlement in the entire Northwest Territories.

Anyone in southern Canada who thinks of the north as a land of ice and snow should visit the experimental farm at Fort Simpson. Mr. Gilbey, its energetic and able superintendent, grows over seven hundred varieties of plants. The day I visited the farm they were picking plums—believe it or not. Mr. Gilbey has trained the trees to grow close to the ground—only twelve or fourteen inches above it. The winter snows cover them and protect them from the biting cold. In the warm summer, with the almost constant sunshine, they grow rapidly and the plums were superb. Other crops too have been grown and more and more is being learned about the possibilities of agriculture and gardening throughout the entire area.

That night—the night of September 15, only one week after my arrival in Whitehorse—I reached Hay River and was once more back on a highway. It felt like the deep south. Hay River, on the shore of Great Slave Lake, is the northern terminus of the Mackenzie Highway and out of it every year are shipped some 7 million pounds of lake trout and whitefish to the markets of eastern Canada and the United States. It is a thriving community—but one wonders just what the future will hold after the railway reaches Pine Point, some seventy-five miles to the east. Will it help Hay River or will it mean that its greatest days are past? I do not think it should worry. In the growing north there will be plenty of room for Hay River and Pine Point too.

From Hay River one of the new development roads the government has under construction leads around the west end of Great Slave Lake to the Mackenzie River—from there north and east to the mining town of Yellowknife. When the road is completed in the autumn of 1960 it will be possible for the first time to drive to the largest community in the Northwest Territories.

Yellowknife is a thriving city—with cement sidewalks, paved streets, an excellent airport, two large, producing gold mines and some of the most energetic people to be found anywhere in Canada. It is, moreover, the jumping-off place for development in the entire mineralized area north of Great Slave Lake. No one in Yellowknife has any doubts about its future.

At Yellowknife there is one of the most interesting symbols of the new approach by the government of Canada to our northern territories. It is a new school that has been built for the specific purpose of combining high school education with commercial and technical training for children and adults from all parts of this area. Beside it is a hostel where 100 people—youths or adults, Indian, Eskimo or white, male or female—can live while they are educated and trained. Until now there has been no place in the entire Northwest Territories

where the kind of training could be given that will fit the people of the north for the trades that will increasingly be required as the north develops and grows. The school at Inuvik will later provide such training and later still another school of the same kind will be opened at Frobisher Bay on Baffin Island. These are the tools that will ensure that the bounty of the north is not drawn off to help people elsewhere but goes to assist those who have the first claim upon its wealth—the Indians, the Eskimos, and the other original settlers of the area.

On September 17 I left Yellowknife and landed in Edmonton. It was only nine days since I had left, but in those nine days I gained a completely new idea of the character and the possibilities of the Canadian north. It is an area more Canadians should get to know for in it, beyond any doubt, lies much of the future of this country.

The CHAIRMAN: May we have a motion to have this report printed in the minutes ?

Moved by Mr. MacInnis, seconded by Mr. Kindt.

Agreed.

The CHAIRMAN: We will now view the films. In the meantime we will have a booklet distributed to the members of the committee so far as they are available. It is a complimentary booklet on the Yukon from the United Keno Hill Mine, which you will find very, very interesting reading.

(At this point two films were shown entitled "The Northern Giant", and "Down North", respectively.)

The CHAIRMAN: Gentlemen, I hope these pictures will prove of some assistance to you.

Mr. Kindt, I am told that the drilling is 8,000 feet and more. You asked about it a few minutes ago.

Now, gentlemen we are on Item 186, which to be found at page 40 of the estimates for 1959-60 of the main estimates of the Department of Mines and Technical Surveys.

ADMINISTRATIVE SERVICES

Item 186 Departmental Administration $687,289

I shall now, with your permission, ask the minister, who is with us this morning, to make his statement.

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): Mr. Chairman and members of the committee, we have been given a very vivid narrative of our chairman's visit to our northern Canada. We have been shown two pictures as companion films.

I might say that you are very lucky, Mr. Chairman, but you certainly deserved such an opportunity.

I like to think that my department is playing no small part in assisting in the development of this most promising part of our country, as you will judge from the statement I have prepared for this occasion. I am pleased again to be before your Committee.

Your report following our appearance last year was most heartening indeed. You agreed on the importance of my department's activities and even suggested that they should be expanded to meet our country's growing needs.

Again I welcome the opportunity of presenting to you our plans and related expenditures for the coming fiscal year and of inviting questions and discussion in reference to our work.

Last year I stated that we would endeavour to have the annual report of my department for the calendar year 1958 available to the members of your

committee in time for these hearings. However, this was not possible in view of the advanced date of the hearings and instead we have distributed a docket, the contents of which provide a good cross-section of our main activities during 1958. Time has not permitted a translation of some of the items in the docket.

As you can see from the contents of the docket, we covered a lot of ground in 1958 both in our field work and in our laboratories. The mineral industry in particular will benefit from this work, and to a varying degree various other segments of the Canadian economy will benefit as well.

Turning now to the coming fiscal year, we are asking for an amount of approximately $36,066,000 to cover our anticipated expenditures during the year. These will include payments estimated at $11.5 million under the Emergency Gold Mining Assistance Act. As you know this act was amended at the last session of parliament to allow for a 25-per cent increase in payments to those gold mining companies receiving cost aid under the act.

The expenditures will also include an amount of $1,074,400 for Administrative Services which is comprised of $697,300 for departmental administration, $281,800 for the work of our Mineral Resources Division, a unit of head office, and $95,400 for administration of the Explosives Act.

For the work of our Surveys and Mapping Branch an amount of approximately $11.8 million has been placed in the estimates.

In this work we intend this year to make a start on a research project in the Polar Basin. The project stems from the decision reached at Geneva recently to the effect that the resources of the continental shelves belong to the adjacent nation. The right of ownership of these resources places on the countries concerned the responsibility for developing them. The region in question extends for about 1,500 miles along the northern rims of the Arctic Islands and for distances up to 200 miles northward into the Arctic. Our work this year will be reconnaissance in nature to obtain a rough idea of the general characteristics of the shelf, the equipment needed for such a project, the best type of transportation and so on. It will be carried out in the 300-mile area centred on Isachsen and Ellef Ringnes Island and extending 100 miles out to sea.

An amount of $567,800 has been placed in the estimates for this project. The team of experts will leave for the area about March 1.

To reinforce the fleet of the Canadian hydrographic service, it is planned to start work this year on the construction of a ship the C.G.S. "Hudson" that will cost an estimated seven million dollars. She will be designed not only for hydrographic surveying but for all types of oceanographic research, including submarine geology.

We are also constructing two new tidal stations in the Arctic. One of these is at Alert on the northeastern tip of Ellesmere island, and will be used largely for long-term research on studies in changes in sea level. The other is at the mouth of the Mackenzie river and is needed in connection with present and future development in the area.

Our field work this year for the establishment of survey control for mapping will include a start on the revision of topographic maps of portions of Nova Scotia and New Brunswick; the continuation of surveys required for the study of the power possibilities of the Yukon river basin; and the extension of survey control for large blocks of detailed and reconnaissance mapping in Quebec and Labrador.

An amount of $1,900,000 appears in our estimates to meet the requirements for aerial photography, which work is done under contract to the companies concerned. We have been faced with a considerable increase in

requests for large-scale photography during the past two years, a result, probably, of the widening appreciation of the value of such photography for planning and of the diversity of its uses.

The estimates for 1959-60 contain an amount of approximately $3.5 million for the geological survey of Canada. I might note here, by the way, that the badly needed new building on Booth street to house the staff of the survey is nearing completion and should be ready for occupancy in a few months.

The docket you received includes an information circular giving the main results of the geological survey's field activities in 1958. In reference to this circular I should like also to direct your attention to the clipping on the display board from a recent issue of The Northern Miner telling of the interest various companies are showing in the mineral possibilities of two widely separated areas in Canada as a result of the circular.

Last year the survey had 77 parties on field work. This year we expect to field 80 parties.

Our plans call for a considerable expansion of our ground water work, especially in the prairie provinces. For the past number of years our ground water studies have been confined mainly to providing what may be termed first-aid to areas that have faced serious water-supply problems. We now intend to get down to a systematic study of ground water geology.

Since 1952 we have been giving top priority in our geological work to the reconnaissance mapping of large areas in order to keep abreast of mineral resources development requirements. In this connection we hope in 1959 to complete the geological reconnaissance of what we call 'Operation Fort George', a 115,000-square-mile area lying immediately east of James bay in Quebec. We also intend to carry out three other such projects. One of these, named 'Operation Pelly', will cover a 20,000-square-mile area in southeastern Yukon. Another, named 'Operation Coppermine', will cover some 60,000 square miles in the western portion of the Canadian shield in the northern part of Mackenzie district, Northwest Territories. In the third, the geology of 125,000 square miles of Banks and Victoria islands in the Arctic archipelago will be mapped. The interest in the mineral potential of these and other arctic and subarctic regions is steadily mounting.

Included in this year's field program is a proposed aeromagnetic survey of an area in Ontario and Quebec bounded roughly on the west by a line joining Parry Sound and Englehart and extending north of Ottawa and eastward to Lake Chibougamau in Quebec. Information gained from the survey will be used in studies of the geology of the region.

I have mentioned Canada's responsibility for developing the resources of its continental shelves. In part, this responsibility will call for a thorough survey of the geology of the shelves in the years ahead in order to evaluate their mineral possibilities. To do this will require the recruiting of a qualified staff of geologists, a matter we now have under active consideration.

The answer to many problems confronting geologists today is to be found only in research which provides the scientific tools needed to probe the earth's geological secrets. To this end the geological survey is giving increasing attention to fundamental research in various fields, one of these being in the development of what is known as the carbon-dating technique. In this work we are endeavouring to determine the best applications of this important technique in the study of geological problems relating to age-determination, with particular reference to our studies in pleistocene geology.

Through funds provided by parliament the Geological Survey has been providing grants-in-aid since 1951 to Canadian universities in support of research projects. Our estimates for 1959-60 contain an amount of $50,000—the same as last year—to cover these grants. We had 40 applications last year

for amounts totalling $100,000 and although all but a few of them were deserving cases, the funds available permitted us to accept only 25. Quite apart from their other benefits, the grants encourage the students to remain in Canada, a very desirable feature. We are finding also that they are tending to encourage private companies and organizations to provide grants.

To finance the activities of our mines branch, we are asking for approximately $3.8 million for fiscal year 1959-60.

Demands for technical assistance from this branch have been increasing and solving of the problems arising from these demands is requiring greater attention to basic research. Among the more important of these problems is that of ground stress in the deeper underground workings. Much of our mineral wealth is obtained from mines that have already reached considerable depths. For this and other reasons, studies into the phenomena of ground stress are a necessity and the branch has been devoting much attention to such work.

Other long-term research of potential value to the mineral industry under way in the branch includes work on: the development of a pressure leaching technique which makes it possible to recover elemental sulphur from Sudbury nickel ores along with nickel and copper; an economical method for extracting manganese from certain low-grade manganese deposits; and direct methods for the reduction of Canadian iron ore.

In its study of Canada's non-metallic minerals the branch now has some ten major research projects under way. In one of these a comprehensive examination and study is being made of Canadian clays and shales. This information will provide assistance to brick and tile manufacturers and to other producers of ceramic products on processing problems and will be of aid in the selection of suitable raw materials.

Research on the fossil fuels, especially in relation to their production, beneficiation and utilization, will continue to receive major attention from the branch. The bituminous sand deposits of northern Alberta loom large in this field of endeavour. The branch, in cooperation with the United States Atomic Energy Commission and Richfield Oil Corporation, is now giving careful study to the feasibility of a nuclear explosion as a means of recovering the oil in the sands.

In its work on metals and alloys the branch is continuing its endeavours to improve the behaviour of existing alloys and to develop new alloys associated with such projects as missiles and atomic energy applications. In cooperation with the primary and secondary zinc producers and users in Canada it has initiated work under the name of the Canadian Zinc Research and Development Committee. It has undertaken two research projects to increase our knowledge of the behaviour of zinc and its alloys in certain applications, to produce better alloys, and to enhance the reputation and sales of Canadian zinc through technological advances.

In our estimates for 1959-60 is an amount of approximately $1.6 million to finance the activities of the Dominion Observatories.

Studies of outer space have been very much to the forefront in recent years and in Canada the dominion observatories is the organization chiefly interested in such studies. As a further contribution to this work we now have under construction near Penticton, British Columbia, a radio telescope 84 feet in diameter. This instrument will enable a study of the hydrogen clouds that are the most characteristic features of the more distant parts of outer space, in which stars and planets have their origin. The same instrument will probably be used to some extent to investigate the physics of the atmospheres of the planets Mars, Jupiter, Saturn and other members of our solar system.

At Ottawa we are developing a new mirror transit instrument never

hitherto used in astronomy, the purpose being to study the positions and motions of stars and members of the solar system. These observations have application in surveying, nagivation and accurate time determination.

Also at Ottawa, new instruments will be developed to study the violent storms on the surface of the sun.

In arctic Canada steps are being taken to establish geophysical stations in the northern posts of Alert and Mould bay. They will be used for a number of purposes, including a study of earthquakes in the Arctic islands and the adjacent Arctic Ocean and a study of the daily variations of the earth's magnetic field.

We are asking for an amount in the neighbourhood of $359,000 to finance the activities of our Geographical Branch in the fiscal year commencing April 1 next.

Just recently this branch published the English edition of the new Atlas of Canada and already close to 4,000 copies have been ordered. Work on the French edition is being pushed to the limit but owing to the magnitude of the task and the physical limitations of the available facilities it will be several months before it is ready for distribution.

In our land-use mapping program we plan this year to continue the work in Saskatchewan and British Columbia.

In conclusion, Mr. Chairman, may I state that the funds we are requesting will enable us to continue to render a service to industry that, over the years has proven to be factor of the greatest importance in furthering the developing of Canada's mineral potential. There is a great and increasing need for the benefits of research in this development and the funds will enable us to keep pace with this need. They will also enable us to maintain our researches in fields other than those directly associated with mineral development at a level comensurate with the role that Canada must play in world affairs in this age of scientific achievement.

In closing I would like to thank all the officers and employees of my department for the excellent cooperation I have received from them and for their thorough and conscientious work.

Mr. Chairman and members of the committee, I thank you all for your kind attention.

The CHAIRMAN: Thank you, Mr. Minister.

Mr. DUMAS: Mr. Chairman, we are very grateful to the minister for giving us a resume of the activities of his department during the year 1958.

I am very pleased also to see that the department has seen fit to prepare a report of twenty-four pages, being a review of the activities of the past year. I understand that this will be translated into French as soon as possible. Also I suppose it is the intention of the department to have this prepared in the form of a pamphlet which can be distributed in the near future.

You will notice on page two of the review of activities for 1958 that there is special mention made of Mr. W. H. Miller who was Director of the Surveys and Mapping Branch until November of 1958. Mr. Miller was retired on that date. You will also notice he joined the staff of the Topographical Division of the Geological Survey in 1913; that is 45 years of service to our country.

Last summer all of you met Mr. Miller when he was in attendance at this committee. You must have noticed that he was really devoted to the department. Since Mr. Miller was retired, unfortunately he became ill, and is at present in hospital. I am sure I am speaking for all the members of the Committee when I say that first of all we wish to extend to Mr. Miller our sincere appreciation for what he did during his term with the different branches, embracing not only the Geological Survey and Mapping Branch but also all the branches connected with the Department of Mines and Technical Surveys.

I am sure that all the friends of Mr. Miller in the department were sorry to see him leave and that they are sorry today to hear that he is ill in hospital when perhaps he should be profiting from his retirement by having more leisure and enjoyment after all those years which he has given to our country, Canada.

I wish to move a vote of thanks to Mr. Miller for his work, and we also wish his speedy recovery and return to good health. When he is out of the hospital and in good health he knows we will be pleased to have him visit us here while we have our sittings, if we have not adjourned.

The CHAIRMAN: Thank you. I think, without a seconder, that you have very competently expressed the opinion of every member of this committee.

The next meeting of your committee is on Thursday morning at 10 a.m. With your permission and in view of the fact that Dr. Harrison, the Director of the Geological Survey of Canada, expects to be away for some time, we will ask him to appear next Thursday morning at 10 a.m. I hope this will not inconvenience anyone. Is that satisfactory?

Agreed.

Mr. DUMAS: This will be satisfactory, Mr. Chairman, in view of the fact that the director has to be away. We will be pleased to take this item on Thursday morning.

With your permission I would also like to add a word or two. We were very pleased to hear at the beginning of this meeting today that Mr. Murphy had been appointed to represent the minister in a tour of the north, and more especially the Yukon. It was certainly a very interesting trip, and we have now looked at the two pictures with great interest; they were very instructive. The report of our Chairman is also complete.

However, although I do not like to close this morning's meeting on a bad note, you will notice on the first page a paragraph which I suggest the Chairman might have dispensed with, where it says that the Prime Minister was the first one to make Canadians fully aware of the Canadian north. We know that even during the last war the oil from Norman Wells was being used for the great benefit of this country. We know also very well that all the mapping of the north has been completed. This is something which should be kept in mind.

The CHAIRMAN: Thank you, Mr. Dumas.

With your permission after our next meeting on Thursday, when we will consider items 200 and 201, in order to permit Dr. Harrison to take his trip, we will then, I hope, deal with the minister's statement. You will be entitled to ask questions and to make comments on his statement. As I said last year at the beginning of our meetings, I intend, as your Chairman and with your permission, to allow considerable latitude in respect of questions and inquiries relating to the estimates of this department.

Mr. HARDIE: Will the minister be here at the next meeting?

The CHAIRMAN: Yes. You have his statement; you will have an opportunity to study it. One of the reasons copies of the minister's statement have been prepared is so that each member would have one and would have an opportunity to review it in the meantime. The minister will be here in attendance, and if any members of the committee wish any special officers of the department to be present here, please do not hesitate to say so.

Would the members of the steering committee meet at my office at 2:15 today?

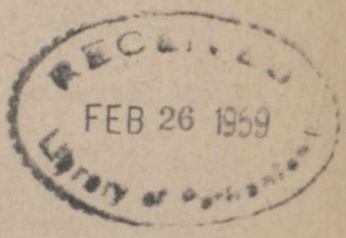
Mr. DUMAS: We have a meeting at two o'clock, Mr. Chairman. Would it be possible to have the meeting of the steering committee at 7:45 p.m. today in my office?

The CHAIRMAN: Yes; that will be all right.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959



STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 2

THURSDAY, FEBRUARY 19, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Hon. Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; and Dr. J. M. Harrison, Director, Geological Survey of Canada.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20573-2—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy Esq.

Vice-Chairman: Erik Nielsen, Esq.
and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, February 19, 1959.
(3)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs: Aiken, Coates, Doucett, Drouin, Dumas, Granger, Gundlock, Hardie, Kindt, Korchinski, Latour, MacInnis, MacRae, Martin (*Timmins*), McFarlane, McGregor, Mitchell, Murphy, Nielsen, Robichaud, Simpson, Slogan and Stearns—(23).

In attendance, from the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Mr. Raymond Grenier, Private Secretary to the Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Dr. J. M. Harrison, Director, Geological Survey of Canada; Mr. A. Ignatieff, Acting Director, Mines Branch; Mr. S. G. Gamble, Director of Surveys and Mapping Branch; Dr. C. S. Beals, Dominion Astronomer, Dominion Observatory; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. W. K. Buck, Chief, Mineral Resources Division; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; Mr. G. H. Murray, Chief, Editorial and Information Division; and Mr. H. P. Kimbell, Chief, Explosives Division.

The Chairman presented the Second Report of the Subcommittee on Agenda and Procedure, as follows:

"Your Subcommittee recommends that the Main Committee meet at 10.00 a.m. on Tuesdays and Thursdays until it is decided otherwise".

The said report of the Subcommittee was concurred in, on motion of Mr. Slogan, seconded by Mr. McGregor.

The Committee proceeded to its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys.

The Chairman stated that Dr. J. M. Harrison, Director, Geological Surveys of Canada, was due to leave Ottawa on duty later this day for an extended trip. Accordingly the Committee agreed that Items 186 to 199 inclusive of the department's estimates stand.

Items 200 and 201 concerning the Geological Survey of Canada were called and considered. Dr. Harrison was questioned at length thereon. The Minister and the Deputy Minister answered certain questions which were specifically directed or referred to them.

On motion of Mr. Nielsen, seconded by Mr. Stearns, Items 200 and 201 were approved.

At 11.45 o'clock a.m. the meeting adjourned until 10.00 o'clock a.m. on Tuesday, February 24, 1959.

Eric H. Jones,
Clerk of the Committee.

20573-2—1½

EVIDENCE

THURSDAY, February 19, 1959.
11 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Mr. ROBICHAUD: Mr. Chairman, on a point of order: before we proceed with the detail of item 200 today, I would like to bring one matter to the attention of the committee. I regret I was delayed at the first meeting on Tuesday, my train being one hour late. If I had been here I would have registered a protest at that time. The protest has to do with the report of the chairman on his trip to the Yukon and the Northwest Territories. The committee has had referred to it items 186 to 213 of the Department of Mines and Technical Surveys. This report had to do with the Department of Northern Affairs and National Resources.

I feel, Mr. Chairman, that in the future we should limit ourselves to the items referred to this committee. We have tried to raise points in the house in the last two days and we of the official opposition have been limited by the Chair to the specific questions under debate.

Some hon. MEMBERS: Well—

Mr. ROBICHAUD: I think, Mr. Chairman, I have the right to protest the procedure followed at the first meeting. This report should have been reserved until the time when the estimates of the department of Northern Affairs are referred to the committee, because it has nothing to do with the items before us at this time.

The CHAIRMAN: Thank you, Mr. Robichaud. I think if you had been here at that particular meeting you would have known that our agenda for that meeting was in particular to show two films which had been taken, one on my trip to the Yukon and the Northwest Territories and the other taken by the National Film Board in order to give the members some idea of the country which is being considered in the estimates of the Department of Mines and Technical Surveys as well as those of the Department of Northern Affairs and National Resources. In fact, the pictures were, I am sure, appreciated by all the members present for that reason. I made it clear when I suggested the idea of showing the pictures, and making my statement, that probably members of the committee would be better acquainted with the north country if the statement were made first; that is the reason it was done.

Mr. STEARNS: I believe that at the first organization meeting it was put up to the meeting whether or not we should see those pictures and I think everybody said they would like to see them.

The CHAIRMAN: I hope that satisfies your inquiry, Mr. Robichaud.

Mr. ROBICHAUD: Thank you.

The CHAIRMAN: The subcommittee on agenda and procedure met at 7.45 p.m. on Tuesday, February 17, and unanimously agreed to submit as its second report that it recommends that the main committee meet at 10 a.m. on Tuesdays and Thursdays until it is decided otherwise.

Will someone move and second that this report be concurred in?

Moved by Mr. Slogan, seconded by Mr. McGregor.

Motion agreed to.

The CHAIRMAN: We suggested at the last meeting that, instead of starting at item 186, in view of Dr. Harrison's commitments and his having to be on duty, we would hear him this morning and commence on item 200. The committee will understand that at the next meeting, or at the conclusion of Dr. Harrison's evidence, you will be free to examine the minister on his statement and on anything else related to the first item.

If you will refer to items 200 and 201, which are the items under discussion, instead of Dr. Harrison making a statement perhaps someone would like to make some inquiries of him. This is at page 41 in your estimates.

GEOLOGICAL SURVEY OF CANADA

Item 200	Administration, Operation and Maintenance, including Canada's share of the cost of the Geological Liaison Office, British Commonwealth Scientific Conference, London, England, and $50,000 for Grants in aid of Geological Research in Canadian Universities	$3,299,108
Item 201	Construction or Acquisition of Equipment	198,118
		$3,497,226

Mr. DUMAS: Dr. Harrison, we have here the statement of the minister, then we have the review of activities, and then a report by Mr. Lord the chief geologist on the work performed in 1958. Last year I told you I was very much interested in the Fort George operation and I understand that during 1957 about one-third of the work was done on this operation. Last year about 35 thousand square miles were covered, making a total of roughly 70 or 80 thousand miles. You have about 35 thousand miles to complete in 1959. Do you expect this operation will be all completed during 1959?

Dr. J. M. HARRISON (*Director, Geological Survey of Canada*): I am not sure that "expect" is the right word. We certainly hope so, but we are getting into more heavily timbered areas this year and are not certain just how well the operation will work in the more heavily timbered areas which limit the use of helicopters a little more than previously. If we get a break in the weather we should complete the full project by the fall of 1959.

Mr. DUMAS: I see in the report for 1958 that three green-stone belts have been located and one of those is reported to be about 35 miles long and six miles wide. What size are the others?

Dr. HARRISON: They are smaller, considerably smaller than that but still large enough to be of significant interest and I believe have been examined.

Mr. DUMAS: This operation is more of a reconnaissance survey?

Dr. HARRISON: This is the initial survey.

Mr. DUMAS: Do you think after this operation is completed that more detailed surveys will be justified?

Dr. HARRISON: In certain parts of it beyond any doubt. This is the whole idea of the initial reconnaissance mapping, to find out those parts of Canada which merit more detailed investigations with a view to learning more about the natural resources and the general geology of the country.

Mr. DUMAS: This is interesting. I think your branch should be congratulated for what it is doing there. In respect of "Operation Pelly", it is to be started in 1959?

Dr. HARRISON: Yes.

Mr. DUMAS: And Coppermine?

Dr. HARRISON: Yes.

Mr. DUMAS: No work is done except perhaps on investigations as to how you will proceed?

Dr. HARRISON: That is true, although at Pelly last year we did use a small airplane and made spot checks throughout the whole area to get an idea as to where we might best conduct more comprehensive investigations.

Mr. DUMAS: What will be the area covered by Coppermine?

Dr. HARRISON: This map was drawn up the other day. "Operation Coppermine" is this yellow block in here.

Mr. DUMAS: And which is "Operation Pelly?"

Dr. HARRISON: This one here.

Mr. DUMAS: Then you have another operation in the district there of 125,000 square miles on Victoria island in the Arctic archipelago?

Dr. HARRISON: That is this spot here.

Mr. DUMAS: This is a very large operation.

Dr. HARRISON: Yes. In the sense of the other operations it is not quite the same. Last year as a trial we attempted to use a small Piper Cub as a fixed wing aircraft to operate throughout the islands and as reported in the recent circular to which you referred earlier something like 450 landings were made in 300 different unprepared localities with this airplane at a very reasonable rate. We intend to extend this kind of operation this year as a result of the experience gained last year. It is not an expensive operation and covers a large territory and for that reason we marked it separately.

Mr. DUMAS: You mean this will be a less expensive operation than Fort George, for instance?

Dr. HARRISON: Yes.

Mr. HARDIE: Why?

Dr. HARRISON: Because the Arctic islands in this region are relatively flat, and with the oversize wheels and the low pressure tires we find the aircraft can land within a reasonable distance of any place the geologist might wish to go. The Piper Cub operates for $35 an hour and covers 100 miles in an hour; the helicopter costs $100 an hour and covers 50 miles in an hour.

Mr. HARDIE: Is Banks in that operation?

Dr. HARRISON: Yes. Banks is one of the main islands, the larger is Victoria.

Mr. HARDIE: Is this Coppermine area, the one in which you will work this year, the same area in which this huge subsidiary company of Eldorado Mining and Refining is going to investigate over the next two years?

Dr. HARRISON: I imagine it will cover all the area they are going to investigate. But we will do a great deal more than that. That is purely coincidence, I might say.

Mr. DUMAS: In the province of Quebec, the yellow part on the map is Fort George?

Dr. HARRISON: Yes, that is Fort George. And, in addition to that, there are some other mapped areas that were being done by more conventional methods. We are taking advantage of the opportunity of sharing the cost of chartering aircraft with the Dominion Observatory, and in order to make efficient use of the aircraft we are putting three parties in the Quebec-Labrador district.

Mr. DUMAS: I was very interested to see that the cost of this operation is only $2.03 per square mile.

Dr. HARRISON: So are we.

Mr. DUMAS: That is very interesting. But it does not include salaries and wages of the staff?

Dr. HARRISON: No.

Mr. DUMAS: Here in Ottawa.

Dr. HARRISON: No.

Mr. DUMAS: And it does not include the preparation of maps?

Dr. HARRISON: No, the cost quoted is strictly the operation itself.

Mr. DUMAS: The operation itself, you say?

Dr. HARRISON: Yes.

Mr. DUMAS: But it is very inexpensive.

Dr. HARRISON: Yes.

Mr. DUMAS: Coming back to this third operation in the Northwest Territories and in the Arctic, I think you should give a name to that operation. It is always interesting to have a name. I think it is of interest. We have the Fort George operation and we have the Pelly operation and the Coopermine; and we have had others, which were completed in 1952 to 1955. I am just making this as a suggestion, that it could be called the Camsell operation, to honour Dr. Camsell.

Dr. HARRISON: That is not quite the area he made famous. We call it, in our own inter-office memoranda, the Banks-Victoria operation.

Mr. ROBICHAUD: Do you expect to cover any section of the maritime provinces this year?

Dr. HARRISON: This year we will have several field parties in the maritime provinces.

Mr. ROBICHAUD: Any in New Brunswick?

Dr. HARRISON: Yes. I doubt very much if you could see them on the map, from where you are sitting, but there they are. There are four of them.

Mr. ROBICHAUD: What section of New Brunswick does that cover?

Dr. HARRISON: We will have in northern New Brunswick a special study of stratigraphy in the Saint John river valley area where we are continuing the investigation of the geology of the unconsolidated materials, which will have application for farming and ground water investigation.

Then we will be continuing studies of the Brunswick mineral belt; and we will be making a special study on the geo-chemistry—that is, the relationship of enclosing rocks to the ore bodies in the New Brunswick base-metal field, so far as chemistry is concerned.

We will also be making another special study on the sandstone belts, the big flat area in New Brunswick, of Pennsylvania sandstone, in order to try to get a better idea of their origin.

Mr. ROBICHAUD: In his statement the minister mentioned that he expected about 80 parties in the field this year. On the average, how many men are there in each party?

Dr. HARRISON: 80 parties; we are authorized to use 285 seasonal employees. Probably about 40 of these will be used at Labrador and office projects, at headquarters—and you will have to excuse me if I appear to be thinking out loud—there would be about four to a party, an average of about four to a party.

Mr. ROBICHAUD: Is there a permanent employee in each party?

Dr. HARRISON: Yes, most parties.

Mr. ROBICHAUD: Most parties have permanent employees?

Dr. HARRISON: Yes.

Mr. ROBICHAUD: How are those seasonal employees selected?

Dr. HARRISON: Through the Civil Service Commission applications. Practically all are students, attending university. We are hiring some people in the prevailing rates category, for packers, cooks, and the like. But by far the most of them are students from the universities.

Mr. ROBICHAUD: What are the prevailing salaries for these seasonal employees?

Dr. HARRISON: For students?

Mr. ROBICHAUD: Yes.

Dr. HARRISON: They range from $245 to $305 for the undergraduate students, and up to about $450 for those who are taking post-graduate studies.

Mr. ROBICHAUD: That is, all expenses paid?

Dr. HARRISON: Yes.

Mr. NIELSEN: I wonder if you could answer by stating what special project you have slated for Whitehorse which is indicated on your map?

Dr. HARRISON: This is simply the operation of the Whitehorse office, indicative of one type of activity. We undertake the same sort of office activity for Yellowknife as for Whitehorse.

Mr. NIELSEN: This office in Whitehorse is a permanent office, is it?

Dr. HARRISON: Yes.

Mr. NIELSEN: How many people did your department have in the field in the Yukon last year?

Dr. HARRISON: We had three field party chiefs, and the officer in charge of the office.

Mr. NIELSEN: And was there one of these parties in the vicinity of southwestern Yukon, the Cassiar area?

Dr. HARRISON: That was in northern British Columbia, but working in the general region of the asbestos country.

Mr. NIELSEN: How many do you plan on having in the field this year, in the Yukon?

Dr. HARRISON: In the Yukon there will be two major projects. The first of these is operation Pelly, which was a helicopter project, and which will probably be a two-year operation. We will have a special investigation in the Richardson mountains which straddle the Yukon-Northwest Territories border. In addition to that there will be the operation of the Whitehorse office.

Mr. NIELSEN: I see the operations indicated on your map are, roughly speaking, emanating with Ross river as the hub, and radiating over a radius of roughly a hundred miles. What extent are your operations going to be in the Richardson mountains?

Dr. HARRISON: They are more detailed and specialized investigations in order to determine the super-position and general character of rocks which are potentially oil-bearing.

Mr. NIELSEN: Over the whole of the range?

Dr. HARRISON: No, they are specialized studies within certain restricted localities of the range.

Mr. NIELSEN: Can you indicate where those localities would be?

Dr. HARRISON: Just east of Aklavik.

Mr. NIELSEN: Just east, do you say, of Aklavik?

Dr. HARRISON: Yes.

Mr. NIELSEN: In the Richardson mountains?

Dr. HARRISON: Yes—oh, excuse me, I should say that it is west of Aklavik.

Mr. NIELSEN: How long did the geological parties stay in the field in the Yukon last year?

Dr. HARRISON: They came out about the end of August.

Mr. NIELSEN: Why so early?

Dr. HARRISON: We made a bad guess as to the amount of money it would cost to operate our field party, and just ran short of money.

Mr. NIELSEN: I see. Do you expect that you will run into that same difficulty this year?

Dr. HARRISON: No, not again.

Mr. NIELSEN: How long do you expect your party will be staying in the Yukon this year?

Dr. HARRISON: Whatever the field party chiefs consider a reasonable length of time to conduct their operations.

Mr. NIELSEN: Is that usually to the end of the season?

Dr. HARRISON: The end of the season is not necessarily the climatic season. As I said earlier, we engage a considerable number of students from the universities. The universities are tending to have the new semester start each year a little earlier than in the previous year. The result is that most of the students have to leave the field about the tenth or twelfth of September in order to get back to the university in time for the beginning of the winter year.

Mr. NIELSEN: If the university students were not employed, and if your geological time in the Yukon were not restricted by the length of time which these university students could stay there, how much would it cost, in addition to what you are paying now, or have you any idea of that?

Dr. HARRISON: I do not know. If we could not use university students, who are seasonal employees, and relatively inexpensive, it would increase the cost of equivalent service. We have, on occasions where relatively small amounts of territory still needed to be investigated, kept parties in the field. That is, the party chief and various continuing employees of the survey have stayed there and carried on the work.

This however is not as efficient as the other way. It still gets the work done and in some instances, in northern British Columbia for example, the party stayed in the field until October 11, I think it was. But the weather did get pretty miserable then.

Mr. NIELSEN: I am asking you that question because we recognize the great need for accelerating the geological mapping and geological survey of all parts of the north. It seems to me that full advantage should be taken of the season, short as it is, in the north. You have only two and a half or three months at the very outside within which you can go out and do any real efficient work. I suggest therefore that if your program is limited or is restricted by the curricula of university students, then perhaps another look should be taken at the utilization of these students, relative to the importance of having this program completed.

Dr. HARRISON: I agree with you. However, I would like to point out, again, that if we were to base our operations on the total force of the geological survey, without the addition of student help, we would either have greatly to curtail the operation of survey, or we would have to ask for a great deal more money for equipment to do the work.

Mr. NIELSEN: Perhaps the latter is the answer, then.

Mr. COATES: On that point—

Mr. NIELSEN: If I might be permitted to finish this; I wished to pursue one other line of thought, and that is in connection with the types of surveys we are doing there. As is generally known, natural resources in all phases of development are the responsibility of the federal government, north of the 60th parallel.

Now, it has been suggested by responsible mining groups in the north, (and in) The British Columbia-Yukon Chamber of Mines, for example, that your department should undertake to do magnetometer surveys up there as well.

In many parts of the Yukon now, I take it, this type of surveying is not done. Is it the intention of the department to have this type of survey?

Dr. HARRISON: No, I do not think so,—not at the regional scale. We would like to, in certain specialized instances, for specialized purposes.

Mr. NIELSEN: Have you ever considered it?

Dr. HARRISON: Yes, very much. The airborne magnetometer functions best in relatively level country. As you know, however, the Yukon is not characterized by very level areas, except in the east.

Mr. NIELSEN: However, you appreciate the fact that magnetometer surveys have been highly successful in the Yukon over the years. For instance, the Hudson's Bay nickel deposit is a good example of that.

Dr. HARRISON: This is a feature of airborne magnetometer surveys which I think you will find many of the private companies would rather we would not undertake, that is, the actual prospecting for mineral deposits—which is what the magnetometer work of the Hudson's Bay Mining Company was directed toward. Our airborne magnetometer work is primarily directed to assisting in the geological interpretation and mapping of the country. If, as happened in the case of the Marmora deposit, for example, it does disclose a deposit, directly, of useful minerals, we are certainly happy about it. But that is not the primary intention.

Mr. NIELSEN: I wonder if, because of these representations that have been made to me by responsible mineral organizations, and development organizations in the Yukon and British Columbia, whether your department or your branch would give consideration to the feasibility of implementing the magnetometer surveys in the Yukon at some future time.

Dr. HARRISON: I would be very happy to see that you get a written statement from Dr. Morley, the Chief of our Geophysics Division, and have his considered opinion of geophysical surveys in the Yukon and other such mountainous terrain.

Mr. NIELSEN: Just one other question, with regard to the recent survey that was made last year. The results of this survey which was conducted in northern British Columbia and southwest Yukon were released in Ottawa approximately seven to ten days ago. The result of that release in Ottawa was that five companies were on the spot within hours of the release of the report, and had staked out all of the ground with which that report was concerned. That ground was staked by five companies.

The residents in the area of northwestern British Columbia and southwest Yukon had no knowledge of the contents of the report until it was too late to get into the field and stake any of the ground for themselves.

There have been representations made to me by mining organizations in the Yukon, the Whitehorse Board of Trade, and the B.C.-Yukon Chamber of Mines, that these reports should be released in such a fashion as to enable residents in the area to obtain equal opportunity with the companies to get on the ground and to stake.

This would mean holding back the reports for release in Ottawa for the time it takes to mail the reports from here to the various mining recorders, and to have a basic time settled. Otherwise it results in an extremely unfair situation.

Do you think you could take that situation under advisement for the future?

Dr. HARRISON: We have considered that to some length. If we were to send reports of this nature to the Whitehorse and Yellowknife offices and to the British Columbia offices, the western plains office in Calgary, and were to have them released simultaneously with those in Ottawa, then I would think that the Saskatchewan, Manitoba, Maritimes and Quebec people would also have sufficient cause for complaint.

Mr. NIELSEN: I am only talking about the property in the Yukon. I am speaking in the name of the local residents who have been up there from twenty to twenty-five years. I would ask that they be given some sort of preference in return for their pioneering.

I am not asking that the people in the Yukon be advised of geological survey reports from the Northwest Territories. I mean for those residents in the area who have lived there for a substantial period of time and who have worked to open up that country.

It is a pretty discouraging sort of thing to have this situation confront them after all those years spent in the field in which you are working.

Dr. HARRISON: I agree, but I also think there is another consideration which has to do with these information circulars. Last year we released information circulars which we thought might contain important economic as well as scientific information on field work, but it happened that they had nothing of primary economic importance. This year, therefore—it was unfortunate that two points of greatest economic interest happened to be the most widely separated, namely, the maritimes and the Yukon. All individuals and companies that are on our mailing list, are advised well in advance when these reports will be released for distribution.

When the aeromagnetic maps were considered to be "hot" or important, the companies had representatives in Ottawa. They used to line up outside our publication office door at nine o'clock on the day of distribution, and they would take the maps and decide from them whether they would prospect, or whether they would telegraph or telephone to their various interests across the country.

This seemed to us to be about the fairest way we could do it.

Mr. NIELSEN: It would not take any time at all to have these reports put in the mail three days before the day of release here—that would be the maximum mailing time to the Mining Recorders' offices in Whitehorse, etc.—so they could be made available in the Mining Records' offices in Whitehorse and the other two Mining Recorders' offices in the Yukon and in Yellowknife; and at the same time the Mining Recorders could be instructed not to open these reports until such and such an hour on such and such a day. In that way everyone would have equal opportunity. But if there is going to be a stampede, a rush, then everybody should have an opportunity to be at the starting line at the same time.

Dr. HARRISON: We will give serious consideration to that thought before the next publication date.

Mr. NIELSEN: Thank you very much.

Mr HARDIE: Mr. Chairman, I think Mr. Nielsen has raised a very good point. The same situation occurs in the Northwest Territories, and when the reports are released here in Ottawa the companies in a matter of hours are on the ground staking.

I think, as Mr. Nielsen does, that it would not take very much for the department to send out in advance to the Mine Recorders' offices throughout the areas these reports, with instructions to the Mine Recorder that they are not to be opened before the time they are to be opened here in Ottawa.

I agree very much with what Mr. Nielsen has said and I think the department should make some effort to advise the residents of the country in which these surveys are made in order to give the people there an equal opportunity to get on the ground in the same way as the larger companies.

Dr. HARRISON: Very good.

The CHAIRMAN: Does any other member wish to follow up that idea as suggested by Mr. Nielsen and Mr. Hardie? If not, please proceed.

Mr. COATES: Mr. Chairman, with regard to the make-up of these survey crews and Mr. Nielsen's suggestions. I would like to ask you first whether the department considers that it needs men with the qualifications of these college students in the department the year round, or whether their main asset to the department is the fact that they are able to go in the field in the summertime.

Dr. HARRISON: Yes—that is, in terms of our field activities, the answer is yes. The fact that they are available only for the summer and are not our responsibility during the rest of the year is of great assistance to us.

Mr. COATES: In addition to that, I would think that this would provide an incentive for students in colleges who are interested in geology to go into this type of work, because they know there is a possibility that they might obtain employment in the summertime and thereby further their education. Is that correct?

Dr. HARRISON: Very much so. It is a double-barrelled development. They gain money with which to put themselves through university and at the same time they gain experience in order to obtain employment afterwards.

Mr. COATES: In item 200 I notice there is an increase of about half a million dollars while in item 201 I notice a decrease of $117,000. I wonder if the minister or yourself could give us some explanation about this decrease and increase respectively?

Dr. HARRISON: The $117,000 deduction in capital expenditure in vote 201 is occasioned by the fact that in the current fiscal year we spent large sums of money putting in new laboratory equipment, and outfitting the geological survey building which we expect to occupy some time later in the current calendar year.

The increase in vote 200 is largely occasioned by the increased use of aircraft—almost all of it.

As we move further north a greater percentage of our exploration dollar must be spent for the chartering and use of aircraft. This is where we ran into such bad trouble last year with respect to our field program, by an underestimation of the amount of flying which we required.

Last year we did not have any major operations with the exception of that at Fort George. This year we have three: Fort George, Coppermine and Pelly. All three of them are expensive in terms of aircraft, and most of that money is required in connection with them.

Mr. AIKEN: I would like to draw your attention to the Hudson bay area. There is a survey party marked there for the Belcher islands. Was there anything done there last year?

Dr. HARRISON: Yes; initial studies were made last year. But when working in the Belcher islands one encounters unusual hazards in the form of ice which last year was abnormally bad in Hudson bay, so that activities there were more limited than they would have been in a normal year.

Mr. AIKEN: Is there any plan for work there once again this year?

Dr. HARRISON: It will be finished this year.

Mr. AIKEN: What type of work is it?

Dr. HARRISON: Mapping on a scale of one inch equals four miles which is more detailed than our reconnaissance work but which is not so detailed as our ultimate geological investigation. It is primarily directed to providing information for making appraisal of iron deposits in the Belcher islands.

Mr. AIKEN: All you have done in respect to the work is to make preliminary surveys, but as yet nothing has come out of it in the way of published readings?

Dr HARRISON: No, nothing. Not enough was done last year to merit release.

Mr. AIKEN: Do you expect major completion of that work this year?

Dr. HARRISON: Yes.

Mr. NIELSEN: Would you please send me two copies of that report?

Dr. HARRISON: I shall be delighted. You refer to the information circular?

Mr. NIELSEN: Yes, so that I may send a copy to the British Columbia chamber of mines.

The CHAIRMAN: Gentlemen: may I interrupt for a moment to say that we have visiting with us a group of members of the Montreal board of trade, the young men's section. We welcome them to this committee. I expect there will be other groups visiting us this morning.

Mr. DUMAS: There will be three other groups.

The CHAIRMAN: This committee is studying the estimates of the Department of Mines and Technical Surveys. Let us proceed.

Mr. NIELSEN: What types of aircraft are used, public or private?

Dr. HARRISON: All are public, that is to say commercial, carriers.

Mr. AIKEN: How many survey parties were in there?

Dr. HARRISON: Just the one.

Mr. AIKEN: Is there any increase intended for this year?

Dr. HARRISON: No.

Mr. AIKEN: Is this a standard party composed of about four or five persons?

Dr. HARRISON: Yes. There will probably be four persons—two surveying units travelling in pairs.

Mr. AIKEN: Is it intended to restrict it to the Belcher islands?

Dr. HARRISON: That is all that is planned at the moment, for that particular group of islands covers a fairly large bit of territory.

Mr. AIKEN: I cannot read the map too well from where I am sitting. Is there any other area in the Hudson Bay district where you have a party out this year?

Dr. HARRISON: No. The operation at Fort George which began in 1957 extended over to Hudson bay, starting on the east coast of Hudson and James bay and working eastward.

Mr. AIKEN: Was there any indication that these deposits might extend on to the mainland?

Dr. HARRISON: Geological formations on the mainland, the coastal mainland, are similar to those in the Belcher islands, and some think they have large deposits of iron associated with them. Certain are known. One is being developed at Great Whale river by the Belcher Mining Corporation, the people who have been doing the primary investigation on Belcher islands in recent years.

Mr. AIKEN: There has been no geological survey on the mainland yet?

Dr. HARRISON: That was done in 1957, from the east coast of Hudson bay and James bay between latitudes 52 and 56, and it extended further and covered an area of about 35,000 square miles. That was a reconnaissance investigation, not a detailed investigation.

Mr. McFARLANE: Are there any surveys planned for the southeast corner of British Columbia under that name?

Dr. HARRISON: I am not sure of the name. Just a moment. There is none by that name. But we are working as far south as the 49th parallel in southeast British Columbia. That is the area which includes the southern part along the Okanagan lakes.

Mr. McFARLANE: No, no; just in the eastern section, right near the Alberta border?

Dr. HARRISON: Yes; that is the work done by Dr. Leech and Dr. Price in the area extending west from the Alberta border, or boundary, to the 116th degree of longitude.

Mr. McFARLANE: I understand there are large deposits of phosphate rock in this area. Would you confirm that for me?

Dr. HARRISON: There are deposits of phosphate rock there, but I never heard that they were particularly interesting commercially.

Mr. McFARLANE: At the present time there are large quantities of phosphate rock required in British Columbia and I was wondering if there is enough there of commercial value to make it reasonable for a company to go in there.

Dr. HARRISON: I would suggest the best answer may be the fact that the commercial organizations are still importing phosphate rock. I know they have made investigations in that region and possibly are continuing; but the actual investigation for commercial exploration is not a function of the Geological Survey and is more properly a function of private industry.

Mr. McFARLANE: The angle I am getting at is the fact that if there are large quantities of phosphate rock in that area for commercial purposes would you encourage a company to come in there?

Dr. HARRISON: We would certainly bring it to the attention of the public.

Mr. HARDIE: I notice that you are going to do some work on Baffin Island this year. Could you tell us what geological surveys have been carried on prior to this time on Baffin Island?

Dr. HARRISON: In detail I cannot. However, I could supply the information for you. I can give you a general indication of what was going on.

Mr. HARDIE: Would you say there would be enough work done up until now to estimate an iron ore body on Baffin Island?

Dr. HARRISON: We have found indications of concentrations of iron on Baffin Island; whether or not they are commercial is outside the province of this organization.

Mr. HARDIE: It would not be from your branch that the Minister of Northern Affairs has received his information that there are 400 million tons of iron ore on Baffin Island?

Dr. HARRISON: I think this is a result of investigations carried out by prospectors in 1957 and 1958. I am not sure of the name of the organization, but a well known prospector named Ross Toms made some investigations up there and did find large bodies of magnetic iron. Whether or not this material is ore in terms of a commercial product is something I do not know.

Mr. HARDIE: Before Mr. Toms or any other prospector or group of prospectors could estimate the tonnage of ore in any field in Baffin Island would it be true they would have to drill?

Dr. HARRISON: Yes. I know drill rigs were up there last year.

Mr. HARDIE: But they just have not done enough drilling at Baffin Island to estimate there are 400 million tons of iron ore there?

The CHAIRMAN: I think that is just an opinion you are expressing

Mr. HARDIE: No. I have the answer I want. The Minister of Northern Affairs is still dreaming.

Mr. DUMAS: Members of this committee asked if you were employing commercial aircraft on the work which you are performing every summer. You are. Is it based on a monthly rate or on a daily rate and do you call tenders.

Dr. HARRISON: According to the air transport board regulations the companies must file their tariff, whether it is on a monthly, a weekly or a mileage basis, with the air transport board. This information is available from the air transport board for any company in any locality in Canada. We do not call tenders in the ordinary sense of the word. We know their rates and we simply try to determine the suitability and availability of their aircraft in the area of our work

Mr. NIELSEN: The tenders for these aircraft could be called within their tariff, but the further you get from the sites of opetrations the more ferrying charges you have. Might I ask whether this department has been concerned with any investigations in the Arctic islands concerning the taking up of oil leases about which we have heard quite a bit in the last few days?

Dr. HARRISON: As you know, the actual leasing is not our function.

Mr. NIELSEN: The investigations.

Dr. HARRISON: In 1955 we mounted operation Franklin which mapped a large area in the Arctic of about 120 thousand square miles in reconnaissance fashion. As a result of that investigation certain areas within the Arctic islands could be designated reasonably as places for accumulation of petroleum. It is largely in these regions that the oil companies are now currently requesting concessions.

Mr. NIELSEN: When was this information garnered by the department released?

Dr. HARRISON: It has not been released yet in final form. It has been released in general publication. The basic data are available in the fourth edition of the Geology and Economic Minerals of Canada which was published a little over a year ago.

Mr. NIELSEN: So the information basically was available about a year ago?

Dr. HARRISON: Yes.

Mr. NIELSEN: Has any geological survey as such been taken in these Arctic islands for the specific purpose of determining the location of oil or gas?

Dr. HARRISON: No. That is not our function.

Mr. NIELSEN: Are there any maps of this area available to oil and gas companies?

Dr. HARRISON: Generalized maps. More detailed maps are not yet available. They are undergoing final preparation at the moment and should be turned over to the drafting unit within a matter of two or three weeks.

Mr. NIELSEN: When do you expect the maps might be available?

Dr. HARRISON: I would hate to hazard a guess. Not before two and a half or three months.

Mr. NIELSEN: Apropos of Mr. Hardie's question a moment ago, would I be incorrect in saying there are methods other than drilling for determining with relative accuracy the ore extent and ore content of any particular area? Are there any scientific calculations which can be made by surface measurements and so on?

Dr. HARRISON: Yes; there are. It depends a great deal on the kind of ore deposit which is being investigated.

Mr. NIELSEN: In respect of base metals they have scientific formulae and calculations which can be utilized for the purpose of determining—and I am not suggesting with any degree of accuracy—any ore bodies.

Dr. HARRISON: I will take this as a question on iron deposits. I would not like to give a false impression. In certain of these iron deposits—I am not familiar with those in Baffin island and I am thinking primarily of those in northern Ungava—these deposits dip at a gentle angle beneath the surface in an area where there is no glacial coverage of any consequence. These can be followed for a matter of miles, and the minimum width can be established. In terms of tonnage, one can make a guess in terms of scores or hundreds of millions of tons that might be available for open-pit mining or something like that. But whether or not this applies in Baffin island, I cannot say.

Mr. HARDIE: The department has not done enough work up until now to even hazard a guess?

Dr. HARRISON: Some of our people were in that general area last year, but I am not familiar with the results.

Mr. DUMAS: On this point of evaluating an iron deposit, I suppose it is probably easier to evaluate an iron deposit than a base metal deposit, but is it not a fact that in the Ungava district where iron ore is located they had performed some diamond drilling to establish an approximation of the deposits—exploratory drilling in order to evaluate the depth or thickness of the deposit?

Dr. HARRISON: Yes. I think this is a fair assumption that no company would be likely, I think, to indicate ore reserves without having done some drilling or other type of investigation. However, I do think they could in certain circumstances be fully reasonable in saying there were hundreds of millions of tons. How much is available is another question.

Mr. NIELSEN: Did Cassiar go into production without any drilling?

Mr. HARDIE: Open pit.

Mr. ROBICHAUD: I understood you to say when we were speaking about the program for the area that it was the intention of the department to carry on or pursue further chemical research of mineral formations in New Brunswick. Did you have in mind the New Brunswick Mining and Smelting Company?

Dr. HARRISON: No. I was speaking of the whole mineral area.

Mr. ROBICHAUD: Would you inform the committee what progress has been made in this field. I understand this matter has been before the department for a long time.

Dr. HARRISON: We have been conducting geochemical investigations for a matter of seven or eight years. We began at Yellowknife, Keno Hill, and just completed geochemical studies of the whole of the mainland of British Columbia, and did some work in connection with sulphide deposits in New Brunswick last year. This work is very important from two viewpoints; first, for indicating an area which might be favourable for intensive prospecting and also for gaining an understanding of the origin of the deposits themselves, so that perhaps other less obvious clues can be followed back to the source.

Mr. NIELSEN: Getting back to the matter of magnetometer surveys, can you tell me whether in any of the other provinces they undertake any provincial plan involving magnetometer surveys?

Dr. HARRISON: I know it has been done.

Mr. NIELSEN: As a government undertaking?

Dr. HARRISON: As a government undertaking. Ontario has done it in certain limited areas; the Saskatchewan government has also done it; I am not certain about British Columbia or Alberta; I do not think Manitoba has; I am almost certain Quebec has not and the maritime provinces have not.

Mr. NIELSEN: Are any of these provinces undertaking such surveys now?

Dr. HARRISON: Not to the best of my knowledge; but that is a negative answer, because I do not know.

Mr. DUMAS: The committee would be interested to know the plan for next summer across the country. I understand, according to the minister's report, that you are planning to have 80 parties in the field next summer. Could Doctor Harrison give us an idea, besides those three or four projects, Fort George, Pelly, Coppermine and Banks-Victoria, the distribution of those parties, let us say in the maritime provinces, Quebec, Ontario, and in the western provinces.

Dr. HARRISON: I should like to point out, first of all, in indicating the number of parties that this is a tentative program now and will almost certainly be subject to modification before the field season arrives. We may have to combine parties and eliminate others, depending on the circumstances about which we do not know anything yet.

However, at present, we have two parties planned for the Franklin area, that is the Arctic islands, Banks-Victoria, and another investigation on the iron deposits in Baffin island. We have planned five parties in the Mackenzie and Keewatin district of the Northwest Territories.

The CHAIRMAN: Mr. Dumas, would you mind having that tabled? It is a long answer.

Mr. DUMAS: It could be included in the minutes.

The CHAIRMAN: Is that agreed?

Agreed.

GEOGRAPICAL SURVEY OF CANADA

Parties by Provinces, 1958 and 1959

Province	1958	1959
Unassigned	—	3
Franklin	3	2
Mackenzie and Keewatin	5	5
Mackenzie and Yukon	1	1
Yukon	2	2
British Columbia	9	12
British Columbia and Alberta	4	3
Alberta	2	3
Alberta and Saskatchewan	2	—
Saskatchewan	3	4
Manitoba	3	4
Ontario	9	9
Ontario and/or Quebec	1	4
Quebec	2	2
New Quebec and/or Labrador	4	5
New Brunswick	6	5
Nova Scotia	5	4
Prince Edward Island	1	2
Maritime Provinces and Quebec	1	—
Newfoundland	4	3
General	9	10
Total parties	76	83

Mr. DUMAS: I have another question. The minister says at page 5:

> Included in this year's field program is a proposed aeromagnetic survey of an area in Ontario and Quebec bounded roughtly on the west by a line joining Parry Sound and Englehart—

and so on. Can you show on the map the extent of that area?

Dr. HARRISON: This is the one, shown in green.

Mr. DUMAS: Oh yes, I see.

Dr. HARRISON: It extends across the Ontario-Quebec boundary, and is designed to provide information on that most complex geological region, the Grenville.

Mr. DUMAS: Will there be a map reproduced after this operation is completed?

Dr. HARRISON: Yes.

Mr. DUMAS: Dr. Harrison, if I might put another question, I would say that I was very much interested to see that you are publishing what we call metallogenic maps. These maps will be very useful. I should like to know how many of them you have published?

Dr. HARRISON: We have published only two so far. The third one is now being drafted and will be printed I expect within two or three weeks.

The ones that have been printed are uranium and beryllium; molybdenum is now being processed.

The CHAIRMAN: Gentlemen, I might point out that we have with us another group from the Montreal Board of Trade, this one being introduced by Mr. Chambers. We welcome you, gentlemen. Might I point out that sitting to my right is the Minister of Mines and Technical Surveys, and that we are now discussing the estimates of that particular department of government.

Mr. SIMPSON: In relation to the proposed mapping program of northern Manitoba, is it to be assumed that that will be completed this year in these three areas?

Dr. HARRISON: They will be completed, we hope, within the terms of the detail that they are investigating.

I should like to make one point, gentlemen, if you will pardon me for a moment. We have here an indication of the total coverage of mapping in Canada, which looks as though we are in pretty good shape. But this is just the initial mapping. When we say "completed", we mean completed on a reconnaissance scale.

Mr. SIMPSON: In the three specific areas?

Dr. HARRISON: Yes, this is the mapping that has been done in Canada. As you can see by these red spots, that is all of Canada that has been mapped in sufficient detail to say that it is properly studied. So we are a long way from completion.

Mr. NIELSEN: Would you expand on that, please. What do the red marks indicate on that map?

Dr. HARRISON: They are areas which have been mapped in fairly good detail, by the Geological Survey of Canada, in Canada.

Mr. NIELSEN: Is it the intention of the department to map all of Canada in what you call "fairly good detail"?

Dr. HARRISON: I doubt it. Some parts will not merit such close investigation.

Mr. NIELSEN: You have a long way to go.

Dr. HARRISON: We certainly have.

Mr. DUMAS: However, we have to add also what has been done by the provinces, in detail.

Dr HARRISON: Yes. Except for Quebec and Ontario the area covered in detail by the provincial governments is relatively small.

Mr. DUMAS: But in Quebec and Ontario there is a considerable area covered in detail.

Dr. HARRISON: Yes.

Mr. NIELSEN: Would you say that our mapping program is sadly behind in Canada?

An hon. MEMBER: Behind what?

Mr. NIELSEN: It seems to be, if one may judge by that last map you showed us.

Dr. HARRISON: This is a question which is exceedingly difficult to answer. In respect of reconnaissance mapping, our initial mapping, for which, by more or less tacit agreement, we are responsible, we are not in too bad shape, as you can see. At one stage we expected that we might reasonably have completed it by 1970 or 1972; but it is getting shoved a little farther back, as we come up through unforeseen difficulties, and do not have the staff.

Mr. NIELSEN: Do you find that because of a lack of funds there are any difficulties existing in your branch of the Department of Mines and Technical Surveys with regard to carrying on a mapping program efficiently and adequately? Do you need more staff and more equipment?

Dr. HARRISON: I suppose any government department thinks that it could use more staff. We would like very much to have more staff, and therefore be able to give adequate coverage across the whole of Canada in respect of our geological investigation.

Mr. NIELSEN: Is the lack of staff slowing down or prohibiting your mapping program? Do you want to do more than you are doing now?

Dr. HARRISON: I believe so, yes; I believe we should be doing more.

Mr. NIELSEN: Would I be right in saying that this is a vital program of this department, that should be undertaken?

Dr. HARRISON: That is perhaps a question which might better be answered by someone else.

Dr. BOYER: There are many areas of the Department of Mines and Technical Surveys which are vital areas. If we think of the research work we are doing in our mines branch in ore dressing and metallurgy, and if we think of the dominion observatory research work, and the surveying and mapping of Canada, it will be realized that we have still a big job to accomplish.

We could, of course, do with much more staff and a lot more money; but it is a matter of how much the public can pay for the job to be hastened. We are trying, as much as possible, to give priority where there is urgent work to be done. No doubt if we could have more money and do more geological work in advance our knowledge of the geology of Canada, and to terminate our geological mapping at an earlier date, it would be better. Actually, we have to choose between certain areas and certain projects on a priority basis.

Mr. NIELSEN: Referring to the mapping program, Mr. Deputy Minister, I wonder if you are satisfied that its progress is satisfactory. Do you think that it is lagging behind? If so, what is the cure for it?

Dr. BOYER: The cure for it, Mr. Chairman, would be more money and more personnel to do the job. In Canada, here, most of the work in many of the branches of geological and geographical surveys, and particularly mapping, and some dominion observatory parties, we can do only in the summer time. However, we are meeting the challenge in Canada even if we can only operate during a certain number of months each year.

Mr. NIELSEN: You have answered half of the question. I have also asked if you, yourself, think that this mapping program has been falling behind or, to put it another way, do you think it should be accelerated? Do you think we are doing what we should in this mapping program?

Dr. BOYER: It is a matter of degree. I think we should do more, but I think we are meeting the immediate needs. But we certainly could accelerate the development of Canada in coming years if more surveys were done.

Mr. MCGREGOR: Have they increased or decreased the number of employees in the last two years?

Dr. BOYER: There is a pattern of increase right through the years, if you will look back five or ten years in the records of the department.

Mr. MCGREGOR: I am asking for the last two years. Have you increased or decreased?

Dr. BOYER: Increased.

Mr. DUMAS: I would like to ask this question; I see here in the details that you have decreased the number of employees for 1959-60 from 648 to 614, in the geological surveys branch.

Mr. NIELSEN: Where do you get that information?

Dr. HARRISON: Mr. Dumas, you will recall that last year the geological surveys branch had a supplementary increase of seasonal staff. That is the explanation for it.

Mr. DUMAS: The reason I put the direct question is to show that it is not so much a matter of increasing the staff. It is a matter of getting some specialized technicians who perhaps could produce more. That is the point. You may have a decrease in the number of employees, this year to the extent of 34 persons but still you have an efficient staff just the same.

Mr. COATES: Could we have the figures for this year's employment, also for last year and five years ago? You do not have to give that information today, if it is not available.

The CHAIRMAN: It could be placed on the record.

Dr. HARRISON: Is that for the branch or for the department?

Mr. COATES: The whole; you might break it down into branches.

The CHAIRMAN: For the several branches, all right. That will be the information for last year, this year and five years ago.

Mr. SIMPSON: I have one further question about the mapping of northern Manitoba. In the three different areas there seem to be three specific forms of mapping. You say, for instance, in relation to the Kettle Rapids area that there is one person will start a four-mile map. Then, in the northern Indian Lake area you say that other systematic geological mapping will take place; and then when you come to the Chisel Lake area you say that detailed mapping will comence.

What would be the three variations of this?

Dr. HARRISON: In the first two it is not significant. It is just a matter of terminology, I suppose, trying to avoid repetitious statements. Incidentally, I believe you are referring to the 1958 program, there. The third project at Chisel Lake is a detailed study made in the vicinity of known ore bodies. It was begun in 1957 and continued in 1958. I am not sure, but I believe it was completed last year.

Mr. SIMPSON: It is complete now, then, is it?

Dr. HARRISON: I can tell you that in a moment. No, it is continuing again this year, for 1959.

Mr. SIMPSON: That is in the Chisel lake area?

Dr. HARRISON: Yes, it is scheduled for completion in 1959.

Mr. ROBICHAUD: On page 5 of the minister's report it mentions that it was Canada's responsibility to develop the resources of its continental shelves. Dr Harrison, can you give us a progress report on the work that has been done in this connection, thus far?

Dr. HARRISON: I only know what has been done specifically, so far as geological work is concerned. Last year an aeromagnetic investigation was completed in the Gulf of St. Lawrence. That data has not yet been compiled. We ran into difficulties on navigational procedure. It has taken longer to have that data put together than we had anticipated. But maps showing the result of the work should begin to be issued within the next six months.

Mr. ROBICHAUD: In connection with that program, has there been any consultation with the provinces concerned in order to define the respective responsibilities of the federal and provincial authorities?

Dr. HARRISON: That is not my question, I think.

Mr. ROBICHAUD: Could the deputy minister answer it, then?

Dr. BOYER: This is not the responsibility of our department. We do the scientific work on the shelf, such as submarine geology or hydrography. But it is not the responsibility of our department to decide who has the exclusive right of access, or ownership.

Mr. NIELSEN: You are not speaking of the Arctic continental shelf ?

Mr. ROBICHAUD: No, the Gulf of St. Lawrence. In connection with this program, again, is it the intention of the department to carry on this year in the Gulf of St. Lawrence area, or has it been completed?

Dr. HARRISON: It has been completed in so far as it is practicable, with the navigational aids we currently have.

Our difficulty is two-fold; the fixed positions for navigational aids were so far away that when we required most accuracy, farthest out in the gulf, we got the least accuracy. Unless new positions are established as navigational aids, there is no particular purpose in attempting to refine and extend the work. One other difficulty which we encountered unexpectedly was severe icing conditions. When flying at only a thousand feet icing is a serious consideration.

Mr. AIKEN: I should like to follow up the matter of aeromagnetic survey in Ontario and Quebec, including the central region from Parry Sound to Chibougamau. Could you spell out the purpose of that survey?

Dr. HARRISON: All aeromagnetic surveys which we conduct are designed to provide the geologist or the prospector with important information on the area which is being investigated.

This particular part of Canada, that is, from Ottawa north, is astonishing in the lack of specialized information; and it is also exceedingly difficult to get it because of the complexity of the geological terrain. But we are attempting to be systematic in our coverage of that region. Incidentally, we are going to fill in gaps in information which we already have; and we are trying to utilize the whole information as a basis for geological investigation over the years.

Mr. AIKEN: Would this be with respect to minerals and mines?

Dr. HARRISON: Yes, and basic geological investigation as well.

Mr. AIKEN: It would be done entirely by aircraft?

Dr. HARRISON: Yes.

Mr. AIKEN: And, along that line, are special aircraft required for this type of work, or can any aircraft company adapt their aircraft for this survey work?

Dr. HARRISON: Several different kinds of aircraft have been utilized with varying efficiency and utility.

Last summer for the first time we tried a new kind of aircraft, much smaller and faster than we had used before. It reduced the cost per line mile enormously, and we plan, naturally, to continue with the same sort of aircraft next year.

Other aircraft can do the work but perhaps not so efficiently.

Mr. AIKEN: I have one general question: is there any other purpose behind the geological surveys besides that of locating minerals? Do they have any further useful purpose?

Dr. HARRISON: They are for basic scientific information which, in the long run, will be applied for the benefit of mankind. In this case they will be based primarily on the investigation for minerals.

However, we do make other studies. For the past four or five years a geologist has been making investigations of the St. Lawrence seaway area. These are special studies in respect to foundations for dams, locks and that sort of thing. In addition we employ geologists whose speciality is that of the study of ground water, or the study of surficial deposits, and so on.

Mr. AIKEN: There is no particular purpose in this central Ontario region; is there anything expected there, or is it merely a matter of having a complete picture on it?

Dr. HARRISON: It is partly a matter of completing the picture, and partly a basic scientific. It is partly—I suppose mainly—with the hope that it will result in the discovery of deposits of minerals.

Mr. AIKEN: Does the southerly limit of this area extend roughly to the southerly limit of the Canadian Shield?

Dr. HARRISON: Just about. Actually, we have done a certain amount of work in the region that goes from the United States border to the edge of the Shield. This is an extension of the work. The block in the southern part was done some years ago and we will complete the whole block this year.

Mr. AIKEN: How many aircraft would be used in that project?

Dr. HARRISON: One.

Mr. AIKEN: That would be the full extent of the project? Would it?

Dr. HARRISON: Yes.

Mr. NIELSEN: Can you tell me if there are five permanent geological offices north of the 60th parallel?

Dr. HARRISON: There are two offices, one at Yellowknife and one at Whitehorse.

Mr. NIELSEN: The one at Yellowknife and the one at Whitehorse are permanent offices?

Dr. HARRISON: Yes.

Mr. NIELSEN: Are those the only permanent offices north of the 60th parallel?

Dr. HARRISON: Yes.

Mr. NIELSEN: Who handles the Arctic arrangements? Is that done from Ottawa?

Dr. HARRISON: Yes.

Mr. NIELSEN: When were the permanent offices in Yellowknife and in Whitehorse established?

Dr. HARRISON: I believe it was in 1950 or 1951 in Yellowknife; and I believe it was about 1956 in Whitehorse; but I would have to check the dates because I am not sure.

Mr. NIELSEN: Is the department giving any thought to the possibility of establishing any additional permanent offices north of the 60th parallel?

Dr. HARRISON: Certainly not for the time being.

Mr. SLOGAN: I see there was a triangulation party which operated in southern Manitoba and northwest Ontario. Could you tell me in which areas they worked, particularly?

Dr. HARRISON: I think that would come under the head of the mapping branch rather than that of the geological survey. We would not be operating a triangulation survey.

Mr. SLOGAN: It is a geodetic survey?

Dr. HARRISON: Yes. I report for the geological survey. The two words are spelled somewhat alike, but the work is quite different.

Mr. SLOGAN: In which areas in southern Manitoba did they work?

Dr. HARRISON: I cannot say. Mr. Gamble will be available for discussion later.

Mr. SLOGAN: Is any work being carried out in Manitoba east of lake Winnipeg?

Dr. HARRISON: No.

Mr. SLOGAN: Is any work planned?

Dr. HARRISON: No. That has been pretty well covered in reconnaissance investigation of earlier years. Detailed studies have been made by the Geological Survey in the region, and the Manitoba government is working on special investigations with respect to mineral deposits.

Mr. NIELSEN: What was the total amount of the vote last year for this work?

Dr. MARC BOYER (*Deputy Minister, Department of Mines and Technical Surveys*): $3,114,720.

The CHAIRMAN: You will find that in your estimates at page 41, Mr. Nielsen.

Mr. NIELSEN: Could you tell me what the gross vote was for the whole department last year?

Dr. BOYER: $29,742,151.

Mr. NIELSEN: So there is an increase of approximately $7 million this year. Is that right?

Dr. BOYER: That is right.

Mr. KINDT: Mr. Whittaker, who headed the coal mission to Japan last November, is in town. I wonder if we could have him appear to give evidence before this committee at an appropriate time? Could the minister arrange this?

The CHAIRMAN: How long will Mr. Whittaker be in town?

Mr. KINDT: That I do not know.

The CHAIRMAN: Speaking for the minister, I might indicate that Mr. Whittetaker would come when called. So when the estimates are up for the Dominion Coal Board, he could be called.

Mr. KINDT: Would he have to remain in town?

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): Mr. Whittaker is from Calgary and he could come back.

Mr. KINDT: Of course; but he is in town today and I had it in mind to ask the chairman if he could appear before this committee.

Mr. COMTOIS: I think this can be done.

The CHAIRMAN: I see no reason why it cannot be done.

Mr. NIELSEN: In the Northwest Territories and the Yukon, as is well- known, the natural resources and their administration is the responsibility of the federal government partly through the Department of Mines and Technical Surveys.

Under this general item I would like to discuss assay services and prospectors' assistance plans north of the 60th parallel, but I believe they might be discussed more properly under Northern Affairs. So as long as it is understood that we would not be out of order at that time, I would like to raise these issues then because, while these issues have to do directly with geological assays and so on, nevertheless they do come more, I think, under Northern Affairs and National Resources than under a discussion of this item at this time.

Mr. COMTOIS: This comes within the mines branch division. If it is a question of assay offices, we could discuss it when that item comes up.

Mr. NIELSEN: I was going to follow it and say first that I realize the very excellent job that the department has undertaken particularly in the field of geological surveys, mapping, and so on; but I believe the department should be doing more.

I realize the restrictions under which the department is operating, probably because of the limitation of funds available; but if we are to realize an acceleration in development beyond the 60th parallel, we must realize that it rests upon adequate geological surveys and mapping being made available at the time when the companies go into those areas.

I am thinking particularly of the Arctic islands where no maps are available. I am not suggesting that the department has been lax; but they simply have not been able to produce them under the limitations under which they have suffered.

The same thing applies to the Yukon and the Northwest Territories when we consider the plans of assistance that are available on a provincial scale; and when we compare them with what is available in the north, they are almost non-existent.

There are provincial assistance plans whereby the prospectors can be assisted by means of grub staking and other material advantages in the provinces; but these plans are not available in the north at all.

There are plans providing for subsidies and assay services so that prospectors will be encouraged in those areas. These plans are available in the provinces but they are not available in the north.

I wonder if the minister or perhaps the deputy minister might indicate to us—I do not mean in detail, but painting with a very broad brush—what the plans of the department are to be with regard to looking ahead to the establishment of these facilities for the encouragement and for the fostering of the man with the pack on his back who, after all, will be the man who, in the end, goes out to seek these minerals? How is the department planning to assist in such a basic form of development?

Dr. BOYER: I believe the answer to Mr. Nielsen's question had better be given by the Department of Northern Affairs.

Mr. NIELSEN: That is what I thought.

Dr. BOYER: We could be of some assistance. For example if there was a need for it, and if it was proven that it was economical to do it, we could set up an assay office in the Yukon, to improve upon the present assistance that we give in connection with those samples sent by prospectors to Ottawa.

At the present time a prospector in the Yukon has the right, I believe, when he gets his prospector's licence from northern affairs, to have a certain number of free assays, by arrangement between the two departments, northern affairs and ours.

Mr. NIELSEN: You are speaking of the Northwest Territories, not of the Yukon. There is no licence in the Yukon.

Dr. BOYER: I may be wrong in respect to Yukon, but if it is a matter of technical assistance, such as geologists assisting in courses to prospectors, or the establishing of an assay office, these services could be established by agreement or by arrangement between the Department of Northern Affairs and the Department of Mines and Technical Surveys, in the Yukon and the Northwest territories as well. But such services or facilities, to be established, would have to be prompted by the Department of Northern Affairs.

Mr. NIELSEN: I prefaced my remarks by saying that I intend to take it up with Northern Affairs when their estimates come before this committee. Perhaps that would be the best time.

Mr. AIKEN: Last year a question was asked about the carbon dating technique. Has there been any advance in the last year in your equipment?

Dr. HARRISON: I think I mentioned last year the Mines Branch is building this apparatus for us, and we expect it to be completed and ready for calibration tests within a matter of a couple of months. However, we are faced with the problem of probably having to put it into cold storage until we can get into our new building, rather than have to recalibrate it all over again. But it should be operational within six months. We are doing the best we can about it.

The CHAIRMAN: I think the committee would be interested to know, inasmuch as the subject was touched upon by Mr. Nielsen earlier, as to how many parties were recalled earlier that were in the field last year.

Dr. HARRISON: None was recalled early. The wording of the instructions sent from Ottawa was that we have in effect no more money; when you spend what you have, you have to pack up.

Mr. NIELSEN: Do you mean early relative to the close of the season?

Dr. HARRISON: Early relative to what they had planned. I am informed that some thirty students—seasonal employees—had their term of employment shortened by this. In other words out of a total of 335 seasonal employees engaged last year 30 only were affected in terms of remuneration.

The CHAIRMAN: What I had in mind was that these parties were called back for one reason or another to Ottawa and you say it was because there was not enough money provided. At what time of the year were they called back and how many parties were involved?

Dr. HARRISON: There were none specifically. They were informed that they could obtain no further advances. However, I should think about eight or nine parties came back early.

The CHAIRMAN: How much too early, and how much longer could they have remained in the field?

Dr. HARRISON: I would think a maximum of ten days.

Mr. NIELSEN: I do not like to contradict, but I think the party in the Yukon came back in August; that is in the Pelly area. The season in the Yukon, short as it is, does permit of field investigations well into September and I am sure the department realizes and appreciates the need for utilizing every single minute north of the sixtieth parallel, because summer is so short and the time available for conducting these surveys is so limited that every advantage should be squeezed out of every available minute.

My suggestion is that, highly desirable as it may be to utilize students for the purposes you have mentioned, if it means cutting the time, then I think surveys should be made by means other than conducting these surveys by students. I think it is imperative to our over-all development north of the sixtieth parallel to squeeze every advantage we can out of every available minute. I would not limit the program. You have already assured the committee that funds will not be the drawback this year.

Dr. HARRISON: We considered it a serious situation last year and we have taken what we think are sufficient steps to prevent a recurrence of that. It will not happen again.

Mr. HARDIE: Were there any cases in the past two years in the Northwest Territories where these parties were called out before the total estimate had been used up?

Dr. HARRISON: In a case like that, the total of the money to leave unexpended is at the discretion of the party chief. If he has X number of dollars, he may leave three or four days early, depending on his own particular brand of conservative approach for getting from the field to Yellowknife and home. Chances are that any individual party will have a little bit of money left when it comes out, simply because they have to be sure they have enough money to get out.

Mr. HARDIE: Were there any instances in the Northwest Territories in 1957 where the field parties came out with amounts left in the fund which could have been used to advantage in that year to finish up a certain job?

Dr. HARRISON: No.

Mr. HARDIE: We are all agreed in this committee that this department is particularly important in the development of natural resources. I would like to ask the minister what he would consider to be the first and primary requirement in the development of a new mining area in Canada.

Mr. COMTOIS: The first thing to do is the mapping and surveys.

Mr. HARDIE: Hear, hear.

Mr. COMTOIS: The topographical work. That is the main thing to be done; and then the geological work. Does that answer the question?

Mr. HARDIE: Very well. I think you should consult with your colleague, the minister of northern affairs and impress that upon him also. I think the Department of Mines and Technical Surveys should be voted a great deal more money in order to do what the minister said is of primary importance in developing a new area.

Mr. NIELSEN: The increase of $7 million this year must be gratifying to the department, but to me it seems to fall far short of being sufficient to achieve the objectives which are so important in the over-all development of our natural resources.

Dr. BOYER: The increase of $7 million is mostly on account of increased assistance under the Emergency Gold Mining Assistance Act, and also for the construction of a ship for hydrographic surveys; the rest is distributed throughout the several units of the department.

Mr. STEARNS: Ever since Mr. Nielsen has been speaking about the possible acceleration of the program I have been thinking, if you have about 600 employees now and hope to double that number, have you the building facilities here to take care of twice the number that you have at present?

Dr. BOYER: It could be done, as long as the increase is planned and carried out in a systematic way over a number of years.

Mr. STEARNS: It would not be a question of having to build a new building immediately?

Dr. BOYER: We might eventually need facilities additional to those presently being built. If you increase your staff you have to increase also the laboratory and other facilities.

Mr. STEARNS: But you could go a long way without putting up a building now?

Dr. BOYER: There could be a five or six-year program in which we could increase the staff as well as the facilities needed in relation with this increase in staff.

Mr. NIELSEN: Is the department doing anything along these lines?

Dr. BOYER: In certain areas in the department we are. For example we are thinking of an increase in the geological survey. That is at present under discussion and being appraised as to its merits, the amount of money that would be needed, and the timing of the project.

Mr. NIELSEN: Are you setting a target for increasing your program by a 50 per cent figure?

Dr. BOYER: Somewhat. It would translate into a sizeable increase in the program. If you say "program", it is not just in the field, but also in research and laboratory work.

Mr. NIELSEN: Could you indicate to the committee what agency, if any, within your department has the responsibility for research and planning?

Dr. BOYER: Research and planning in the department is the responsibility of the minister, the deputy minister and the director-general of scientific services; and each of the branch directors is also responsible in his particular field—geology, astronomy, surveys and mapping. It is their responsibility to suggest to us what is the program that best fits the needs of the country. We lean heavily on the branch directors, because they, as experts, know the score in each of their fields of endeavour.

So, research and planning is rather a group effort. It is no unique responsibility of one individual. It is this group which can really assess the situation and see where an increase in activities is warranted.

Mr. NIELSEN: Would I be too far out of line if I suggested that the department, then, paces its activities to the rapidity of development in the country, rather than the reverse, with the department setting the pace and development following along in the wake of that pace.

Dr. BOYER: We try to feel that we have to keep abreast of the situation. In research in the mines branch, for example, if low-grade ores are what the future will call for, supposing that most of our high-grade ore deposits will have been mined out, we undertake research in order to find or improve processes for the extraction of metals and minerals from low-grade ores.

We try to be abreast of the situation. And the same is true of mapping, geology and the other scientific endeavours in the department. In the way of development generally we try also to relate the normal growth of the department to the tempo of increase in activities in Canada.

Mr. NIELSEN: In other words, you are constantly striving to set the pace?

Dr. BOYER: To set the pace, and we try to be abreast of the situation and not just follow up on it.

Mr. COMTOIS: We must also consider the requirements of other departments of Government, too.

Mr. NIELSEN: You are familiar with—

Mr. COMTOIS: For instance, the Department of National Defence. We have to give priority to those requirements.

Mr. NIELSEN: You are familiar with the reorganization of the Department of Northern Affairs and National Resources, where they have set up a director of research and a director of planning.

Is there any thinking that this might be implemented in the Department of Mines and Technical Surveys?

Dr. BOYER: It exists presently within the department. Dr. van Steenburgh's title is director-general of scientific services. The work of this department is essentially technical and scientific. Therefore in this department one would not need the same type of personnel as they might require in the Department of Northern Affairs and National Resources, where a great amount of their work is not of a scientific nature. That department needs someone who can coordinate scientific work in a particular way.

In our department the director-general of scientific services, who is the equivalent of an assistant or associate deputy minister, has the direct responsibility of assisting in the planning and coordination of scientific work, as all our work is technical or scientific.

The CHAIRMAN: Any other questions, gentlemen?

Mr. DUMAS: How many seasonal employees were employed last summer in your branch?

Dr. HARRISON: There were 335.

The CHAIRMAN: Gentlemen, have you completed your examination of Dr. Harrison? If so, he will be free to follow his other engagements.

If you are satisfied, we will approve items 200 and 201. Those are the items we were discussing this morning. Would someone move their adoption?

Mr. NIELSEN: I so move.

Items 200 and 201 agreed to.

The CHAIRMAN: We have a few minutes left; do you wish to begin another subject—perhaps item 186?

Mr. KINDT: I move that we adjourn.

The CHAIRMAN: We will resume on Tuesday morning at 10 o'clock, probably in another room.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 3

TUESDAY, FEBRUARY 24, 1959

RECEIVED
MAR 2 1959
Library of Parliament

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Hon. Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Mr. K. M. Pack, Chief Administrative Officer; Mr. H. P. Kimbell, Chief, Explosives Division; Mr. W. K. Buck, Chief, Mineral Resources Division; and Mr. S. G. Gamble, Director, Surveys and Mapping Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20602-9—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, February 24, 1959.

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Coates, Drouin, Dumas, Granger, Gundlock, Hardie, Kindt, Korchinski, MacInnis, MacRae, Martel, Martineau, McFarlane, McGregor, McQuillan, Mitchell, Murphy, Nielsen, Payne, Robichaud and Stearns.—22.

In attendance, from the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Dr. John Convey, Director, Mines Branch; Mr. A. Ignatieff, Chief, Fuels Division; Mr. S. G. Gamble, Director, Surveys and Mapping Branch; Mr. Robert Thistlethwaite, Surveyor General of Canada; Mr. J. E. Lilly, Dominion Geodesist; Mr. A. C. Tuttle, Chief Topographical Engineer; Mr. Douglas Baldock, Chief Cartographer; Mr. N. G. Gray, Dominion Hydrographer; Mr. H. A. S. West, Secretary, Interdepartmental Committee on Air Surveys; Dr. C. S. Beals, Dominion Astronomer; Dr N. L. Nicholson, Director, Geographical Branch; Mr. W. K. Buck, Chief, Mineral Resources Division; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; Mr. G. H. Murray, Chief, Editorial and Information Division; Mr. H. P. Kimbell, Chief, Explosives Division; and Mr. J. Murray Sutherland, Chief, Financial Services Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys and reverted to Item 186, Departmental Administration.

The Minister was questioned on matters arising from his opening statement to the Committee on February 17th. The Deputy Minister and certain officials answered questions which were referred to them.

Item 186 was approved.

Item 187, Explosives Act Administration, and Item 188, Mineral Resources Division, were severally called, considered and approved.

Items 189 to 199, concerning the Surveys and Mapping Branch, were called and considered.

At 12.00 o'clock noon the Committee adjourned until 10.00 o'clock a.m. on Thursday, February 26, 1959.

Eric H. Jones,
Clerk of the Committee.

20602-9—1½

EVIDENCE

TUESDAY, February 24, 1959.

The CHAIRMAN: All right, gentlemen. This morning we will resume consideration of item 186 of the 1959-60 estimates for the Department of Mines and Technical Surveys, concerning departmental administration. You all have a copy of the minister's statement of the first meeting. It is in the No. 1 printing of our proceedings. You are entitled to question the minister and to make observations.

ADMINISTRATIVE SERVICES

Item 186 Departmental Administration $687,289

Mr. COATES: I wonder if the minister has the figures I requested with regard to personnel?

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): Yes; it will not be long.

Mr. COATES: If it is long, Mr. Chairman, it could be incorporated.

Mr. COMTOIS: In 1955-56 the total number of staff was 3,357, including seasonal employees and summer employees; in 1958-59 the figure is 3,633, and in 1959-60 the figure is 3,761.

Mr. COATES: Do these figures include seasonal employees as well?

Mr. COMTOIS: Yes.

Mr. DUMAS: How many seasonal employees were there in the same years?

Mr. COMTOIS: The number of seasonal employees is pretty steady. The figure is about 1,200—I think it is about that.

The CHAIRMAN: That is for each one of those years?

Mr. COMTOIS: Roughly, yes.

Mr. DUMAS: Between 1,200 and 1,300?

Mr. COMTOIS: Yes. Would you like to have the details on those figures; are you interested in having a breakdown?

The CHAIRMAN: Yes, Mr. Minister, that is what he requested.

Mr. COATES: I would like to have a breakdown.

Mr. COMTOIS: Geological survey 1955-56, 504; 1958-59, 648; 1959-60, 614.

Mr. COATES: They have dropped a third in the last year.

Mr. COMTOIS: Yes, in that branch. There are less this year because of the 50 additional employees who were added last year for the summer program.

Mr. COATES: This figure of 614 might be increased during the year?

Dr. MARC BOYER (*Deputy Minister of Mines and Technical Surveys*): We employed the 50 additional students last year as a result of representations being made to us; there were quite a number of university students unable to obtain summer employment and the government of Canada, as well as the provincial governments, assisted by increasing their field parties in order to make more jobs available.

The same pressure has not been experienced as yet this year and we are dropping the extra 50 students whom we added to our regular program last year.

Mr. COATES: Could I ask you when the pressure occurred last year? Was it around this time of the year?

Dr. BOYER: Yes.

Mr. COMTOIS: I think it was in March. In the mines branch for 1955-56 we had 592; 1958-59, 627 and for 1959-60, 647.

In the surveys and mapping branch for 1955-56, 1,882; 1958-59, 1,920 and for 1959-60, 2,008.

With regard to the dominion observatories for 1955-56 the figure was 132; 1958-59, 139; and for 1959-60, 153.

In the geographical branch for 1955-56, the figure was 99; 1958-59, 92 and for 1959-60, 93.

The figures for departmental administration, including mines and resources are: 1955-56, 148; 1958-59, 201; 1959-60, 213.

That is the breakdown of the main figures. The remainder of the departmental totals that I have given are made up by staff required for the polar basin project.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. DUMAS: I wonder if the minister would have the number of students employed during the period 1957-58.

Mr. COMTOIS: Yes, we could give you that.

Mr. DUMAS: In all branches.

Mr. COMTOIS: Yes. I could give you a breakdown. Do you mean any kind of students?

Mr. DUMAS: Well, yes. Say, university students.

Mr. COMTOIS: University students.

Mr. DUMAS: Yes.

Mr. COMTOIS: In 1957-58 we had about 600 students. I mentioned 1,200, but this includes—

Mr. DUMAS: Yes, I understand you had some labour-rate employees.

Mr. COMTOIS: Yes, and some summer seasonal employees.

Mr. DUMAS: That is in 1957-58?

Mr. COMTOIS: Yes.

Mr. DUMAS: And in 1958-59?

Mr. COMTOIS: About the same as 1957-58. Well, I should mention again that the figure of 1,200 also includes some members of the ship's crew who were engaged in connection with the hydrographic survey.

Mr. DUMAS: Who worked only during the summer?

Mr. COMTOIS: Yes.

The CHAIRMAN: Gentlemen, are we through with item 186?

Mr. DUMAS: No, Mr. Chairman. I wonder if the minister could give the committee an idea of the progress made in the construction of new buildings.

Mr. COMTOIS: Perhaps Dr. van Steenburgh could give you that information.

Dr. W. E. VAN STEENBURGH *(Director-General of Scientific Services)*: As the committee probably knows, we are in the process of a building program on Booth street. In the early part of this year—I believe it was in January—the Mines Branch occupied part of the new building.

Mr. DUMAS: The Mines Branch?

Dr. VAN STEENBURGH: Yes. The remainder of the building probably will be occupied some time between now and June of this year. Last month the administrative building was occupied by the Administration Branch of the

department, including the mineral resources, the treasury office and the coal board. The geological survey building is nearing completion and it is anticipated that the geological survey of Canada will move to their new quarters on Booth street in June or July of this year. The surveys and mapping building is under construction and it is anticipated that it will be ready for occupancy in 1961.

Mr. DUMAS: Thank you.

Mr. ROBICHAUD: Mr. Chairman, could the minister explain why there is an increase of ten full-time positions, as set out on page 258; it shows an increase from 143 to 153. What are those positions? At the same time perhaps he could give us some explanation as to the note there, "anticipated savings due to staff turnover". I notice there is a saving of $10,000. Could you explain how this is arrived at?

Dr. BOYER: This saving is something which is done in each of the votes. There is always a certain number of positions vacant between the time they become vacated and the time they are occupied. Nor can we recruit for all the positions available. As a result, there is a token adjustment at the end of some votes for such contingencies.

Mr. ROBICHAUD: The increase is from 143 to 153 full-time employees, as set out at page 258.

Dr. BOYER: The answer to Mr. Robichaud is that we are getting into card punching and tabulation work on our statistics and other operational data for the department. This will mean a few additional employees for the I.B.M. tabulating equipment. The other additions are for the editorial and information and other divisions of the administration services.

Mr. ROBICHAUD: There is also an increase of $10,900 for office stationery, supplies and equipment; is there any particular reason for this substantial increase?

Mr. COMTOIS: Mr. Pack will answer that question for you.

Mr. K. M. PACK *(Chief Administrative Officer)*: In answer to your last question, the basic cause of the increase is the cost of the rental of the I.B.M. equipment to which the deputy minister has just referred. We have not had that expenditure in previous years and provision had to be made this year for that rental. Basically, that is the reason.

Mr. COATES: I would like to direct a question with regard to this I.B.M. equipment. How much of this type of equipment is used by this department at the present time?

Mr. PACK: Mr. Chairman, during the past two or three years we have used I.B.M. equipment on a rental basis. In other words, we have turned over our statistical requirements to the I.B.M. centre in Ottawa and used their facilities. But, as a result of a report made by the Civil Service Commission and ourselves it was considered more economical and suitable in the future to install our own. That is planned for approximately May 15 of this year. Until now we have had it taken care of on a rental basis by the local I.B.M. Ottawa centre.

Mr. COATES: Mr. Chairman, I would like to ask a further question. Would it not be possible to cut down on your staff, your clerical staff particularly, with the use of this type of equipment by the department.

Mr. PACK: I think I can deal with this negatively by saying that, had we not taken steps for the I.B.M. equipment, we would have had to ask for an increase in staff. To that extent it has been offset.

Mr. COATES: Further to that, could the department use more of this type of equipment than it is presently using?

Mr. PACK: Well, we are planning in this case to sort of walk before we run. We are putting the instalation in and hope to get it in operation by May of this year. And as we stand our staff can take care of the immediate problem. I think it will be a natural consequence. We will see other opportunities and utilize them to the full extent. I cannot give a complete answer until we have had an opportunity to review it.

Mr. COATES: Am I right in assuming it is quite a difficult operation to change over from the present system to the I.B.M. system?

Mr. PACK: I guess it is difficult but we think we have the answers to it. Perhaps when we get into it in more detail we may find it is a little more difficult than we anticipated, but at the movement we believe we have the answer to the conversion.

Mr. COATES: I would like to commend the minister in regard to this work.

The CHAIRMAN: How much I.B.M. equipment do you intend to buy?

Mr. PACK: We will not be buying anything as far as I am aware at the moment.

The CHAIRMAN: There is nothing in the estimates.

Mr. PACK: We are planning to rent it. As far as I am aware today, we do not plan to purchase any.

Mr. COATES: Does I.B.M. sell this equipment?

Mr. PACK: I understand within the past week a letter has come in from I.B.M. offering to sell any equipment which is presently located in departmental units. The letter came in only a day or so ago and we have not had a chance to evaluate the economics.

Mr. HARDIE: I would like to ask the minister a question. Since the minister's appointment to the portfolio he now holds he has had ample time to inspect the workings of his department. I wonder if he could tell us whether or not he has found in his department any indication of waste or extravagance.

Mr. COMTOIS: No, sir.

The CHAIRMAN: Are there any other questions?

Mr. DUMAS: It might interest the committee to hear from the minister whether he has visited most of the mining camps in Canada since his appointment as minister. My reason for asking is not to talk about trips. I do not mean to object to any trips of this kind.

On the contrary, I think that the minister should make it a point to visit all the mining camps in Canada if he can possibly do so, of course; and I think it would be interesting to know to what extent the minister has been able to do this.

Mr. COMTOIS: Let me tell you frankly that since I have been appointed minister I have not had much time to travel. Anyway, I have done my best. I am very anxious to visit the campsites, mining sites, and mining towns.

Last fall I went to Nova Scotia and New Brunswick and I visited the coal mines there in Cape Breton and some other mines too, such as the salt mines in the maritimes.

After that I went to Newfoundland and I visited the Wabana (Bell Island). I might say that one of the most interesting experiences I had was my visit to the Abitibi district where I met Mr. Dumas and some other mining people. I found my trip very interesting. It was an experience to me to visit the gold mines and copper mines in his district.

Before that I should mention that I had an opportunity to go to Thomson lake on the occasion of the operation "last spike" on the invitation of Inco—that is, the International Nickel company.

We visited that new mine where there is very extensive development with nickel.

Up to this time I could not give more of my time to visiting, but I do hope to do more this year, if we can get through this session by summertime. I hope we will be through in July.

Mr. DUMAS: Thank you.

Item 186 agreed to.

Item 187 Explosives Act Administration ..... $ 95,418

Mr. DUMAS: On this item, Mr. Chairman, I would like to ask the minister if the department has received any request from the mining industry to the effect that the regulations be amended to increase the permissible maximum load of explosives that may be transported by truck from 10,000 lbs. to 20,000 lbs.

Mr. COMTOIS: Yes. In the course of the years we have received many representations on the matter. The mining industry in some districts wants to have the regulations changed or modified so that trucking companies or truck contractors might be allowed to transport more tonnage by truck. The actual limit is 10,000 lbs.

On account of the fact that some districts are so far away, the main reason is that they should be allowed to go up from 10,000 lbs. to 20,000 lbs. But up to now we have been very reluctant.

However, the matter is under study. I think Mr. Kimbell who is in charge of the explosives branch might give us some details and information about the matter.

Mr. DUMAS: Before we hear from Mr. Kimbell may I ask if it is possible that the department will change the regulations?

Mr. COMTOIS: Not likely. It can be done, but we should have some very good and very serious reasons for changing them.

My experience with the occurrences or cases of accidents we have had during the years is that our department must be very very careful in the matter, and very prudent.

The CHAIRMAN: Do you care to advance any arguments in support of your suggestion, Mr. Dumas?

Mr. DUMAS: I think we would like to hear from Mr. Kimbell.

Mr. H. P. KIMBELL (*Chief, Explosives Division*): Mr. Chairman, we have given a great deal of thought to increasing the load limit. We always consider the economics of any matter with which the Explosives Act is related. But in considering the economics of it, we must bear in mind that an accident with explosives can have very serious consequences.

We read in the newspapers every day about the slaughter on the highways. I have had very very serious doubts about whether we should increase the number of pounds of dynamite regardless of the number of trips on our highways.

In view of this accident rate, I think that five tons of dynamite in one load is enough.

Moreover, if we raised the limit, it would tend to take the explosives off the safer means of transport—the railways—and to put them on the public highways where we would have to deal with all sorts of drivers; that is, it would take them off the private right-of-way of the railway and place them on the public right-of-way where we do not have the same control of the drivers.

We had three accidents in 1958, one of which involved a 10,000 lb. load in Manitoba. It collided with an automobile and the four occupants of the automobile were killed. The gasoline tank broke and the possibilities were serious, but fortunately nothing happened.

The second accident occurred near Brockville in September when 1,500 lbs. burned. We believe the exhaust system probably caused it, but no detonation resulted.

However, in November there was a third case of 2,000 lbs. which started with fire and ended in detonation. We were very fortunate in that case that nobody was hurt, but there was over $100,000 damage done to nearby dwellings.

As the minister has said, we have given this matter very great thought, including both the possibility of the saving in transportation cost, and the possible accident rate.

Mr. COMTOIS: The requests that have been received came from the west and the northern territories on account of the distances to be covered.

Mr. DUMAS: You must have read of the examination which was made by the Canadian Metal mining association which represents the whole of the industry.

Mr. COMTOIS: Yes.

Mr. DUMAS: And when we talk about explosives, we mean explosives used in mining.

Mr. COMTOIS: Yes.

Mr. DUMAS: The regulations were amended in 1954, I understand.

Mr. KIMBELL: Yes.

Mr. DUMAS: The regulations were amended in 1954 to permit the transportation by truck on the roads of 10,000 lbs. instead of 4,000 lbs., which had been the previous limit. There was an amendment made under the regulations previously.

Mr. KIMBELL: That is right.

Mr. DUMAS: And since then, you mentioned that three accidents happened last year?

Mr. KIMBELL: Yes.

Mr. DUMAS: Since the regulations have been amended, were there more accidents?

Mr. KIMBELL: More accidents since the regulations were changed?

Mr. DUMAS: Yes.

Mr. KIMBELL: No.

Mr. DUMAS: Now the fact is that the regulations could be amended. And even if the law permitted 20,000 lbs. of course, if an explosion occurred, it would probably cause more damage; however, do you not think that by permitting an increased load that you would have a less number of trips on the highways?

Mr. KIMBELL: That is a very good point. That of course is true to some extent, but it does not go the whole way. You would not go down by 50 per cent because it would become more economical to go farther and farther.

For instance, I believe it would become economical to transport from the factory in Quebec to Halifax by road, but it is not economical at the moment as compared to rail transportation; so it would not drop 50 per cent. It might drop, perhaps—

Mr. DUMAS: Perhaps by 30 per cent?

Mr. KIMBELL: Yes.

Mr. McQUILLAN: Do you think it would be more dangerous to have 20,000 lbs. in a boxcar, or less dangerous?

Mr. KIMBELL: Less dangerous, because there is a private right of way.

Mr. McQUILLAN: You think it would be less dangerous?

Mr. KIMBELL: Yes. The railway is a private right of way; locomotive engineers are a limited class of people who drive these trains; moreover, you do not have your dynamite sitting over a supply of gasoline as you would on the highway. The danger is mostly from fire resulting in detonation; and you are bound to have gasoline right under your dynamite.

Mr. HARDIE: Has thought been given to areas not served by rail transportation? For instance, the Mackenzie district, or from Yellowknife into the Yukon? Has any consideration been given to the possibility of amending the regulations in such a way as to permit 20,000 lb. loads to be carried to areas where railway transportation does not exist?

Mr. KIMBELL: That has been done in one instance; the Northern Transportation company by special order in council has been given permission.

Mr. HARDIE: That is done by boat?

Mr. KIMBELL: By boat and road; it involved road as well as boat.

Mr. HARDIE: They haul out of Waterways which is the end of the rails.

Mr. KIMBELL: Yes, that is road transport.

Mr. HARDIE: And it may be over a portage.

Mr. KIMBELL: There are portages; that is what is covered by the special order in council.

Mr. HARDIE: Why could the regulations not be amended to allow the freighting of that dynamite in 20,000 lb. lots by truck from Edmonton through to Yellowknife rather than by rail to Waterways and then on to trucks and then on to boats, and from the boats into Fitzgerald and over the portage to Yellowknife?

Mr. KIMBELL: This brings up a serious problem of assessing the highways throughout the country.

Mr. HARDIE: I think you will recall that the worst disaster we have had in the north in the Mackenzie district was caused when a dynamite barge exploded on Great Slave lake. I do not recall any accident on the Mackenzie highway concerning a load of dynamite.

Mr. KIMBELL: We have thought about this matter. But with the varying congestion on public highways, this would put us in a position under a federal statute of assessing the highways from St. John's to Victoria.

Mr. DUMAS: You said that a good argument was the fact that the railways have a right of way which belongs to them, as compared to the highways.

Mr. KIMBELL: That is right.

Mr. DUMAS: But the railway right of way is only a very narrow one; and if a carload of dynamite should explode, the damage could be tremendous.

Mr. KIMBELL: Indeed it could, if it exploded at the wrong place. The insurance that is carried by the road truckers is $2 million, I think, of liability; it is a group contract.

Mr. DUMAS: What about insurance carried by the railways?

Mr. KIMBELL: I cannot answer that.

Mr. COMTOIS: The regulations do not apply to the railways.

Mr. DUMAS: I know; but what I am trying to establish is this: that the possibilities of explosion on the highway are not much greater than the possibilities of an explosion of carloads of explosives on the railway. However, I am not insisting too much. Thought should be given to this question with a view to permitting an increased load.

Earlier Mr. Hardie mentioned the Northwest Territories where it would probably be more economical to transport dynamite by truck. In our district the railways, as you know, go around the long way, let us say. To go from Montreal to Val d'Or by rail, for instance, they go 600 miles; whereas by truck, there are only 250 miles.

Since the regulations were amended in 1954 the mining industry has saved quite a large amount of money. I understand the savings run up to $400 and some thousand dollars.

Mr. KIMBELL: The savings estimated by the Canadian Metal Mining Association, if the regulations were further amended, would be $420,000.

Mr. MACINNIS: In the event that these regulations should be amended to allow you to increase the load, what is there to stop the municipalities from preventing them from carrying it?

Mr. KIMBELL: There is nothing to stop them.

Mr. MACINNIS: They exercise that right in my home town now.

Mr. KIMBELL: There is nothing in the Explosives Act which prevents the carrying of explosives from being regulated under municipal or provincial law.

Mr. DUMAS: If it is transported by railway, it would also have to be transported to the mines by truck because there is no other way.

Mr. MACINNIS: According to regulations laid down either by the municipality or by the province.

The CHAIRMAN: Is the amount of damages that can be assessed against the transport company limited by the statute, Mr. Kimbell?

Mr. KIMBELL: No, sir.

The CHAIRMAN: You mentioned a figure of $2 million.

Mr. KIMBELL: That is the liability insurance which is carried by the carriers in cooperation with the manufacturers; it is the manufacturer that has that policy which is carried on a group basis.

Mr. AIKEN: Following up Mr. MacInnis' question, do you know of any great number of municipal or provincial road bylaws which conflict with the provisions of the Explosives Act?

Mr. KIMBELL: No, sir; however British Columbia does have a couple of provisions in its Motor Vehicles Act now.

Mr. AIKEN: They have not enforced a road limit under the Explosives Act?

Mr. KIMBELL: No.

Dr. BOYER: Notwithstanding the stipulations of the act, the province or the municipality or other organized bodies can make regulations and stipulate that, for example, not more than 1,500 lbs. are to be carried in a municipality. That is permissible by virtue of the act.

Mr. AIKEN: That is the point about which I was wondering, whether any of the municipal or provincial organizations think the present limit is too great and have passed any local by-laws.

Dr. BOYER: I do not think the provinces have passed any limiting by-laws which would lower the maximum limit permissible under the act. However, the province can do so if it wishes.

Mr. DUMAS: How many transport permits are there which have been issued?

Mr. KIMBELL: I do not have the figure for 1958. It would be about 280.

Mr. PAYNE: In view of the discussion and the questions which have been asked, I think it would be in order at this time to pay a compliment to Mr. Kimbell and the other officials who are keeping foremost in their mind their responsibilities as a departmental official in respect of the road hazards. I do not think we as a committee in considering this matter should minimize the dangers inherent in permitting additional hazards in an already hazardous highway system in Canada.

Mr. KORCHINSKI: I notice that in the estimates for last year you had provision for a chemist and this year you do not. Would you outline the duties of that position and why it has been dispensed with?

Dr. VAN STEENBURGH: We have near Uplands airport a laboratory the duty of which is to test explosives and other dangerous chemicals of this nature. This group of people were carrying out routine tests only. In studying the situation it appeared to us that with the excellent facilities they have and the staff available, this group could carry on a portion of the research on any explosives and propellants as well as their routine duties. The group as of April 1 will be transferred to the Mines Branch. The first call on the group in the explosives laboratory is the normal duties associated with the Explosives Act, but in addition they will be carrying on work on propellants for the fuels division of the Mines Branch. It seemed more convenient to administer them from the Mines Branch than from the Explosives Division. However, the same service is given as previously.

Mr. KORCHINSKI: In other words, they are still there?

Dr. VAN STEENBURGH: Yes.

Mr. NIELSEN: I wonder when the committee might have an opportunity to discuss this press release, or has it already passed items 200 and 201.

Dr. VAN STEENBURGH: No; when the hydrographic division comes up later on we will be glad to answer any questions.

Item agreed to.

Item 198 Mineral Resources Division $281,753

Mr. ROBICHAUD: Could the minister give us some detail as to the specific work assigned the officials of this division, and also in doing so could he explain why there is an increase of over $51,000 while the number of employees has only increased from 38 to 44? According to the details on page 260 of the estimates there are six additional full-time employees. The additional amount of the item is over $51,000. Could we have an explanation on this?

Mr. COMTOIS: I will give a general explanation and Mr. Buck will give more details.

The work of the Mineral Resources Division lies in the mineral economics, mineral resources, mineral legislation, and government administrative fields, rather than in scientific laboratory research. The division has the important role in the Department of Mines and Technical Surveys of advising senior departmental and other governmental officials on matters affecting Canadian mineral policy. As prescribed by section 6 of the Department of Mines and Technical Surveys Act, the division collects, records, compiles and prepares information for the use of the department, other government departments, crown corporations, foreign embassies, private industry, and the general public

on mineral resources, mining and oil companies, exploration, production, processing, and marketing operations, and on mineral industry legislation and taxation. It carries out economic studies on all phases of the Canadian mineral industry, and also maintains a considerable record on the mineral industries of foreign countries.

In order to keep informed of new developments and advances in the mineral industry, officers of the division carry out carefully planned field inspections covering all important mineral industry operations. This provides not only a first-hand record of mineral industry developments but also a better understanding of mineral problems than would otherwise be possible without personal contact with various industry officials.

The division is responsible for the administration of the Emergency Gold Mining Assistance Act. It maintains staff to carry out the engineering inspection of all gold mines receiving assistance under this act.

Officers of the division act in an advisory capacity on matters dealing with taxation of mining properties and other aspects of mining legislation. Part of this responsibility includes advising the Department of National Revenue in the administration of those sections of the Income Tax Act and income tax regulations applicable to the mineral industry.

Mr. ROBICHAUD: Thank you, Mr. Minister. Mr. Chairman, the minister has mentioned it is part of the duty of this division to give information in respect of marketing operations. Could the chief of this division give us some information as to the general position of the market in respect of base metals, especially zinc and lead?

Dr. BOYER: The chief of this division is Mr. Buck. The Mineral Resources Division is the economics division, we might say, of the department. Mr. Buck might answer any questions put to him on this division.

Mr. W. K. BUCK (*Chief, Mineral Resources Division*): May I answer the first question. The increase in moneys is practically all for payment of staff. Of the $51,000 about $41,000 is for salaries; there is only about a $10,000 increase in operating expenses.

The second question I must admit is somewhat difficult to answer. As you know, the turn-down in the economy in the western world, particularly in the United States and especially in the automotive industry, has meant a very substantial turn down in the consumption of lead, zinc and copper. Certainly the general view is that the present state is improving and that consumption is increasing. However, it is also very true that production is still in excess of armaments in the world has had a great effect on the use of lead, zinc and zinc into the United States affects this country very considerably. There is, of course, no quota on copper.

Mr. NIELSEN: Could you tell me whether your staff has any responsibility in the field of research involving new uses for lead and zinc.

Mr. BUCK: No, sir; we have not.

Mr. NIELSEN: Has any branch of the department been set up for that purpose?

Dr. BOYER: The Mines Branch.

Mr. NIELSEN: Would that be a proper question under this item?

Dr. BOYER: The mines branch has a special vote on this, and it will come up later.

Mr. STEARNS: There is something which has intrigued me for a long time. Do you think it is true in the case of the base metals that the change in armaments in the world has had a great effect on the use of lead, zinc and copper?

Mr. BUCK: I do not think it is true in respect of lead and zinc. The armament change has had relatively little effect there. The main uses of lead and zinc are so large that the smaller amounts used in armaments do not affect the general pattern.

Mr. NIELSEN: Are Canadian sources of lead and zinc competing favourably with other sources of lead and zinc? If they are not competing favourably with other world sources, does your branch or any other branch in the department undertake studies of ways and means of making those two metals competitive with other world sources.

Mr. BUCK: I think Canadian lead and zinc is competitive. The situation confronting the Canadian industry is not so much the competitive situation as the quota system. A good part of our production is exported to the United States.

Mr. NIELSEN: It is competitive then. I think the second part of my question is still pertinent. Has the department undertaken, or is it undertaking any studies to determine ways and means of still more efficient methods of production for the purpose of ensuring that competitive position, and to make it more economical for world users of lead and zinc to consume Canadian production?

Mr. BUCK: Not specifically.

Mr. NIELSEN: Do you think it would be a good idea?

Mr. BUCK: The companies engaged in the field are quite active and quite aggressive. I am not so sure how much we can contribute to it. We certainly follow the situation. We have a specialist who makes a point of visiting every plant in Canada and also in the United States; he has also participated in the international committee on lead and zinc, particularly in respect of import quotas.

Mr. NIELSEN: This is a world problem?

Mr. BUCK: Yes

Mr. BOYER: May I add that there is also in the Department of Trade and Commerce a commodities division which is studying marketing of all products including metals. The Mineral Resources Division is assisting very closely this organization of the Department of Trade and Commerce in its appraisal of the situation every day and the future situations which might arise. I believe the question can be answered more fully a little later when we come to the item in the mines branch concerning the amount of research being done toward improving the extraction of metals as well as the purity of these metals for possible new uses which might open more markets for some of them. The research program in the Mines Branch will enlighten the Committee a little more.

Mr. NIELSEN: My next question was going to be directed to the advances in the electro smelting field. I understand that the Mines Branch will be the item under which to ask that.

Mr. MARTINEAU: Has the imposition of the quotas in the United States on lead and zinc had an actual result on the cutback of the production?

Mr. BUCK: No; it has not. The producing companies have continued at the rate they were producing prior to the imposition of import quotas.

Mr. MARTINEAU: Is it being stockpiled?

Mr. BUCK: In the case of Canada and also the other countries it is being shipped to the United States and is being held in bond.

Mr. NIELSEN: In other words the United States is stockpiling?

Mr. BUCK: The term might be confusing. The smelters themselves are holding it in bond and if they require it they withdraw it from bond.

Mr. NIELSEN: Does it not amount to the same thing?

Mr. BUCK: Except that the United States smelters are financing it at the moment and not the government.

Mr. NIELSEN: Would it be correct to say that the imposition of these quotas has no effect on the lead and zinc industry to date?

Mr. BUCK: No; I do not think it would. Production has not been decreased. If it is not soon decreased, it could reach a point where the quotas can be drawn out in a matter of days or hours. This is a matter of concern to the industry.

Mr. PAYNE: If a Canadian producer exports in bond to the United States it is held by whom?

Mr. BUCK: The American smelter.

Dr. BOYER: I think Mr. Buck would agree with me that, if the situation of import quotas in the United States continues, there will be damage to the Canadian industry. At the present we continue to export at the same rate we did before, but we are exporting, particularly in zinc concentrates, more than the quota allows, and this is piling up in the United States. If the quotas continue for any length of time at some time harm will be done.

Mr. NIELSEN: Have you estimated what period of grace the lead and zinc industry has in respect of the maintenance of the quota restrictions in the United States? How long will it take before it starts to affect our lead and zinc industry?

Mr. BUCK: It is felt that by the third quarter of this year the backlog will be almost sufficient to take care of the full quota. It is a matter of some urgency.

Mr. ROBICHAUD: Could Mr. Buck give us the total production of lead and zinc for 1957 and 1958?

Mr. BUCK: Zinc in all forms in 1957 was 412,000-odd tons; in 1956 it was 422,000-odd tons. I do not have the 1958 figure with me. I will get it for you. I do not think there has been too much of a change.

Mr. ROBICHAUD: Could we have it at our next meeting?

Mr. BUCK: Yes. Lead, all forms, in 1957 was 187,000 tons, and almost 188,000 tons in 1956.

Mr. DUMAS: What was the domestic consumption for the same period?

Mr. BUCK: This is in terms of refined metal. The total consumption for zinc in 1957 was 52,000 tons. In 1956 it was approximately 61,000 tons. For lead, again in refined terms, for 1957 it was 74,000 tons and for 1956, 75,000 tons.

Mr. HARDIE: Has the department any estimate of the known reserves or known bodies of ore in Canada?

Mr. BUCK: Yes, we would have. They are certainly tremendous, without any doubt. I cannot give any figure right offhand, but they are very large.

Mr. HARDIE: I wonder if we could have that supplied to us.

Mr. BUCK: Yes.

Mr. NIELSEN: I am going to ask a question which perhaps either the minister or the deputy minister could answer, in preference to Mr. Buck. I am wondering if the only reason for the railroad to Pine Point was the exploitation of the low-grade lead-zinc diposits there.

Mr. HARDIE: High grade.

Mr. NIELSEN: High grade—I am sorry. If the railroad were complete, would the introduction of the production at Pine Point have any deleterious effect on the markets of the lead-zinc world, so far as Canadian sales are concerned?

Mr. BUCK: Well, with import quotas, of course, there would be no market in the United States, which is our big market. That is one of the reasons why the import quota system is of vital concern to Canada. Regardless of how large our resources are, and how aggressive our mining companies are, if there is a set figure on exports, then there is no possibility of marketing increased production.

Mr. NIELSEN: Assuming the removal of restrictions now in existence, and assuming Pine Point production, can you answer the question?

Mr. BUCK: In the long term, I would say no consumption is increasing. The short term is not quite as good, because world production is quite in access of consumption.

Mr. NIELSEN: Am I correct in saying that there is every reason to expect a market for the Pine Point resource, for sale in the United States in a few years,—assuming the removal of these restrictions in the United States?

Mr. BUCK: Well, would you define "a few years"?

Mr. NIELSEN: Let us say, in the next 10 years.

Mr. ROBICHAUD: Mr. Buck, could you tell us—

Mr. NIELSEN: Could I have an answer to that question; let us say, in the next 10 years.

Mr. BUCK: Yes, in my considered opinion it would be; but it would probably be closer to the 10 years.

Mr. ROBICHAUD: Could you give us a figure showing how many lead and zinc mines in Canada are closed down at this time,—that is, mines that were in operation two years ago and are now closed?

Mr. BUCK: I cannot give you a firm figure, but there would not be very many—perhaps only four or five.

Mr. NIELSEN: Some have since reopened, have they not?

Mr. ROBICHAUD: Do we not have a number of mines closed in Canada, mines which are easily accessible in the matter of transportation? Those mines are closed down on account of the lack of markets, or on account of the present situation of the market—that is, the base metals market? I have in mind particularly in my own constituency the Brunswick Mining and Smelting, and Heath-Steele, in Northumberland, a few miles away, where they have perhaps a hundred million tons of potential minerals, and they are closed down due to a lack of market.

Mr. BUCK: There was one mine in production at Bathurst, for a short period of time.

Mr. ROBICHAUD: And Brunswick was ready to operate.

Mr. NIELSEN: What is the answer to Mr. Robichaud's question?

Mr. BUCK: I am not certain whether I understood it.

Mr. ROBICHAUD: The question was this, that in view of the fact that we had a number of mines—and you are going to give us the figure tomorrow—a number of base metal mines which have been forced to close down, on account of the market condition, should we not expect these mines to be in operation, on account of their easily accessible transportation facilities before, let us say, Pine Point mine, which has been mentioned?

Mr. BUCK: Of course transportation is only one item in the picture. Grade also enters into it, and the difficulty or lack of difficulty in extracting the metals.

Mr. NIELSEN: And then, would not this also be true, that if the transportation was intended only for the purpose of exploiting mineral resources, this would have some significance. But transportation, for instance in the Pine Point area, is intended for other reasons as well, different factors that would come into play and affect the answer.

Mr. McQUILLAN: Could the witness tell us how much lead or zinc Consolidated Mining and Smelting produce in British Columbia?

Mr. BUCK: I could not just say. But, as you know, company production figures are confidential, unless they agree to their publication.

Mr. McQUILLAN: Do you have the provincial figures?

Mr. BUCK: No.

Mr. HARDIE: Are the figures on the ore reserves at Trail and Kimberley confidential?

Mr. BUCK: No; they usually publish them in their annual report. Frequently, however, publication shows combined lead and zinc, so that it is difficult to sort out what is lead and what is zinc.

Mr. HARDIE: Would you know, offhand, at the present rate of consumption or production at Trail and Kimberley, what would be the length of time before that ore body is worked out?

Mr. BUCK: This would be purely an estimate, but I would say at least fifty years, if not more. It is quite large.

Mr. MACINNIS: Why should these production figures be confidential?

Mr. BUCK: The Statistics Act is administered by the Department of Trade and Commerce, and it does not permit disclosure of certain figures. Those are some of the items. If there are less than three producers, the total production for the country is not disclosed.

Mr. NIELSEN: Along the lines of Mr. MacInnis' question, one of the greatest needs that has been expressed by officials of the department, in the realm of resources development in Canada, is the need for mapping and the need for assessing our mineral resources, and the value of them.

Now, has the department—and perhaps before I go on with that question, I might say that I believe this also is true, that of great assistance in assessing these resources would be the information which is now in the possession of companies actively engaged in the mineral exploitation field.

Has the department given any thought to instituting a scheme whereby this information could be handed to the departmental officials for purposes of assessing the nation's resources, on a confidential basis or otherwise, on any other basis—in circumstances where companies could be assured, for purposes of their financing, and their stockholders and so on, that this information would be kept confidential? It seems to me that the reason the companies are holding back is that they are not all agreed as to procedure. One will say, "Sure, I will submit information if my competitors will submit information."

They cannot seem to get together on the matter of giving information to the government and, consequently, this damages planning. On the other hand, has the department given any thought to this aspect, on the matter of information; and, if it has, what are the present thoughts?

Dr. BOYER: All the information in the possession of the dominion bureau of statistics is available to the departments that have need of it, and they can make use of it in their studies.

Mr. NIELSEN: That is not what I was asking. For instance, there is oil exploration going on in the north; there is mineral exploration going on in Ontario and in other parts of the country. At the moment these companies are required to give you the results from cores, for instance. I have stated the reasons for this.

There is a lack of a guarantee of security to the companies. One will do it, and the other may suffer from it. I think wou should know what I mean.

Now, Mr. Deputy Minister, perhaps the solution to it would be legislative requirements for the disclosure of this information—a 100 per cent disclosure of the information for planning purposes, where officials of the department

would have access to it and could use it for planning, so that we might more accurately assess what we have in Canada by way of resources material.

Mr. HARDIE: My recollection is that in the Northwest Territories at Hay River a few years ago the Department of Mines and Technical Surveys had a man up there who took cores submitted to him from the oil companies.

Mr. BUCK: We do get samples of all oil drilling cores but I am not sure of the provincial-federal jurisdiction in the matter.

Mr. MACINNIS: How can they tell you the life expectancy of a mine or oil-well, or whatever it may be, unless they know the production figures of the mine or oil-well?

Mr. BUCK: We do receive all production figures of the mine.

Mr. NIELSEN: Am I wrong in this, that there is no rule in existence which requires complete disclosure by mineral companies engaged in the exploration field in Canada to make a full disclosure of their exploration in the field?

Mr. BUCK: To the province there is. Mineral resources are a provincial responsibility, and under the provisions of the leasing arrangements and assessment work they do have to report to the provincial governments.

Mr. NIELSEN: Oh, do they?

Mr. BUCK: Yes, I think so.

Mr. HARDIE: How about the Northwest Territories?

Mr. BUCK: To the Department of Northern Affairs and National Resources.

Mr. PAYNE: Is disclosure made in full?

Mr. NIELSEN: How is the check made?

Mr. BUCK: Each of the provinces, as you know, has mining inspectors in each of the areas; and the Department of Northern Affairs and National Resources has mining inspectors in the territories; and these inspectors go out periodically and, in addition to checking the safety requirements under the provisions of the provincial mining acts, they also have provisions for checking other aspects.

Mr. NIELSEN: I cannot see that, because when you say this system exists north of the 60th parallel, I know that an individual can go out and stake a mineral claim in the Northwest Territories or in the Yukon, north of the 60th parallel, and obtain an independent assay, one which he pays for, and he can keep that information to himself. There is no law requiring me, if I stake a mineral claim, disclose the result of any assay to anyone.

Mr. BUCK: No, that is right. But to maintain a claim, in most of the provinces a certain amount of work has to be done each year.

Mr. NIELSEN: But this is not assessment work. That does not assess the value of the claim?

Mr. BUCK: That is right.

Dr. BOYER: I think that there are very few prospectors or developers, or mining companies who, after having made any find of importance, would not be inclined to have it developed as soon as possible.

Mr. NIELSEN: I agree with that.

Dr. BOYER: It is rather the exception, where there might be some sizable deposits that are known by companies or by individuals, and that are not disclosed in any shape or form.

I think, generally speaking, through the information that companies give in their own annual reports and the reports they make to the provinces, and

through the reports they make to the Dominion Bureau of Statistics, we are well aware of the potential ore bodies that exist and the extent of the ore reserves.

We do have a mineral resources division catalogue of these ore reserves.

Mr. NIELSEN: Perhaps we might clear this up in this way; would you answer this question; are you satisfied that the Department of Mines and Technical Surveys obtains sufficient information to make an accurate assessment of the nation's resources?

Dr. BOYER: In the sense that you would mean accurate, no. Because a deposit may or may not be an ore body, depending upon the going price of the metal on the international market.

But, so far as existing mines that are concerned, or ore bodies indicated by mines which are in the promotional stage and are endeavouring to get into production, I am sure that we know the score quite well.

Mr. NIELSEN: Would you answer the same question in regard to the compilation of resource inventories; inventories of the nation's sources. Do you obtain sufficient and accurate information to compile a resource inventory for the nation?

Dr. BOYER: That is a hard question to answer because the resource inventory might include all categories of ore in the ground but some of which are not mined because of certain economic conditions.

Mr. NIELSEN: I mean that—I mean just that.

Dr. BOYER: So far as knowing what is potential and where the ore bodies are and their sizes, if they are known through a diamond drilling program that has proven these ores, I believe we know very much what the score is.

Mr. HARDIE: You would not include in your inventory the so-called 400 million tons of iron ore that is supposed to be in Baffin Island?

Dr. BOYER: It might be included. If there has been a statement made by a company that can be proven. There are three categories in what we might call ore reserves—proven, indicated and potential. We might use these three categories in some instances. We use them in our inventory that we have in the mineral resources division.

Mr. BUCK: Yes, we actually use four. We have measured, indicated and inferred, and we throw in potential.

Mr. HARDIE: To arrive at this figure, do you require the results of diamond drilling? For instance, in measuring an ore body—

Mr. BUCK: Certainly for the measured category it has to be well drilled. And, to answer the other question, before the Gordon royal commission on Canada's economic prospects we did an appraisal of most of the main minerals produced in Canada, to assess resources. We did that. I would not say that we do it regularly, but we do it intermittently. Sometimes it is done more frequently than at other times, depending on the need and the possibility of a resources shortage, and so on.

Mr. DUMAS: Mr. Buck, can you tell us the grade of the ore deposit at Pine Point?

Mr. BUCK: Offhand, no. We do have it—and I am not sure whether it is from a company report or whether it is from a private report. I can obtain it for you.

Mr. DUMAS: Do you know the approximate tonnage?

Mr. BUCK: We do know the tonnage. It is certainly very large.

Mr. DUMAS: Another question; I do not know whether you are aware that in connection with the Heath-Steele mine, the rumour was to the effect that it had closed down on account of a lack of ore for immediate production, is that true?

Mr. BUCK: I think the ore reserves in the Brunswick area, including Heath-Steele, are quite good.

Mr. DUMAS: I was told by a man who seemed to know the area very well that the company had developed only a certain part of their ore body, and they did not keep on with the development work. Was that through lack of ore?

Mr. BUCK: The prices of lead and zinc decreased very considerably in the last couple of years, and I believe that influenced their decision more than anything else.

Mr. NIELSEN: With regard to strategic metals when, in your opinion, will the United States be in a deficit position? I am thinking of the time at which they will be more or less utterly dependent upon this nation for their supply of strategic materials.

Mr. BUCK: In some instances we are deficient in the resources of certain minerals ourselves.

Mr. NIELSEN: Would you mind mentioning a few of them?

Mr. BUCK: Yes. We are not certain about our resources of manganese. We do have some low grade properties. We produce no chromite at all. However there are some low grade properties in Manitoba. Our resources probably of most of the ferro-alloy materials are limited, and are very small.

Mr. NIELSEN: Thank you. That gives me an idea. But could you go on, apart from these strategic materials, and continue to answer my question?

Mr. BUCK: Certainly. The American need for our mineral materials is increasing very considerably. In some instances they have to reply on the capacity of other nations of the world, particularly Canada, to supply them with some of those strategic minerals you mentioned, because they have not got them themselves.

Mr. NIELSEN: Has any inventory been made of these and other specific strategic minerals you mentioned? And if so, is any action that you know of being taken by private industry or by government to promote the development of these inventoried resources?

Mr. BUCK: To answer the first part of your question: away back in 1917 at the end of the first world war a mineral inventory was started in the department, in the Mineral Resources Division, but during the depression years it fell behind because of lack of staff and money to carry on; therefore it was not of too much value at the start of world war II.

However, at the end of world war II, it was felt that it should be reactivated and maintained. This has been done. This is an attempt to index or "card" every occurrence in Canada, with some basic details on it. In the case of the larger occurences it relates to our resources records where we have more extensive geological reports. An attempt is made to report on available resource, and resources of strategic importance.

The Department of Mines and Technical Surveys is the only place where it is done in Canada.

Mr. NIELSEN: I can think of one manner in which perhaps the department can be of assistance in this regard: that is, to extend to the prospector, the so called small man, who may take a very significant part in development—that is, to make available some sort of report or listing of strategic minerals which the department feels to be of vital importance to the nations of the free West as a whole, so that his specific efforts are directed in the field to prospecting for

those particular specific types of minerals. A system to make geological reports available as a promotional scheme, and to point out to the prospector the vital need that the nation has for such particular resources.

Mr. BUCK: In that connection might I mention that we have a prospectors handbook which we make available. It mentions some of the uses and some of the areas where there are gaps in our resources. The distribution of that booklet is quite extensive.

Mr. AIKEN: I am interested in low grade iron ores in the Hudson Bay district and in the Belcher Islands. Have you any information on the capacity of that area?

Mr. BUCK: Once more, probably the best way of talking about that subject would be in relation to other areas of iron ore.

Mr. AIKEN: Yes. I would like to have some comparisons.

Mr. BUCK: The resources of iron ore in Canada are tremendous, particularly in the low grade beneficiating type of material. Beneficiation may be expensive but it can be done.

The areas that are most favourably located, as you know from the announcements about it in the press, are those being developed. I refer particularly to the area south of Schefferville in Quebec, and part of Labrador, about 225 miles north of the gulf.

Mr. AIKEN: Are those ores of approximately the same grade or more costly?

Mr. BUCK: They are higher in grade and certainly more costly to beneficiate than direct-shipping ore further north.

Mr. KINDT: What would be the percentages?

Mr. BUCK: The percentage on those in the Wabush Lake area?

Mr. KINDT: About 38 per cent?

Mr. BUCK: About that; there are deposits on the west coast of Ungava Bay which probably runs from 35 to 40 per cent, but the difficulties are in transportation there. The Belchers are lower in grade but the quantities are large, and over on the mainland near Great Whale River there are large deposits, and on Baffin Island there are deposits with lower grade than those of the Belchers and Ungava.

Mr. AIKEN: Have you any percentage figures?

Mr. BUCK: The Baffin Island ones are 20 per cent from what is known of them; they are all in the earliest stages of exploration.

Mr. AIKEN: When you said "Baffin" did you not mean "Belcher"?

Mr. BUCK: No, I meant Baffin Island, which is lower in grade. Belcher is about 35 per cent.

Mr. NIELSEN: I asked you about the probable deficit position of the United States with regard to strategic materials. Could you give the committee any idea of Canada's position both in the field and out of the field of strategic metals, the position in Canada as to her import requirements of those metals—and what decides the source of supply of those metals in relation to areas of Canadian production?

Mr. BUCK: We import all our requirements of manganese and all our requirements of chromite.

Mr. NIELSEN: Do we import 100 per cent of our requirements of manganese?

Mr. BUCK: We produce no manganese in Canada. We import it as raw material; and we import most of our molybdenum. We do produce a little molybdenum but we still import most of our requirements.

We produce no berillium and we produce no columbium.

Mr. NIELSEN: What is our position with regard to barite?

Mr. BUCK: We have one producer in the east, and we have had an intermittent producer in the west. I do not think the western producer is now active, but we do have one producer in Nova Scotia.

Mr. NIELSEN: What about our import position?

Mr. BUCK: We import it also; but the problem there is the location; we use it in drilling, in connection with our oil industry in the west; it is shipped down to the east coast, and from there it is shipped to the United States.

Mr. NIELSEN: With respect to Canada's position and with regard to our resources inventories in these specific fields—do you think that Canada's position could be improved by any policy approach which you are contemplating now or which should be contemplated by your department, and if so, how?

Mr. BUCK: I shall try to keep away from the policy aspects and stress the economic aspects. You are talking about the further processing of raw materials, and the utilization of those which we produce?

Mr. NIELSEN: Yes.

Mr. BUCK: I do not think it is a simple question. For instance: in the case of barite, it just would not be economical to process it and probably ship it all the way across Canada because the quantity required would not be large enough in the one case and it probably would not be economical.

Mr. NIELSEN: Because of the cost?

Mr. BUCK: That is right.

Mr. NIELSEN: Is there any way, apart from subventions, we could improve our competitive position in barite so as to use our own resources rather than to import?

Mr. BUCK: There is a tariff on barite, and this is a difficulty. Barite is exported as a crude material because the United States tariff on ground barite is higher than it is on the unground material; nevertheless the tariff would permit of crushing and grinding the product could still be exported.

The tariff area is one of the big areas which would permit further processing in Canada. The American tariffs on metals are usually considerably higher than they are on raw materials.

Mr. NIELSEN: Perhaps the minister could tell us how we could improve our tariff position in order to make barite more competitive in Canada and to encourage more utilization of our own resources.

Dr. BOYER: I believe this is more a matter of policy of other departments than it is of ours.

Mr. NIELSEN: Of which departments?

Dr. BOYER: The Departments of National Revenue and Trade and Commerce. These are matters of trade.

Mr. NIELSEN: Are you discussing these matters with those departments now?

Dr. BOYER: Yes.

Mr. NIELSEN: Can you give the committee any idea of the possibility of reaching a point in those discussions where some solution will be found towards improving the position in Canada with regard to barite and other such strategic materials?

Dr. BOYER: These matters are constantly being studied in an effort to try to improve the position of Canada, particularly looking for Canadian sources of material. If the Canadian sources of material are not of a grade that can be immediately used by industry, then it becomes a matter of research on

our part to assist in any beneficiation of that product to render it usable in Canada. When it becomes a matter of export and import, there are always some studies being undertaken jointly by the Department of Trade and Commerce and ourselves, and the Department of National Revenue.

Mr. NIELSEN: With regard to this one specific example, what progress has been made with regard to greater utilization of Canadian-produced barite in Canada?

Dr. BOYER: I do not think that any specific study has been undertaken on the matter of barite in Canada.

Mr. NIELSEN: Would the department, perhaps, give such a study some consideration?

Dr. BOYER: Certainly we can.

The CHAIRMAN: Would you like to follow up your question, Mr. Nielsen, and enquire as to the amount of this mineral that Canada requires by way of import in terms of dollar value?

Mr. NIELSEN: I asked Mr. Buck for the entire value.

The CHAIRMAN: In dollars and cents?

Mr. NIELSEN: Perhaps Mr. Buck could tell us the actual cost to Canada of the imports of these strategic materials such as manganese, chromite, molybdenum, and other materials to Canada, in terms of import value only.

Mr. BUCK: I am afraid I could not give you the figures offhand; but certainly, from all our experience, it would not be as great as our exports. About 31 to 38 per cent of Canada's exports are in minerals or mineral products. I do not think that our imports are in that proportion. I think we export more than we import.

Mr. NIELSEN: Is that information available?

Mr. BUCK: Yes. There are three publications in which the members of the committee might be interested, among other things. They contain a lot of "meat" in a few pages. There is a series put out on each mineral produced, each year, by the Canadian mineral industry. In them we can see in a few pages what happens in the industry. We also have an illustrated volume entitled Canada—Minerals and the World. It shows in pictorial form where all our minerals come from and where they go.

Mr. NIELSEN: The fact that, of our total exports, minerals comprise 38 per cent, points out the importance of the work of this committee to the members of this committee, and that this matter deserves a good deal of attention.

I wonder if these publications could not be supplied to us at our next meeting in sufficient quantities for a set for each member?

The CHAIRMAN: Could you also at the same time have figures with you giving in dollars and cents our imports of these particular minerals?

Mr. KINDT: I would like to ask Mr. Buck about Canada's position with respect to volcanic ash which is used very extensively in oil well drilling.

Mr. BUCK: That is one question which I cannot answer. I do not know, because I have not followed the development of volcanic ash.

Mr. KINDT: Perhaps someone else present could supply the information?

Dr. BOYER: We could get that information for you at the next meeting, sir.

Mr. HARDIE: If we are through with this line of questioning, I would like to ask Mr. Buck if it is his branch of the department that works out this three-year tax-free period that mines have? Does the Department of National Revenue come to you and say—for instance, in the case of a new mine: "When did this mine come into operation, and when is the end of the three-year limit?"

Mr. BUCK: Sir, the administration of the Income Tax Act is a matter for the Department of National Revenue, and we act as technical advisors to that department.

Mr. HARDIE: They do come to you for information on various occasions?

Mr. BUCK: That is right.

Mr. COMTOIS: There is an inter-departmental committee set up for that purpose, and they hold sittings whenever they are required.

Mr. NIELSEN: Following up Mr. Hardie's question with a new line of thought: there is also a very pertinent series of questions that could be asked in this particular field which might be of assistance in disclosing the opinion of the committee to the officials of the department for use in such an inter-departmental committee which functions, in reporting on these things.

I think it is well realized that every incentive must be given to individuals and to companies engaged in the search for new minerals and for new sources of the nation's mineral resources. One of the suggestions of long standing in this regard has been that these individuals and these companies operating in the remoter northern areas be granted some incentive in the field of tax concessions.

There have been submissions to the Gordon commission in this regard from one company that the tax free period on a new mine should be extended; and following up suggestions have been put forth in this regard over five to ten years.

Has the department given this matter any consideration with regard to introducing that type of incentive on behalf of northern developers, and if so, what is the department doing in that respect?

Dr. BOYER: I think that the department, Mr. Chairman, which would take the lead in anything like that, is the Department of Northern Affairs and National Resources which administers mineral resources in the Yukon and the Northwest Territories.

Certainly the question has been studied in the past, and it has been found very difficult to assess the situation in terms, let us say, of the 60th parallel.

Mr. NIELSEN: I am sorry—I did not mean to leave the impression that I was drawing a line. I just used the term "remoter northern areas"—and I would include in that term any areas which are remote, regardless of the parallel of latitude, because there are several in the northern portions of the provinces which are just as remote areas as those above the 60th parallel.

Dr. BOYER: We feel that our major responsibility lies in the work that we do to assist the mineral industry, particularly in the remote areas especially in the fields of scientific studies and investigations. But in tax incentive measures we would take the lead from the department which administers the resources in those regions.

Mr. NIELSEN: Do you think that the principle is a good one?

Dr. BOYER: I would say definitely, yes, if a formula could be found that would be acceptable.

Mr. HARDIE: I do not think it needs much of a formula to extend the period from three to five years.

Mr. NIELSEN: The formula is that it is necessary to determine those remoter northern areas.

Mr. HARDIE: Oh, I can do that for you!

The CHAIRMAN: Are there any other questions?

Mr. AIKEN: This is a lesson in remoteness.

Item 188 agreed to.

SURVEYS AND MAPPING BRANCH

Item 189. Branch Administration, including a Grant of $1,000 to the Canadian Institute of Surveying and Photogrammetry	$ 82,820
Item 190. Geodetic Survey of Canada	788,606
Item 191. International Boundary Commission	83,224
Topographical Surveys, including expenses of the Canadian Board on Geographical Names—	
Item 192. Administration, Operation and Maintenance	1,980,020
Item 193. Construction or Acquisition of Equipment	100,000
Canadian Hydrographic Service—	
Item 194. Administration, Operation and Maintenance, including Canada's fee for membership in the International Hydrographic Bureau	3,661,349
Item 195. Construction or Acquisition of Buildings, Works, Land and Equipment	2,777,057
Item 196. Legal Surveys and Aeronautical Charts	775,463
Item 197. Provincial and Territorial Boundary Surveys	43,800
Map Compilation and Reproduction—	
Item 198. Administration, Operation and Maintenance	1,283,532
Item 199. Construction or Acquisition of Equipment	180,200
	$11,756,071

The CHAIRMAN: Is it the wish of the committee, when considering the items concerning the Surveys and Mapping Branch to include items 189 to 199, and then probably, later, confine questions to each particular item? Agreed.

Mr. NIELSEN: Perhaps someone would start off by explaining what is the Canadian Institute of Surveying and Photogrammetry, and why we are granting $1,000 to this institution.

Dr. BOYER: Mr. Gamble is the new director of our Surveys and Mapping Branch and he will answer questions.

Mr. S. G. GAMBLE (*Director of Surveys and Mapping Branch*): It is now the Canadian Institute of Surveying, and is no longer "photogrammetry". It is the national association of surveyors; it started some sixty or seventy years ago as the Dominion Land Surveyors Association. When the dominion surveyed and laid out the provinces into townships and so on, this group of dominion land surveyors formed themselves into this association. As that work died out and the interest in the various types of surveys became broader it changed its name to the Canadian Institute of Surveys.

Mr. AIKEN: Is there any good reason why a group of very "well-heeled" gentlemen should receive a government grant of $1,000? I am not detracting from them. Is it for a special purpose—for them to provide a public service?

Mr. GAMBLE: A great many technical articles are published in *The Canadian Surveyor*, which is the publication of the institute. If it were not for the Canadian Institute of Surveying publishing these articles, the department would be put to considerable expense in doing so. There are five volumes issued annually, and the cost per volume is something in the order of $800. In point of fact, this branch looks after about a fourth of the cost of the publication.

Mr. AIKEN: It is more or less for the purchase of this information from the institute? What I am getting at is: it is not really a case of giving them a grant such as in the case of a widow of a deceased employee of the government service, or similar grants as are contained in this estimate book?

Mr. GAMBLE: I think it can be classified as for services rendered.

Mr. AIKEN: Thank you.

Mr. DUMAS: Now, Mr. Chairman, I would like to say a word on that. I am the president of the Canadian Institute of Surveying, which is a great honour to me. As has been very well explained by the director of the Surveys and Mapping Branch, this grant of $1,000 enables the Institute of Canadian Surveying to publish these articles, the cost of which is $4,000. This item represents only 25 per cent of the cost. It would be absolutely impossible for the institute to produce such a fine magazine without a special grant.

At this time I would like officially to thank the minister for having given this consideration to the request which was put to him last year to increase the grant from $500 to $1,000. On behalf of all the members of the Canadian institute, who number 1,145 across the country, I wish to thank the minister for this increase in the grant.

Mr. COMTOIS: I was very happy to do it.

Mr. DUMAS: We are very pleased.

Mr. NIELSEN: I wonder if the minister would indicate where the increases are in this $3 million chiefly, without going into detail.

Dr. BOYER: I would say, Mr. Chairman, there are moderate increases here and there in the several votes which cover the whole Surveys and Mapping Branch. The major item of increase is for the construction of the new ship for hydrographic, oceanographic and submarine geology work.

Mr. NIELSEN: Which will be used in the polar research mentioned in the press release?

Dr. VAN STEENBURGH: No—that ship cannot reach those polar regions.

Mr. NIELSEN: What is the purpose of this ship?

Dr. VAN STEENBURGH: There are several regions as will be brought out by the Hydrographic Service later, where we are very much behind and it would take us many years to catch up in the hydrographic field.

However, in recent years, due to defence requirements, and the fact that the continental shelves now belong to this country, and for navigational purposes as well, it was felt that Canada should increase her effort in oceanography. This ship is designed so that it can carry out hydrographic work if the priority is in hydrographic work; but probably its main purpose will be in doing physical oceanography and submarine geology over the ocean shelves. In addition this ship will take part in any international effort in which Canada may be required to participate in oceanographic work any place in the world.

Mr. NIELSEN: What will this ship cost?

Dr. VAN STEENBURGH: In the neighbourhod of $7 million—we have not had a firm bid yet.

Mr. NIELSEN: It is in the tender stage?

Dr. VAN STEENBURGH: It has not yet reached tender.

Mr. NIELSEN: What is the $2 million in this year's estimates?

Dr. VAN STEENBURGH: That is what we anticipate will be spent this year.

Mr. COMTOIS: It is a progress payment.

Mr. NIELSEN: Are tenders being called in Canada from Canadian shipbuilders?

Dr. BOYER: Yes. We hope within a month or six weeks to ask for tenders.

Mr. NIELSEN: What is the total estimated cost?

Dr. BOYER: Approximately $7 million. We will not be sure what the actual cost is until we receive tenders.

Mr. DUMAS: Is the full amount of $7 million included in this?

Mr. COMTOIS: No; it is only $2 million for the progress payment.

The CHAIRMAN: When do you expect it will be completed?

Mr. COMTOIS: In a year or a year and a half.

Dr. VAN STEENBURGH: It will probably take two years from the date of the granting of the contract until the ship will be commissioned.

The CHAIRMAN: The deputy minister was just saying to me that they expect delivery of the ship in 1961.

Mr. NIELSEN: Will there be anything in addition to the $7 million which the ship is estimated to cost? Will there be any additional cost for fitting it out with special scientific equipment?

Dr. VAN STEENBURGH: Actually the scientific equipment is included in that estimate. This ship will contain a great deal of special equipment, such as electronic equipment, special winches, and other equipment of that nature. That is included in this estimate.

Mr. NIELSEN: In this year's estimate?

Dr. VAN STEENBURGH: No; in the total estimate.

Mr. MCQUILLAN: Is it planned to use the ship on both coasts?

Dr. VAN STEENBURGH: This ship is planned at present for the east coast working into the eastern Arctic. I might say for the benefit of the committee that this ship only meets part of the requirements for increased hydrographic and oceanographic work for this department.

Mr. PAYNE: With the recent launching of the Department of Transport's far northern icebreaker and sea rescue work, will your department be using this craft for the technical assistance which you need in your oceanographic studies?

Dr. VAN STEENBURGH: Actually we have a very close working relationship with the Department of Transport and wherever we can get scientific and technical people on their ships we do so. Their ships are used for different purposes so it is only occasionally that they can be used for obtaining technical information; but on these occasions we use their ships.

Mr. NIELSEN: Would questions properly be asked under this item as to the details of the operations now being conducted and intended to be conducted after this ship is completed; or would those questions be more properly asked under another item?

The CHAIRMAN: I think under this item. The minister has already set out some of the particulars; so I think you are justified.

Mr. NIELSEN: I wonder, then, perhaps, Mr. Chairman, if we could be informed as to what is being undertaken and has been undertaken by the Russians in this particular field.

Dr. VAN STEENBURGH: I am speaking now of newspaper reports and information which is available to us through the translated literature. At the present time knowledgeable oceanographers feel that the Russians are doing more work in the field of oceanography and associated research than any other country. I would not want to go as far as to say they are doing as much as all the rest of the world put together, but they are doing more than any other single country in this field.

Mr. NIELSEN: This points up the important nature of this program.

Dr. VAN STEENBURGH: Yes. The need for oceanographic information is extremely pressing at the present time and except for the work which has been done by the Fisheries Research Board in Canada very little oceanography has been done off our coasts. It is in an effort to fill this gap that our department is now entering the field of physical oceanography.

Mr. NIELSEN: Could we have an idea, once this ship is completed, as to how wide the range will be of its activities? Looking at the map, do you intend to go right up to the limit of the Canadian territory in the eastern Arctic with this ship?

Dr. VAN STEENBURGH: At the present time, because of the nature of our climate, our ships can start their operational season south, and as it warms

up, advance northward. We anticipate this ship will work off the east coast as long as the season will permit and then as the warming-up period approaches move further north, and that ultimately it will be working as far north as possible.

Mr. NIELSEN: This next question will perhaps prove a little difficult, but I would like to know whether or not the department has any suspicious that Russian oceanographers are trespassing on Canadian territory and in Canadian waters in conducting their work in oceanography.

Dr. VAN STEENBURGH: The only information we have on that point is the translated technical documents from the Russians.

Mr. NIELSEN: What do they say?

Dr. VAN STEENBURGH: They indicate that the Russians have made soundings quite close to our northern coastline; how close it is difficult to say.

Mr. NIELSEN: Is there any reason to suspect they have made soundings inside our coastline?

Dr. VAN STEENBURGH: May I say I believe the Russians know more about the extent of our shelves and depths in the Arctic ocean than we know.

The CHAIRMAN: How far have they gone?

Dr. VAN STEENBURGH: We do know from actual soundings which the Russians have published; it appears they have been at least 75 miles from our coast.

Mr. NIELSEN: The western Arctic is as important as the eastern Arctic now, and I think even more important because of its proximity to Russian territory and the relatively free access they would have to the western Arctic as opposed to the eastern Arctic. Is the department considering any plans for duplicating this type of research in the western Arctic?

Dr. VAN STEENBURGH: I might say that the fisheries research board through their Pacific oceanographic group have carried out one rather extensive oceanographic cruise into the Beaufort Sea and one or two less extensive ones. The Americans are extremely interested in that area and have groups working now out of Port Barrow, Alaska. Our own continental project will be centred on Isachsen this year and will work approximately 150 miles northeast and southwest of Isachsen. You will see by our press release that this polar shelf project is a long-term approach to the study of the physical factors in that area and we expect that we will move farther north and farther south as the project proceeds.

Not only are we interested in physical characteristics of the Arctic polar shelf itself, but we are very much interested in the waterways between the islands. This study will move back into the channels between the islands as it develops. The project this year is purely a reconnaissance. The reason is that we know so little about what types of transport we can use, what kind of equipment will operate effectively, how to position ourselves during the work and other factors of that nature.

Next year the polar continental shelf project will expand its scope and employ thirty or more technical persons with necessary transportation and that should yield very valuable information on that whole area.

Mr. NIELSEN: Could I move we adjourn without passing this item?

The CHAIRMAN: We will let items 189 to 199 stand.

Gentlemen, will you observe the press release from the Department of Mines and Technical Surveys. It has special reference to item 210 and you may wish to make a study of that before the next meeting which will be on Thursday morning at 10 o'clock. The meeting stands adjourned until Thursday at 10 o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAR 6 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 4

THURSDAY, FEBRUARY 26, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Hon. Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Mr. S. G. Gamble, Director, Surveys and Mapping Branch; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. K. M. Pack, Chief Administrative Officer; Dr. W. E. van Steenburg, Director-General of Scientific Services; Mr. J. E. Lilly, Dominion Geodesist; and Mr. Robert Thistlethwaite, Surveyor General of Canada.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20638-3—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.
Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, February 26, 1959
(5)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Vice-Chairman, Mr. Erik Nielsen, presiding.

Members present: Messrs. Aiken, Dumas, Gundlock, Hardie, Kindt, Korchinski, Leduc, MacInnis, Martel, Martineau, McFarlane, McGregor, McQuillan, Mitchell, Nielsen, Payne, Roberge, Robichaud, Slogan and Stearns. (20)

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Dr. John Convey, Director, Mines Branch; Mr. A. Ignatieff, Chief, Fuels Division; Mr. S. G. Gamble, Director, Surveys and Mapping Branch; Mr. Robert Thistlethwaite, Surveyor General of Canada; Mr. J. E. Lilly, Dominion Geodesist; Mr. A. C. Tuttle, Chief Topographical Engineer; Mr. Douglas Baldock, Chief Cartographer; Mr. H. A. S. West, Secretary, Interdepartmental Committee on Air Surveys; Dr. C. S. Beals, Dominion Astronomer; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; Mr. G. H. Murray, Chief, Editorial and Information Division; and Mr. J. Murray Sutherland, Chief, Financial Services Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys.

The following documents, which had been requested at the last meeting of the Committee when items concerning the Mineral Resources Division were being considered, were distributed, namely, the most recently published mineral map of Canada, a booklet entitled Summary of Developments in the Canadian Mineral Industry 1957 and a file of Annual Mineral Reviews for 1957, all published by the Department of Mines and Technical Surveys.

Answers to certain questions which had been asked at the last meeting were produced by Dr. Boyer and were ordered to be printed in this day's proceedings.

The Committee resumed its consideration of Items 189 to 199 concerning the Surveys and Mapping Branch. Mr. Gamble, the director of that branch, gave a resumé of the functions, operations and problems of the various divisions of his branch. He and certain of his officials were questioned thereon.

Items 189 to 199 were severally called, considered and approved.

At 11.48 o'clock a.m. the Committee adjourned until 10.00 o'clock a.m. on Tuesday, March 3, 1959.

Eric H. Jones,
Clerk of the Committee.

20638-3—1½

EVIDENCE

THURSDAY, February 26, 1959
10 a.m.

Mines, Forests and Waters.

The VICE-CHAIRMAN: Gentlemen, I see a quorum. Let us get started.

I have one or two announcements to make before we resume consideration of items 189 to 199, where we left off last Tuesday.

You will find before you in your places some publications which I requested at the meeting on Tuesday last. The first is a summary of developments in the Canadian mineral industry 1957; that is the little white publication.

Then there is the most recently published mineral map of Canada with information up to the date of January, 1958; and there are also the Annual Mineral Reviews for 1957. These are in the black Acco-bound publication in front of you, which contains fairly complete information on the mineral resources throughout Canada.

The minister has also pointed out that there is a French translation of the press release concerning research in the polar basin, for any members who are interested in obtaining a copy in French.

When the committee comes to consider the estimates of the Dominion Coal Board, there are a number of witnesses whom members undoubtedly would like to have called. Mr. Kindt is the only member up to this date who has submitted any request in that regard. He requested that Mr. William Whittaker, a member of the Dominion Coal Board, a gentleman who is secretary of the Coal Operators Association of Western Canada, and who was also chairman of the coal mission to Japan in 1958—Mr. Kindt requests that Mr. Whittaker be called as a witness for examination by the committee on the subject of the marketing of coal in Japan and relative matters.

May I suggest to the members that if they have any witnesses that they feel should be called when the committee is considering the estimates of the Dominion Coal Board, would they be good enough to let us know whom they wish to have called some time between now and next Tuesday. Will they let the clerk of the committee or myself have the names of the witnesses before that time?

There were questions asked last Tuesday for which I now have the answers. Some of them are a little lengthy. Perhaps I should read the questions and then ask permission of the committee to have the answers published in the official record of the committee's proceedings.

Mr. DUMAS: I think the questions and answers could be published in the proceedings, Mr. Chairman.

The VICE-CHAIRMAN: Without the necessity of reading the questions?

Mr. DUMAS: That is right.

The VICE-CHAIRMAN: Very well.

Mr. KINDT: Before we do that, may I ask if the question which I asked regarding volcanic ash is included?

The VICE-CHAIRMAN: It is.

Mr. KINDT: May I ask one or two more questions about that subject? I would like to have it brought before the committee for discussion.

The VICE-CHAIRMAN: Very well. I shall extract that one. Perhaps it would be better if I ran over these questions in view of the request made by Mr. Kindt.

Mr. Robichaud has a question in connection with the total production of lead and zinc for 1957 and 1958. The answer to that question is here.

I had a question about the total imports of barite in 1956, 1957, and the first nine months of 1958. The answer is here.

Mr. Kindt had a question with respect to volcanic ash. The answer to that question is here.

Mr. Robichaud had a question concerning the number of lead and zinc mines in Canada which had been closed down. The answer to that question is here.

I had a question concerning the actual cost to Canada of the imports if these strategic materials such as manganese, chromite, molybdenum and other materials, in terms of import value only. The answer to that question is here.

Mr. Hardie asked a question at the last meeting concerning the estimate of the known reserves of ore in Canada. The answer to that question is here as well.

The questions and answers as they are to appear in the record, in their complete form, are as follows:

QUESTION

Mr. Robichaud—Could Mr. Buck give us the total production of lead and zinc for 1957 and 1958?

ANSWER

Production of lead and zinc in all forms from Canadian mines in the years 1955 to 1958 was as follows:

	1957		1958	
	Tons	$ Value	Tons	$ Value
Lead	181,484	50,670,407	185,770	42,095,560
Zinc	413,741	100,042,533	428,638	93,100,167

	1955		1956	
	Tons	$ Value	Tons	$ Value
Lead	202,763	58,314,500	188,854	58,582,651
Zinc	433,357	118,306,466	422,633	125,437,344

ANSWER TO A QUESTION BY

Mr. Nielsen

Imports of ground barite in 1956, 1957 and first nine months of 1958 were as follows:

	1st nine months of 1958		1957		1956	
	Tons	$	Tons	$	Tons	$
United States	613	31,329	1,427	47,682	897	37,053
West Germany	360	10,194	364	9,037	538	12,514
Italy	—	—	40	1,290	40	1,261
Total	973	41,523	1,831	58,009	1,475	50,828

QUESTION

Mr. Kindt—I would like to ask Mr. Buck about Canada's position with respect to volcanic ash which is used very extensively in oil well drilling.

ANSWER

Volcanic ash, also known as pumicite or volcanic dust is a natural glass or silicate, pulverized by volcanic explosions and thrown into the air in great clouds which ultimately settle into beds varying from a few inches to many feet in thickness. The dust occurs as finely divided powder of a white to grey or yellowish colour and is composed of small, sharp, angular fragments of highly siliceous volcanic glass.

Widespread deposits of volcanic dust occur in Saskatchewan, Alberta and British Columbia, but owing either to thinness of beds, or remoteness from markets, *there has been no production for many years.*

Volcanic dust is used in Canada mainly for making scouring and cleansing aids. Lightweight building blocks composed of pumice aggregate and cement mixture are made at several block plants in British Columbia. The pumice aggregate is imported from nearby Oregon and Washington at prices ranging from $6.00 to $9.00 a short ton, f.o.b. Vancouver plants.

In United States increasing amounts of pumicite and pumice are being used as concrete admixture and concrete aggregate. Pumicite is also used as a carrier or filler for insecticides, and as a cleaning and scouring agent in soaps and powders.

Imports are grouped with a number of similar products (pumice, pumicite, volcanic dust, lava, and calcareous tufa) and in 1957 were valued at $254,427 compared with $242,656 in 1956. Most of these imports came from United States.

Although no figures are available a maximum of 200 tons per year is apparently imported into Canada.

QUESTION

Mr. Robichaud—Could you give us a figure showing how many lead and zinc mines in Canada are closed down at this time, that is, mines that were in operation two years ago and are now closed?

ANSWER

Lead and Zinc Mine Closures and Cutbacks Since May 1957

Since May 1957, when lead and zinc prices began to decline, the mines shown below have closed or curtailed production substantially. To estimate the loss in production, their output in 1956, a year of stable prices, is shown. The totals for lead and zinc represent the potential loss of production due to the price decline. There were other closures since May 1957, caused by exhaustion of ore reserves but these are not included.

Mine Closures	Province	Annual Recoverable Production Lost Since May, 1957	
		Lead	Zinc
		Tons	Tons
Cominco	B.C.	5,000	20,000
Barvue Mines	Que.	50	21,050
Galkeno Mines	Yukon	1,600	1,340
Britannia M. & S. Co.	B.C.	.....	8,615
Heath Steele Mines	N.B.	4,560	10,080
Sunshine Lardeau Mines	B.C.	2,500	2,600
Silver Standard Mines	B.C.	880	1,000
West Macdonald Mines	Que.	.....	11,035
Curtailed Production			
New Calumet Mines	Que.	460	860
East Sullivan Mines	Que.	.....	3,460
Total		15,050	80,040

In addition to the closure of producing mines, declining prices have forced the suspension of mine exploration and development in several parts of Canada. In New Brunswick, Brunswick Mining and Smelting Corporation suspended work as did other smaller projects such as Nigadoo Mines, Sturgeon River Mines and Anacon Lead Mines. In Ontario, Consolidated Sudbury Basin Mines developed two large deposits, built a 1000-ton mill, but did not go into production because of low base metal prices. In British Columbia, Silbak-Premier Mines, American Standard Mines and Western Mines also deferred mine development. In Quebec, Coniagas Mines deferred mill construction as a result of low zinc prices.

QUESTION

Mr. Nielsen—Perhaps Mr. Buck could tell us the actual cost to Canada of the imports of these strategic materials such as manganese, chromite, molybdenum and other materials, in terms of import value only.

ANSWER

Imports of main additive minerals and addition alloys (i.e. used in steel production) for the years 1956, 1957 and the first nine months of 1958.

	1956		1957		1st nine mos. 1958	
	Tons	$	Tons	$	Tons	$
Chromite	64,965	1,529,411	111,453	2,751,372	36,811	763,852
Manganese	207,978	9,137,278	131,318	7,519,746	25,144	1,135,335
Ferromanganese (under 1% Silicon)	2,191	798,086	743	237,104	951	210,058
Ferromaganese (over 1% Silicon)	1,130	459,416	2,257	854,309	1,752	447,666
Molybdic oxide	478	705,400	239	401,928	130	186,746
Ferromolybdenum (U.S. exports to Canada)	248	504,043	119	266,812	94	201,007
Calcium molybdate (grouped with vanadium oxide and tungsten oxide for manufacture of steel)	161	367,194	143	468,115	60	97,023
Ferrotungsten	103	270,259	85	122,453	30	54,879
Tungsten ore	62	160,555	115	147,711	272	215,622
Ferrosilicon	682	222,462	810	311,513	874	310,201
Alloys, n.o.p. for manufacture of steel	7,290	4,476,214	5,658	3,453,407	2,790	1,707,903

A measure of some of other Canadian imports of similar materials may be had from an examination of United States Exports to Canada, i.e. in 1957.

	lbs.	$
Zirconium ore and concentrates	5,457,101	192,802
Zirconium metal and alloys (in crude form and scrap)	30,304	104,145
Titanium metal and alloys	154,789	2,098,114
Titanium metal and alloys (intermediate mill shapes)	1,392,431	7,128,722
Titanium metal and alloy sponge (including iodide titanium and scrap)	57,654	27,373
Tantalum metals and alloys (in crude form and scrap)	320	2,880
Tantalum—Semi-fabricated	80	5,000
Chromic acid	1,035,870	296,662
Molybdenum wire	9,597	136,263

QUESTION

Mr. Hardie—Has the department an estimate of the known reserves of ore in Canada,

ANSWER

The three attached tables give the ore reserve situation in respect to lead, zinc, iron ore and copper

LEAD AND ZINC ORE RESERVES—CANADA

GROSS METAL CONTENTS

Classification	Ore Tons	Zinc	Grade	Lead	Grade	Copper	Grade	Silver	Oz.
		Tons	%	Tons	%	Tons	%	Ounces	/Ton
I MEASURED ORE									
Zinc-Lead Ore	143,993,900	9,786,750	6.8	6,005,900	4.2	400,440	0.3	314,707,400	2.2
Zinc-Copper Ore	64,551,500	2,309,050	3.6	1,935	0.003	1,136,600	1.8	68,868,700	1.1
Total	208,545,400	12,095,800	5.8	6,007,835	2.9	1,537,040	0.7	383,576,100	1.8
II INDICATED ORE									
Zinc-Lead Ore	112,120,680	6,509,180	5.8	2,663,190	2.4	548,830	0.5	191,479,070	1.7
Zinc-Copper Ore	321,100	10,900	3.4	.....	.....	3,500	1.1	289,000	0.9
Total	112,441,780	6,520,080	5.8	2,663,190	2.4	552,330	0.5	191,768,070	1.7
III MEASURED & INDICATED ORE									
Zinc-Lead Ore	256,114,580	16,295,930	6.4	8,669,090	3.4	949,270	0.4	506,186,470	2.0
Zinc-Copper Ore	64,872,600	2,319,950	3.6	1,935	0.003	1,140,100	1.8	69,157,700	1.1
Total	320,987,180	18,615,880	5.8	8,671,025	2.7	2,089,370	0.7	575,344,170	1.8
IV POTENTIAL ORE									
(*a*) In underdeveloped areas	78,994,000	4,015,900	5.1	1,532,200	1.9	28,200	0.04	16,920,000	0.2
(*b*) Metallurgically underdeveloped	63,000,000	3,654,000	5.8	1,512,000	2.4	315,000	0.5	107,100,000	1.7
(*c*) Uneconomic at present time	137,334,350	2,313,489	1.7	405,101	0.3	323,650	0.2	67,695,900	0.5
Total	.....	9,983,389	.....	3,449,210	.....	.....	.....	.....	.....

COPPER RESERVES OF CANADA (ESTIMATE) FEBRUARY 25, 1959

Province	Class	Short Tons of Ore	Short Tons of Contained Copper	Total Short Tons of Ore	Total Short Tons Contained Copper
Newfoundland.....	Producing Mines.....	*9,324,700	143,800		
	Potential Producers...	*2,216,000	44,300		
				11,540,700	188,100
New Brunswick.....	Potential Producers...	*94,870,000	535,700		
				94,870,000	535,700
Quebec.....	Producing Mines.....	*113,387,700	1,841,020		
	Potential Producers...	*8,005,700	139,970		
	Exploration Properties.....	**20,902,000	151,910		
				142,295,400	2,132,900
Ontario.....	Producing Mines.....	*327,679,100	4,628,900		
	Potential Producers...	*22,295,300	264,800		
	Exploration Properties.....	**6,157,200	37,800		
				356,131,600	4,931,500
Manitoba—Saskatchewan.....	Producing Mines.....	*33,101,000	603,800		
	Exploration Properties.....	*4,445,000	62,700		
				37,546,000	666,500
British Columbia....	Producing Mines.....	*2,984,000	51,100		
	Potential Producers...	*4,750,000	48,800		
	Exploration Properties.....	**145,600,000	1,093,200		
				153,334,000	1,193,100
Yukon & Northwest Territories.....	Producing Mines.....	*447,500	4,200		
	Exploration Properties.....	**737,600	10,500		
				1,185,100	14,700
	GRAND TOTALS			796,902,800	9,662,500

*Includes measured and indicated ore.
**Includes indicated and inferred ore.

AN ESTIMATE OF THE IRON ORE RESERVES OF CANADA

Sufficient exploration and development has taken place in Canada, especially within the last decade, to indicate that Canadian iron ore resources are tremendous. Not only does Canada possess large reserves of direct-shipping ore but she also has vast resources of low-grade, iron-bearing material of concentrating grade. What shortages of iron ore exist are regional such as in the western provinces, and it is safe to say that Canada possesses an absolute abundance of iron ore sufficient to supply her growing domestic and export markets for generations to come.

In the accompanying table an estimate of the iron ore reserves of Canada is shown. In the columns headed measured, indicated, and inferred, the tonnages listed are for deposits presently being mined or are under development for production in the near future. Potential reserves include many known deposits presently being explored and represent only a portion of the actual tonnages that exist. It should be cautioned, however, that although some of the potential reserves may become commercial within the next few years, much will remain undeveloped for many years. The more important reasons for this situation are: geographical location, chemical and physical characteristics, and lack of markets.

AN ESTIMATE OF THE IRON ORE RESERVES OF CANADA—*Concluded*

Geographical Areas	Thousands of Long Tons					Per Cent Iron
	Measured	Indicated	Inferred	Potential	Total	
NEWFOUNDLAND						
Bell Island	150,000	.....	1,050,000	.....	1,200,000	50
Sub Total	150,000	.....	1,050,000	.....	1,200,000	
LABRADOR						
Schefferville area	137,000	.....	150,000	.....	287,000	52
Wabush Lake	.....	2,500,000	.....	2,500,000	5,000,000	35-38
Sub Total	137,000	2,500,000	150,000	2,500,000	5,287,000	
QUEBEC						
East Coast of Hudson Bay	.....	.....	.....	630,000	630,000	32-38
Matonipi Lake-Albanel Lake	.....	.....	.....	2,000,000	2,000,000	25-35
Mount Reed-Mount Wright	.....	700,000	.....	4,000,000	4,700,000	32
Schefferville	280,000	.....	250,000	.....	530,000	52
Southeastern	150,000	.....	50,000	1,500,000	1,700,000	40-45
Ungava Bay	.....	.....	.....	4,000,000	4,000,000	35
Western	10,000	10,000	.....	2,500,000	2,520,000	20-35
Sub Total	440,000	710,000	300,000	14,630,000	16,080,000	
ONTARIO						
By-Product	11,000	.....	15,000	.....	26,000	68
Michipicoten	375,000	.....	100,000	.....	475,000	35
North Central	.....	25,000	.....	200,000	225,000	20-35
Northwestern (excluding Steep Rock)	.....	.....	.....	3,000,000	3,000,000	20-35
Southeastern	10,000	10,000	.....	50,000	70,000	20-38
Steep Rock area	330,000	.....	330,000	.....	660,000	52
Steep Rock area	15,000	15,000	.....	.....	30,000	15
Sub Total	741,000	50,000	445,000	3,250,000	4,486,000	
PRAIRIE PROVINCES	.....	.....	.....	2,000,000	2,000,000	25-40
BRITISH COLUMBIA	1,000	3,000	.....	2,000	6,000	40-45
NORTHWEST TERRITORIES	.....	.....	.....	2,000,000	2,000,000	25-40
TOTAL	1,469,000	3,263,000	1,945,000	24,382,000	31,059,000	

The committee will now resume consideration of items 189 to 199.

I propose to ask Mr. S. G. Gamble, Director of the Surveys and Mapping Branch, when we begin consideration of these items, to give us a brief summary of the activity of his branch under each item, before the committee proceeds with an examination of individual items.

SURVEYS AND MAPPING BRANCH

Item	189	Branch Administration, including a Grant of $1,000 to the Canadian Institute of Surveying and Photogrammetry	$ 82,820
Item	190	Geodetic Survey of Canada	788,606
Item	191	International Boundary Commission	83,224
		Topographical Surveys, including expenses of the Canadian Board on Geographical Names—	
Item	192	Administration, Operation and Maintenance	1,980,020
Item	193	Construction or Acquisition of Equipment	100,000
		Canadian Hydrographic Service—	
Item	194	Administration, Operation and Maintenance, including Canada's fee for membership in the International Hydrographic Bureau	3,661,349
Item	195	Construction or Acquisition of Buildings, Works, Land and Equipment	2,777,057
Item	196	Legal Surveys and Aeronautical Charts	775,463
Item	197	Provincial and Territorial Boundary Surveys	43,800
		Map Compilation and Reproduction—	
Item	198	Administration, Operation and Maintenance	1,283,532
Item	199	Construction or Acquisition of Equipment	180,200
			$3,497,226

Mr. S. G. GAMBLE (*Director, Surveys and Mapping Branch*): Mr. Chairman, before turning to the particular items, I would like very briefly to review the history of the branch, because certain of the activities are reflected in this history.

About ten years ago the various divisions forming the branch were brought together under the Surveys and Mapping branch.

Great progress has been made since that time in the development of techniques and in the quantity of work performed. But we have been handicapped in our housing. Very shortly we shall be going into a new building.

We are now having a study by the Organization and Methods Service of the Civil Service Commission to see how we can best consolidate our administrative services when we move into that new building.

There are also under review a number of studies to see how best we can face the changing situation. I think we can consider the first ten years as a period of consolidation. If there are different problems to be faced up to, it is not because nothing has been done in the past, but because we have an opportunity to go ahead.

The problems of the Surveys and Mapping Branch are very closely related to the development of the country, and as the country goes forward I think we have to look for an ever-increasing demand for the services of the branch. Therefore we have to look for ever-increasing numbers employed on the work of the Surveys and Mapping Branch.

The history of other countries has followed this course, and as the country becomes more developed much more detailed information in mapping and surveys is required. I should like to deal now with the particular problems of each division, starting with the Surveys and Mapping Branch. The administrative unit of the branch is very small. It administers the various divisions. It has up until now, it seems to me, let the divisions undertake some of the duties which should be rightfully undertaken by it. This is a matter of organization and is being studied. Up to this time, certainly, it is a matter of the most convenient way these things could be handled. I speak particularly of survey and map information, and this type of information. We should be in a better position than we are at present to give out information.

The first large division is the Geodetic Survey of Canada. This map shows the geodetic framework. The long-term intention, of course, is to cover the whole of Canada with these types of survey controls so that all other surveys will be based upon a firm base. As an interim measure we have this shoran control which has been undertaken over the last few years and completed last year. This gives preliminary positions for mapping and other activities. Had we waited until these firm triangulation networks were completed over this whole area we would have had to wait a long time. These surveys go forward slowly and have to be done accurately; and to get this pattern all over the country would take, I would estimate, something in the order of fifty years. So this is an interim expedient.

Besides establishing the triangulation first on the continent and then into the Arctic islands, we also have a problem of supplying the more settled areas with a better class of survey control, not only horizontal but vertical. These major projects such as the Seaway, the Saskatchewan River and that type of work require, as you will appreciate, very good survey control.

This division in the past has been slowed down because of lack of qualified staff. It has been difficult to recruit the right class of man. Now the situation is easing up and we expect we can get more engineers to carry out this type of work. This is the basis, of course, on which all other surveys are carried out.

The next division is a small one. It is the International Boundary Commission. Their work is to ensure that the boundary between the United States

and Canada is well defined, that there is a clear vista along the line, which means cutting down trees from time to time, visiting sections of the line and putting in new survey markers as the old ones become destroyed from one cause or another. This is a continuing requirement under the international boundary agreement. Their work is fairly well defined and their problem now, of course, is merely to keep the lines open and in good condition.

Mr. KINDT: What is the joint arrangement with the United States in respect of cost?

Mr. GAMBLE: It is on a cost sharing basis.

Mr. KINDT: On a fifty-fifty basis?

Mr. GAMBLE: Yes.

The Topographical Survey is the next division I would like to mention. Its task is the mapping of the land area. It is mapping at two main scales, the four-miles-to-the-inch or the 1/250,000 scale, and the 1/50,000 scale, or about 1¼ inches to the mile. The smaller scale—the 1/250,000—is used in the more remote and—at the present time—less important areas. The scale that should be used is sometimes difficult to assess, but generally we have a fair indication of which scale is to be used in a certain area.

The situation on the 1/50,000 scale mapping is shown on this map. Wherever there is 1/50,000 mapping, it is very simple to make a 1/250,000 map, because you merely take that information and incorporate it in the smaller scale map. The general plan is to cover the whole of the country with this scale of mapping. We have a long way to go as you can see.

Considerably more field work is done than is indicated on that map and also a great deal of air photography. These are the bases of mapping, field work and air photography, and as long as we have these done then we can do the mapping in any area. The next map indicates the program of field work as it now stands for the topographical survey for the 1959 season.

In addition to the Topographical Survey, which is undertaking this work, there is also a unit of the Department of National Defence, the Army Survey Establishment. Very close working arrangements exist between the two organizations. They also are fielding some parties this year. This 1/50,000 work is quite well in hand and we are making good progress on it. The 1/250,000 work is not in as good a condition.

But there is one problem here, and that is the publication of these 1/50,000 maps. This, I will leave until we come to considering the map compilation and reproduction division.

I would like at this time to turn to the hydrographic services.

Mr. KINDT: I would like to ask one question before you do that: in regard to topographical mapping, have actual photographs been taken of these northern islands which recently have been leased for oil exploration? Has aerial photography work been done?

Mr. GAMBLE: Yes. I think Mr. West, who will be speaking later, can answer that specifically for you. But in regard to that contract which was let about a year ago, I believe the work is almost 50 per cent completed, and I would think that particular area was part of the work which was completed, and that aerial photos are available.

There are also other forms of coverage, which are not as good, but the trimetrigon coverage could be used, if absolutely necessary, to give some information.

There is another problem with respect to topographical surveys and that is the problem of the revision of maps. We are very anxious to get new information into the hands of the public. But some of the older maps also need revision and we are taking steps to do something about this.

In regard to the hydrographic service, their work was covered by Dr. van Steenburgh at the last meeting. However, this map shows their field program for the coming year.

Mr. SLOGAN: Could you elucidate on what that area is in the Arctic?

The VICE-CHAIRMAN: I wonder if you would allow Mr. Gamble to go through all the items in each division, because there are specific officials in each of the divisions who as experts will be dealing with each one of these items. I am not, however, suggesting Mr. Gamble is not an expert.

Mr. GAMBLE: There has been some increase in their responsibility, with Newfoundland joining confederation. As you can see, the coastal areas of Canada have increased tremendously. There also has been an increased interest in the north and, of course, an interest in the Seaway. All this has thrown a very great load on our hydrographic service. And in connection with that, of course, they are involved in more ocean work, and work requiring larger ships. The training and holding of the staff has been a problem, but recently this situation is showing considerable improvement.

There is one very definite problem which faces the hydrographic service, of course, and that is that they have a great number of charts not only to do but also to revise. This throws a great load on their office services. As a result, it would seem that we have to look for some increase in that area as well. Of course, in addition to the navigable inland waterways, the tide and water-level information, we also receive requests for hydrographic charts of the holiday areas for tourists. This is something that has come up quite recently.

Mr. Norman Gray, the Dominion Hydrographer, is presently at a meeting in Detroit to discuss charting of the Seaway with the American authorities.

Another unit is the Legal Surveys and Aeronautical Charts. First, in regard to the legal surveys, the surveyor-general of Canada is responsible for the surveys in all dominion lands within the provincial framework,—Indian reserves, national parks and so forth,—as well as being responsible for the conduct of the surveys in the Northwest Territories and the Yukon. We have continually increasing requests from other federal government agencies for legal surveys. Also, of course, more legal surveys are being conducted in the territories.

Mr. KINDT: I wonder, Mr. Gamble, if you could give me one or two official words in regard to what a legal survey consists of.

The VICE-CHAIRMAN: I wonder, Mr. Kindt, if you would mind writing your question down; that is, make a note of it and when this particular division comes up you could ask the question.

Mr. KINDT: That is a good way to forget about it.

Mr. GAMBLE: I could hazard an answer to that, but I think a much better answer can be given by the surveyor-general.

Besides the legal work that is increasing from year to year, and the office work involved in processing the legal surveys, this division is also responsible for aeronautical charting.

These are normally based upon the eight-mile map of Canada. This black area on the map is the area for which there is no vertical information for the aeronautical charts. Perhaps I should qualify that by saying that there is actually some vertical information, but the current charts do not show it.

Vertical information in flying operations is very necessary. It is almost as important as, and sometimes even more important than, horizontal information.

So, as you can see, the air charting of Canada is still somewhat behind.

Besides this work, there are other things such as the Canada Air Pilot, and a series of air information charts, and so forth, which are the responsibility of that division. The electoral map of Canada, is also the responsibility of the division.

The surveyor general, of course, also looks after the boundaries between the provinces and territories. The boundary between Manitoba and the Northwest Territories is being run this winter. We expect that this work will be completed in two or three years.

We are called in as the third party on provincial boundaries. And there is another field that the division looks after, that is the air profile recording lines such as are shown on the map. This is a specialized field, because air profiles are used for "heighting" the air charts. The information is used by this division, and it has continued to look after the air profile work. This gives the elevation of the ground over which the aircraft flies.

The last division I shall speak about is the Map Compilation and Reproduction Division. It attempts not only to look after the publications of the other units of the branch, but also for other agencies of our own department, and of other departments.

The work load of the division is very great and it now has rather more than it can handle.

I mentioned that we were having trouble getting our 1/50,000 maps published, and we have a fair backlog of those maps. We can only get them into the hands of the public in a somewhat indifferent form.

We have been studying this problem and, by taking extreme measures which I have not yet discussed with the department officials, we have worked out a plan to bring these into a more acceptable form and to get them out more quickly than at present.

This scheme, if it meets with approval, may be reflected in our supplementary estimates.

This backlog that we have been examining has now risen to quite serious proportions. Admittedly when we get into our new quarters we shall be able to do a better job of keeping up with current requirements, but we certainly will not be able to digest the backlog of maps awaiting publications.

Speaking more generally, and recognizing the fact that we are about to go into new quarters, we have not gone as far in asking for funds for new equipment as we otherwise would.

It is my opinion that next year we shall be asking for the Map Compilation Division, the Topographical Survey Division and possibly others, considerably more money for capital equipment than we are asking for this coming fiscal year.

We are asking for one new press as a replacement, but it would be unrealistic to ask for more, because physically we have no place to put them.

It takes time and money to erect them and to tear them down. So we would prefer, under those circumstances, that any further new presses go into the new building.

The same applies to other equipment that we would very much like to ask for; but we feel it should not be asked for this particular year.

That I think, Mr. Chairman, covers the surveys and Mapping Branch, in rather general terms.

The VICE-CHAIRMAN: I do not think Mr. Gamble covered any of the individual items concerning "administration, operation and maintenance, construction or acquisition of equipment". Could you run over these items?

Mr. MCGREGOR: I would like to ask about those "fifty thousand" maps. What is the idea of having fifty thousand maps?

Mr. GAMBLE: That refers to the scale.

Mr. MCGREGOR: Did you not say that you were going to get fifty thousand maps?

Mr. GAMBLE: No. That is the scale of the maps, one to fifty thousand. It is something like one inch to the mile, or more precisely, one and a quarter inches to the mile on the map.

The VICE-CHAIRMAN: It is the scale of the map as opposed to the number.

Mr. MCGREGOR: What do you mean by that?

Mr. AIKEN: Those were the maps which you have not yet finished printing?

The VICE-CHAIRMAN: It is the scale of the map that was distributed to the members this morning...

Mr. MCGREGOR: I thought that he said that he wanted fifty thousand maps.

Mr. DUMAS: That is the scale of the map; one mile to the inch approximately.

The VICE-CHAIRMAN: Yes. That is the scale on the map we have distributed to you, Mr. McGregor.

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): Yes. One inch represents fifty thousand inches on the ground.

Mr. GAMBLE: The scale is of one mile to the inch, is 1/63,360. That is, one inch on the map represents that many inches on the ground.

Mr. MCGREGOR: All I heard was fifty thousand maps and I wondered what it was all about.

The VICE-CHAIRMAN: Would you just cover the administrative items, Mr. Gamble, items 192, 193, 195, 198 and 199? Or would you prefer to have the individual officials concerned with these items administrative discuss these items rather than discuss them yourself?

Mr. GAMBLE: I think I can discuss most of them.

Mr. DUMAS: Mr. Chairman, I wonder if we could dispense with that? We already have the minister's report, and his report for 1958—which would cover all these things.

The VICE-CHAIRMAN: Is it the wish of the committee that we dispense with it? Very well.

Mr. SLOGAN: Mr. Chairman, I would like to ask a few questions arising out of Mr. Gamble's remarks.

I noticed that several times he used certain phrases when speaking of the Geodetic Survey. He said that it was slowed down because of the lack of qualified staff, but that now the situation is easing up.

How large a staff do you have on that survey? How many technical people would be involved?

Mr. GAMBLE: Do you mean full-time?

Mr. SLOGAN: Yes. I do not mean the ordinary run-of-the-mill employees, but the technical people, or those you would mean by the expression "qualified staff".

Mr. GAMBLE: Thirty-six engineers is the total staff now. Perhaps I should qualify that by saying, plus or minus one or two.

Mr. SLOGAN: You mentioned that the situation was easing up. Is there now a greater availability of engineers, or is it because there is an increase in the budget? What are the factors which are causing an easing up in the situation?

Mr. GAMBLE: For quite a number of years we could not fill our engineering positions in the Geodetic service. But the prospects this year are quite good. We think we shall be able to attract the class of employee we want.

Mr. SLOGAN: Has there been an increase in the salary scale? Or what is the reason you are able to attract them now and you have not been able to do so in the past?

Mr. GAMBLE: There are several reasons, I think, such as increased interest in this type of work at the universities; better public relations than we had in the past with the universities; more attention we pay to the student assistants who work on our parties; and the fact that the engineers at universities today have not a great number of attractive offers before they are through their final year.

Mr. SLOGAN: Has there been any increase in salary for these people?

Mr. GAMBLE: Not in the last year.

Mr. SLOGAN: Then you spoke of the hydrographic survey, and you said something to the same effect, that holding staff was a problem but that it has become considerably better of late; would those same reasons apply to the hydrographic survey, or are the conditions under which they work any better?

Mr. GAMBLE: Yes, except there is another factor in the hydrographic survey. In this case not every engineer finds he is a good sailor. Sometimes they try out for this service and find that it is not the life for them. They do not like working on the water. Also, in order to get the most use out of our ships many of the hydrographers are away from home for very long periods —six months in the course of the year. They do not want to be separated from their families that long and we are trying to do something about that as well.

Mr. SLOGAN: Mr. Gamble, I have one final question: you mentioned that you had quite a large backlog of publications that you are more or less keeping up at the present time but that you are catching up on the backlog. Is the improved condition in your ability to turn out maps now due to more equipment or more survey parties; or what is the reason for this accumulated backlog?

Mr. GAMBLE: Between new survey equipment, photogrammetry and so on, the field parties can cover many times the area that they used to be able to in pre-war days. Now, this condition has arisen quite clearly and I would suggest that, on the average, a good field party can probably do five times as much work as it could before the war.

Mr. SLOGAN: I have just one more question—and you can pass it on to someone else if you feel it does not come within the scope of your branch. I am talking about international boundaries. At the southeast corner of the province of Manitoba there is a parcel of land attached to the mainland of Manitoba, in the Lake of the Woods area, that belongs to the United States, although the United States has no access to this land, except by water. The boundary actually runs away up and cuts off this little neck of land and then comes down again. Could you explain the background as to how that particular piece of land became attached to the United States?

Mr. GAMBLE: I cannot. However, I know the piece of land to which you are referring, and for convenience we have included it, on our maps, although of course it is shown as United States property. But I certainly do not know the background of it.

Mr. SLOGAN: Would anyone in your department be able to give an answer to my question; I just want to know as a point of information how that piece of land ever became part of the United States.

Dr. BOYER: Without putting this in the record, would Dr. Nicholson, the director of our Geographical Branch, know anything about this?

Dr. N. L. NICHOLSON (*Director, Geographical Branch*): The answer is not a short one, but perhaps I can give you a short version of it. It is in a memorandum of the Geographical Branch of this department. The full story is also in the reports of the International Boundary Commission.

Briefly this is due to a historical accident. Before the boundary extended from the Lake of the Woods westwards, the old documents said it could run to the northwest angle of Lake of the Woods. This was before we quite knew where the Lake of the Woods was or what latitude it was. When the position was finally determined it was found to be north of the 49th parallel. By that time the boundary west of Lake of the Woods had been decided as the 49th parallel, and so the jog goes up and down again to the 49th parallel. However, there is plenty of material on this subject and if the chairman wishes, I can give any member of the committee the particulars.

Mr. SLOGAN: I would be happy if you did.

Mr. KORCHINSKI: In connection with the International Boundary Commission, we have a crew in the field,—that is, the Canadian government has,—and I imagine the American government would also have one, too.

Mr. GAMBLE: Yes.

Mr. KORCHINSKI: And then the cost to the American government runs up and then it is subtracted from the cost we have, or vice versa, and we share in the arrangements; is that it, or what is the arrangement? How do we share the costs in this case? Is there a duplication of service?

Mr. GAMBLE: I am afraid I cannot answer your question.

Mr. PACK: In regard to that question, the two sections of the International Boundary Commission meet annually and set budgets. This question of reassessment of costs is the subject of an annual discussion. As a result, adjustments are being made at these sessions which bring the costs into an exact relationship. It does not always appear on the surface, but the over-all situation is that there is an equal sharing of costs. Usually that assessment is made on an annual basis.

Mr. KORCHINSKI: Before any work is done, are there any discussions carried on between the two countries to assess what the work for the year is to be?

Mr. GAMBLE: Definitely.

Mr. KORCHINSKI: And in that way there is no duplication of services?

Mr. GAMBLE: No. The work is divided between the two countries and the boundary commissioners jointly visit the boundary. Each year they visit certain sections of it.

Mr. KORCHINSKI: A certain amount of work is designated to a Canadian character, and a certain amount to the American; is that right?

Mr. GAMBLE: Yes.

Mr. PAYNE: Would the witness enlarge his statement, covering the two fields which I feel perhaps are not completely covered in the statement. One has to do with the basis for which priorities in the mapping service are established, and the other is the basis of liaison—there being other agencies actively in the survey work—between provincial authorities. And I am thinking also of international arrangements with the United States, particularly with regard to hydrographic surveys. Would Mr. Gamble make a statement to clarify in my mind how priorities are established in these specific cases; is there a liaison and, if so, what form does it take between the provinces and the United States?

Mr. GAMBLE: First, with regard to priorities: representations are made to the department for work by other government agencies, by provincial author-

ities and so forth. These are all assessed and we try to direct our work to those areas where the greatest need seems to lie.

Mr. PAYNE: But based on what? Representations made to government or—

Mr. GAMBLE: This is something which is hard to define, but it is based on the knowledge that we have the development work that is likely to occur. The Geological Survey is very helpful in indicating to us the areas of interest. There is also the Forestry Branch and other units of the Department of Northern Affairs, and other agencies which have definite programs planned for certain areas. They are taken into consideration when we are trying to develop our program.

Mr. KINDT: May I interrupt here for a moment. I think we would get further in discussing these items of the Surveys and Mapping branch if we went ahead and discussed each item separately. They are listed here from 189 to 199. There is not any use of our having a superficial discussion such as we have had here this morning. I suggest that we should take each item separately, probe deeply into it and have an expert opinion on each particular item. The way we are carrying on this morning is certainly a waste of time.

Mr. PAYNE: I must object to that statement. We are listening to a statement of a man from this department, which covers the general principles of operation.

I would like to pay tribute to the witness for his very broad coverage of the subject. There are two specific fields I would like to go into and I would like to have the witness carry on.

Mr. KINDT: In answer to the honourable member, I was not referring to his particular question, or any other questions. I think the answer he wants would come out when the questions are asked later. However, I have no objection.

Mr. PAYNE: If my question is out of order, I would ask the chair to so rule.

The VICE-CHAIRMAN: I was following the procedure that was established last Tuesday, when Mr. Murphy, the chairman, obtained the agreement of the committee to discuss items 189 to 199 inclusive. If the committee has changed its view between the last meeting and now, I am willing to hear anyone else who wishes to speak on this matter.

Mr. KINDT: Was it not that he thought we would cover 189 to 199?

The VICE-PRESIDENT: That was not my impression.

Mr. KINDT: I could be wrong.

The VICE-CHAIRMAN: The other members of the committee may speak to it.

Mr. AIKEN: I think, Mr. Chairman, that the point Mr. Kindt is objecting to is that certain questions he asked were disallowed and other questions have replaced his.

The VICE-CHAIRMAN: His questions were not disallowed; they were merely deferred until after the general statement had been made.

Mr. KINDT: No, there was no thought in my mind of that.

Mr. PAYNE: One of my question is directed to the witness in order to have him extend his statement in regard to the establishment of priorities, and the other concerns the liaison between our government and other governments,—the provincial governments and the United States.

The VICE-CHAIRMAN: Perhaps the witness can finish his answer to Mr. Payne's question. In the meantime, would the members please consider how they want to tackle these items, and I will put the question after the witness answers Mr. Payne's question.

Mr. GAMBLE: In regard to certain international commitments in connection with surveys for defence, we work closely with the defence services, and

where practical we try to incorporate their requirements for surveys along with our development requirements. The defence mapping agency in turn tries to incorporate our development work with its defence work.

In reference to provincial relations, we cooperate very closely with the surveyors-general and the directors of surveys of the provinces. Just a month ago we had an informal get-together to discuss problems of mutual concern. We depend for quite a lot of our information in determining priorities in the provinces upon the opinions of the provincial surveyors-general. Some of the provinces also do certain mapping work, some a fair amount and others very little. However, there is a complete interchange of information. We publish maps from their surveys when they fit into our scheme of things rather than do our own surveys.

Mr. PAYNE: Does the same hold true with the United States?

Mr. GAMBLE: Yes.

The VICE-CHAIRMAN: Is it the desire of the committee to discuss each of these items individually or collectively?

Mr. AIKEN: Mr. Chairman, might I suggest this: it is my belief that we should examine each item individually and go into it fully until we feel it has been settled and then go on. As I understand it the procedure agreed upon was that the items would be passed as a block when we finished and it would not therefore cut off any cross-reference to various items. I think probably we would cover the field much more fully if we went into each item one by one but not necessarily passing it, and then passed the group as a block when we are finished.

Mr. DUMAS: This is a good idea. I understood that last Tuesday the chairman definitely asked the committee if it would like to ask questions on items 189 to 199 inclusive. But I think it would be more orderly if we proceed item by item and pass them in a block at the end.

The VICE-CHAIRMAN: Is that the wish of the committee?

Mr. SLOGAN: Mr. Chairman, I would prefer the way we have been proceeding. A lot of this is very technical. I have had most of the points pretty well cleared up in my mind. We could discuss it in a general fashion and then go over them item by item. If there are any additional questions we could have it on that basis.

Mr. DUMAS: Proceeding in this way we can come back to an item any time later.

Mr. MACINNIS: Mr. Chairman, we are getting further and further afield, and I suggest that you are directing the meeting and should adopt the procedure which you think is necessary.

The VICE-CHAIRMAN: I would like to have the wishes of the committee. Let me suggest that we proceed as suggested by Mr. Aiken and Mr. Dumas. That is, firstly, we will discuss each item individually, which does not preclude the members cross-referring to items, and then at the end of the discussions we will pass items 189 to 199 inclusive, as a block.

Agreed to.

Mr. SLOGAN: Are we now discussing item 189?

The VICE-CHAIRMAN: Yes.

Item agreed to.

The VICE-CHAIRMAN: Item 190.

Mr. SLOGAN: I would like somebody to define for me this word "geodetic". To what does it actually refer?

Mr. GAMBLE: It is really associated with the study of the geoid, which is the shape of the earth. This class of survey is not like plane surveying; you have to take into account the shape of the earth and make a great number of corrections to the surveys so that the work will conform to the real figure of the earth. We use the term in this country to indicate very precise surveys. There is some difference of opinion. In Europe they use the term "geodetic" more loosely to cover the broad field of surveying. But on this continent we pretty well confine it to precise surveys.

Mr. SLOGAN: When I look at the map of Canada, there is something I would like cleared up in my mind. I think the western boundary runs along the 140th meridian, the eastern boundary along the 60th meridian, excepting that part which is attached to Greenland. Is that accepted as the boundary? Is all that property which converges to the north pole under the sovereignty of Canada? Is that the boundary of Canada, in other words? It appears like that on the map. Lines are drawn which I presume indicate it belongs to Canada. Is that a fact?

Mr. GAMBLE: This is a question which I think is better not answered by me.

Dr. BOYER: I believe a similar question was asked in the House of Commons some time ago. The principle of Canada extending as a sector to the north pole is not generally accepted by other countries. This sector principle applies purely to the Antarctic, but I do not think it has been accepted in the northern hemisphere.

Mr. SLOGAN: Perhaps Dr. van Steenburgh might answer some of these questions. Is this sector principle generally accepted in Canada as applying to the Arctic?

Dr. VAN STEENBURGH: I cannot speak for the policy of the Canadian government and I do not want to go on record as a public servant as taking any attitude contrary to the official attitude of the Department of External Affairs. All I know is the general attitude of officials in other countries toward our claims. At the present time there is a great deal of discussion regarding the sector claims in the Antarctic; as you know Australia, New Zealand, Great Britain, the United States and South American countries have made certain sector claims in Antarctica. These have never been accepted on the international level. At the present time there is a considerable interchange of exploration work within the sectors with or without the consent of the claiming country.

We have considered the sector to the north pole as part of Canadian sovereignty. To the best of my knowledge that has no international acceptance. At the present time we, under international law, have rights within the three-mile limit of the mainland. Those three-mile rights in the north present many complications because the shore ice projects from the land out as much as 25 to 75 miles. Now what are the rights on that shore ice? This has never been determined. I believe under international law at the present time all we can be sure of is acceptance to the three-mile limit.

Mr. SLOGAN: There are certain countries I suppose which do subscribe to this sector theory and certain countries which do not. Could you tell me, for instance, whether the United States subscribes to this sector theory?

Dr. VAN STEENBURGH: I am now quoting newspaper accounts. The international lawyers in the United States do not accept the sector claim. I have not heard of any official discussions between the United States and the Canadian governments on this question.

Mr. SLOGAN: Furthermore does the U.S.S.R. accept the sector theory?

Dr. VAN STEENBURGH: They have never indicated that they do, and I would suggest they do not since they are actually making soundings and are carrying on scientific work in this sector.

Mr. SLOGAN: Can you tell me how many parties from the U.S.S.R. are operating within our sector of the Canadian Arctic?

Dr. VAN STEENBURGH: I doubt very much if anyone in the western world can answer that.

Mr. SLOGAN: But are there U.S.S.R. parties making soundings in what we would call the Canadian sector of the Arctic?

Dr. VAN STEENBURGH: There have been many of them. May I make one qualification. These soundings are made from landings on the Arctic ice and from ice islands which have floated in the Arctic ocean, not from ships.

Mr. SLOGAN: Recently in Geneva I believe it was established that all islands in the Arctic archipelago or that water under the continental shelf would come under the sovereignty of Canada.

Dr. VAN STEENBURGH: I think the committee would obtain much more precise information on this subject if they wait until the estimates of the Department of Northern Affairs is before the committee.

Mr. KORCHINSKI: Could we refer to that map which indicates the geodetic survey?

The VICE-CHAIRMAN: Is there anyone else who wishes to follow up this line of questioning?

Mr. SLOGAN: I have another question. Last year the American atomic submarine Nautilus made a trip from the west coast to the east coast through the Canadian Arctic. Has the scientific data which the Nautilus uncovered in this voyage been in the possession of the Canadian government?

Dr. VAN STEENBURGH: There were two submarines involved, the Skate as well as the Nautilus.

Mr. SLOGAN: Did both go through?

Dr. VAN STEENBURGH: The navigator of the Nautilus was in Ottawa recently and any information which is obtained by the United States in this exploratory work is given to us freely on a need-to-know basis. There is no difficulty in getting the information as far as Canada is concerned on a security basis. Since that trip I have personally held discussions with the navigator of the Nautilus and no information which I wished was withheld.

Mr. SLOGAN: Has the Nautilus or the Skate made any further trips into the Arctic of which you know?

Dr. VAN STEENBURGH: Those which have been publicized, to the best of my knowledge, are the last trips the submarines made into the Arctic, but I think the committee should realize this is a continuing program and will be enlarged as time passes.

Mr. SLOGAN: In other words there is a prospect of them making further journeys into the Arctic for this purpose?

Dr. VAN STEENBURGH: Yes.

Mr. SLOGAN: Is there any danger to Canadian sovereignty in these American teams going to the Arctic on the Nautilus, in their establishing sovereignty on any islands which do not come within the continental shelf in the Canadian Arctic?

Dr. VAN STEENBURGH: I doubt whether there are any such islands left undiscovered.

Mr. SLOGAN: You feel most of the Arctic islands in this sector have now been discovered?

The VICE-CHAIRMAN: Does anyone else wish to follow up on this line of questioning of Mr. Slogan's?

Mr. KORCHINSKI: Could we have a brief explanation of the legend on the map before us. I could not see it from here.

Mr. GAMBLE: In red we have the triangulation network which has been completed. The blue is the 1959 work plan. The red dots which you see are the shoran stations which have been established by electronic means from aircraft. The green lines are the precise level lines. We generally wait until we get a good route to follow for the precise vertical information, such as a railroad or a highway. It is very time-consuming to go through the bush determining precise levels. So you will see they are pretty well confined to the settled areas. This Seven Islands to Ungava Bay is what we call a second order net, and some work will be done on that with a new electronic distance-measuring device, which we hope will allow us to upgrade the survey with a minimum expenditure to a first order net.

Mr. KORCHINSKI: I have one further question. All this network which you have in there does not follow any roads, rivers, or anything like that in the past. Have they been following railroads, highways or rivers in the past? Is that why the network appears as it is at the moment?

Mr. GAMBLE: Not necessarily. The triangulation which is shown in red goes across country, following the most favourable routes; it might be well away from the communications.

As we get farther afield, the cost of transportation increases, and we are pretty well dependent on aircraft in these areas for moving our people around.

Mr. AIKEN: Recently I read that as a result of the I.G.Y., scientists have found that the world is smaller than they believed. Have you any over-all calculation of Canada as a result of the geodetic survey?

Mr. GAMBLE: May I ask Mr. Lilly, the dominion geodesist, to answer that question?

Mr. J. E. LILLY (*Dominion Geodesist*): What was the question again, please?

Mr. AIKEN: The results of the I.G.Y. have indicated, as I understand it, that the world is somewhat smaller than we previously believed. I asked if the results of the geodetic survey of Canada have indicated that there is any difference in the size of our country from what was previously believed?

Mr. LILLY: No. The change in the size of the earth from that previously believed is so extremely small that we could not possibly check it by ordinary surveying methods.

Mr. AIKEN: Therefore, as a result of our geodetic survey and of the triangulation involved, are our maps quite accurate?

Mr. LILLY: Yes.

Mr. AIKEN: Thank you.

Mr. SLOGAN: May I call upon Dr. van Steenburgh again. A couple of questions have occurred to me.

I wonder if any attempts have been made to communicate with the U.S.S.R. with regard to obtaining some of the information which they have obtained by their soundings in the Canadian Artic?

Dr. VAN STEENBURGH: The U.S.S.R. do publish a considerable amount of their scientific and technical information dealing with the Artic regions in their scientific journals. These are obtained by our scentists, and they are translated, so that through their open publications we have a considerable amount of information on the work that the Russians have done in the Arctic.

Mr. SLOGAN: Have any official steps been taken to attempt to deal with the government of the U.S.S.R. on that subject?

Dr. VAN STEENBURGH: This is done mostly through organizations other than our own. You will realize that the National Research Council, the Defence Research Board and other organizations have made representations to Russia for certain information.

We, as a department, carry on our exchange of information with Russia on the official level if it is possible; but we do get a considerable amount of information on a personal basis through contact with Russian scientists. Actually this has been the most fruitful approach to getting information of the type that we wish.

I might say that the Russians—speaking of their important Arctic publications—have been very reluctant to allow them out of their country.

Dr. Nicholson was recently in Russia and—while he can speak for himself—I believe he found that the Russian scientists themselves were quite open in discussing the problem. However, at the official level it is difficult to get that material.

I believe Dr. Nicholson brought back material from Russia which we could not possibly get officially.

Mr. SLOGAN: Might I ask Dr. Nicholson if he had any communication or contact with the Russian scientists and with their publications as to how far east of the 140th meridian into the Canadian sector those scouting parties have advanced?

Dr. NICHOLSON (*Director, Geographical Branch*): I had no more information on that point while I was in Russia than I already knew before I left.

Mr. SLOGAN: How far have they advanced, to the best of your knowledge?

Dr. NICHOLSON: We have a map showing the location of some of their work in the Arctic, but the sites are scattered all the way across.

Dr. VAN STEENBURGH: I am sorry to say that I do not think we can produce that map. It was compiled by the defence research board and for some reason or other it bears a security rating. Why, I am not prepared to say.

Mr. SLOGAN: You said earlier—

Dr. VAN STEENBURGH: I am sorry. I have just been told that they have lifted that security. So we can produce the map.

Mr. SLOGAN: Thank you, Dr. van Steenburgh. I think you said earlier that your official attempts to deal with Russia at the official level were not too fruitful. Thus attempts have been made and I suppose applications have been made for some of the data obtained by Russian surveying parties in the Canadian Arctic? Or were you referring to other cases?

Dr. VAN STEENBURGH: I was just speaking generally. For instance, our Geological Survey Branch, in dealing with the Russians, might make an official request to the Russians for certain information on geology; or other groups such as the geographic group.

But to the best of my knowledge we have no official unit in our department that is carrying on negotiations with the Russians in an attempt to obtain information.

Mr. SLOGAN: Do you think that they perhaps do have data which would be of assistance to this department in surveying and mapping the Arctic sector of Canada?

Dr. VAN STEENBURGH: If you speak generally regarding the Arctic, the Russians would appear to be more advanced in the technology of all Arctic subjects than we are in Canada.

However, if you speak specifically of Canadian mapping, I doubt that the Russians can help us very much. But it is possible I have misunderstood your question.

Mr. SLOGAN: No, that is fine. To your knowledge, and to Dr. Nicholson's knowledge, are there any survey parties other than those of the U.S.S.R. operating in the Arctic area?

Dr. VAN STEENBURGH: Operating in the U.S.S.R. area?

Mr. SLOGAN: Yes.

Dr. VAN STEENBURGH: Not to my knowledge.

Mr. SLOGAN: No Canadian survey party has ever gone over the pole?

Dr. VAN STEENBURGH: Certainly no Canadian party.

Mr. SLOGAN: Thank you very much.

Items 190 to 193 inclusive agreed to.

Mr. SLOGAN: With respect to item No. 193, the Canadian hydrographic service, I understand that a hydrographic survey was begun of Lake Winnipeg under Mr. Radakir.

Mr. GAMBLE: That is correct.

Mr. SLOGAN: Where was that hydrographic survey commenced? Is there anybody here who is in charge of the hydrographic service branch?

Mr. GAMBLE: The dominion hydrographer was not able to be here this morning. But I shall ask about it and have the answer at the next meeting?

Mr. SLOGAN: I think it has been going on for several years.

Mr. GAMBLE: That is right.

Mr. SLOGAN: I wonder when the hydrographic survey of Lake Winnipeg was commenced. There is a program going on there now. I think it is going to be terminated any time now; but I wondered when it was commenced. I think it was at least eight years ago or more, when it began.

Mr. GAMBLE: May I get the answer for that? I think it was about three or four years ago, to my knowledge.

Mr. SLOGAN: There are several questions I would like to ask about that survey because it affects a large number of people in my constituency on account of the flooding and so on. I wonder if we might have somebody come from the hydrographic branch to the next meeting to answer that question?

Item 194 agreed to.

Mr. DUMAS: Does the operation Polar basin come under item 194, Mr. Boyer?

Dr. VAN STEENBURGH: The Polar basin has been set up under a special vote.

Mr. DUMAS: According to the minister's report I see that it comes under surveys and mapping.

Dr. VAN STEENBURGH: Actually, for parliamentary purposes it comes under item 210.

Mr. COMTOIS: Item 210 "Polar Continental Shelf Project", on page 42.

Mr. DUMAS: Thank you.

Item 195 agreed to.

Mr. DUMAS: On items 196 and 197, perhaps Mr. Gamble can answer this question. What responsibility do we have with respect to the Manitoba-Saskatchewan boundary survey? Is it only because we are asked by the provinces to join with them on that survey?

Mr. GAMBLE: May I ask Mr. Thistlethwaite to answer that question?

Mr. ROBERT THISTLETHWAITE (*Surveyor General of Canada*): Our approach to the Manitoba-Saskatchewan boundary operation stems from a request by Manitoba and Saskatchewan that the federal government participate in the project of surveying the remainder of this boundary. It did participate, of course, in the earlier part of the survey.

Mr. DUMAS: Well, shall we be recovering the money expended on this project from both provinces, or are we paying for our share?

Mr. THISTLETHWAITE: It is projected at the moment; we are one of the parties administering the whole work, to which the federal government contributes one-third of the total costs.

Mr. DUMAS: You say that the federal government contributes one-third of the total costs?

Mr. THISTLETHWAITE: Yes.

Mr. COMTOIS: When there are two provinces involved the costs would be divided into three parts, one-third for each province.

Mr. DUMAS: Is this a precedent, or have we done that in the past?

Mr. THISTLETHWAITE: No, this has been customary in the past.

Mr. DUMAS: You say it has been customary in the past?

Mr. THISTLETHWAITE: Yes.

Mr. DUMAS: I take it that nothing of this kind has been done on the Manitoba-Ontario boundary?

Mr. THISTLETHWAITE: Yes sir, exactly the same procedure.

Mr. DUMAS: What about the boundary between Quebec and Ontario?

Mr. THISTLETHWAITE: No. To the best of my knowledge I believe that the federal government has never participated in this endeavour.

Mr. DUMAS: I have one more question under item 196. Has the boundary between Saskatchewan and the Northwest Territories been completed?

Mr. THISTLETHWAITE: A survey of the boundary was completed last winter, but it has not yet been presented to either Saskatchewan or the federal government for ratification.

Item 196 agreed to.

Mr. DUMAS: Mr. Gamble mentioned that part of the Manitoba-Northwest Territories boundary is being surveyed now. How many miles do we have to survey now in order to complete that job?

Mr. THISTLETHWAITE: If I remember correctly, that boundary is about 270 miles long.

Mr. DUMAS: You mean the boundary between Manitoba and the Northwest Territories?

Mr. THISTLETHWAITE: Yes.

Mr. DUMAS: How many miles have we completed to date?

Mr. THISTLETHWAITE: According to the last report the department is working easterly from the northeast corner of Saskatchewan, and it had completed, by the tenth of this month, thirty-three miles.

Mr. DUMAS: And this work is carried on during the winter.

Mr. THISTLETHWAITE: Yes.

Mr. DUMAS: And you think it will be completed within the next three or four years?

Mr. THISTLETHWAITE: We are optimistic; we are thinking in terms of two years, although it may be three.

Mr. DUMAS: What about the boundary between British Columbia and the Yukon?

Mr. THISTLETHWAITE: On the ground survey of this boundary it is complete as far as the commission feels it is necessary to go at the present time. It it within 40 miles of the western end that is the Alaskan boundary.

Mr. DUMAS: And this will take two seasons to complete?

Mr. THISTLETHWAITE: No, it is not intended to proceed any further with this particular boundary. The terrain is extremely mountainous and covered with glaciers. At the moment it does not seem necessary to proceed further.

Mr. DUMAS: Thank you very much.

The VICE-CHAIRMAN: Item 196?

Mr. PAYNE: In connection with legal surveys and Indian lands, in view of the fact that there is almost a total absence of legal surveys on certain British Columbia Indian lands, where do these surveys emanate from? Is it on the demand of the Department of Northern Affairs and National Resources, or instituted by this department?

Mr. THISTLETHWAITE: No, they are done at the request of the Department of Citizenship and Immigration.

Mr. PAYNE: And who pays for the cost of the surveys?

Mr. THISTLETHWAITE: This department; the funds are appropriated within this department.

Mr. PAYNE: Could you give us an indication of the state of such surveys generally throughout western Canada where most of the Indian lands are?

Mr. THISTLETHWAITE: That is a difficult question to answer.

Mr. PAYNE: Just generally.

Mr. THISTLETHWAITE: Many of the Indian reserves are not surveyed internally; that is to say there is no internal sub-division. We approach them only when requested by the other departments. Until we receive their requests we have no information as to which ones will need attention in the future.

Mr. PAYNE: You only act upon a request?

Mr. THISTLETHWAITE: Yes.

Mr. PAYNE: And what time element is involved in discharging these surveys?

Mr. THISTLETHWAITE: Each year the department requests that we tackle a number of different surveys in each province; we set out on a program each year, depending on the staff available and the indicated priority of these requests, and do just as many as we can.

Mr. PAYNE: Are you able to fulfil their requests or do you have a large backlog?

Mr. THISTLETHWAITE: No, there is a large backlog of this type of work.

Mr. PAYNE: How far would you be behind in that work?

Mr. THISTLETHWAITE: According to the present indication—and I understand that they do not show us all the requirements each year—I would say they have indicated enough this year for two years work on our part.

Mr. MCQUILLAN: In the re-establishment of the external boundaries of Indian reservations does that still have to be done by a dominion land surveyor, or can it be done by a licensed provincial land surveyor?

Mr. THISTLETHWAITE: It must be done by a provincial land surveyor.

The VICE-CHAIRMAN: Mr. Kindt wanted to know what a legal survey was; could you for the record describe what a legal survey is?

Mr. THISTLETHWAITE: In very broad terms we interpret it to mean a survey that is made for the purpose of either finding or creating property boundaries; it deals with property boundaries.

Mr. HARDIE: I am wondering if we could be told at what points in the Northwest Territories Mr. Snowling and his party will be working this year.

Mr. THISTLETHWAITE: This year we plan to undertake in the Northwest Territories six residential sub-divisions. There is one at Hay River, one at Frank's Channel, one at Fort Smith, and one at the new townsite of Inuvik. We have in mind one right-of-way survey from Fort Smith to Fort Fitzgerald, and 14 parcels of crown land for sale, lease or reservation. These are situated along the Mackenzie highway at Yellowknife, Inuvik, Providence, Enterprise, Norman Wells and Wrigley.

Mr. MCQUILLAN: Are there any lands within the province that must now be surveyed by a licensed dominion land surveyor, or is that all done by provincial land surveyors now?

Mr. THISTLETHWAITE: Exclusively, no. A dominion land surveyor may need statutory authority to survey lands which are in the interior of national parks, or Indian reserves, or any other crown Canada lands.

Mr. MCQUILLAN: But in British Columbia a licensed British Columbia land surveyor can survey lands in Indian reserves, and register these surveys.

Mr. THISTLETHWAITE: Quite true. They are not normally registered in the ordinary way; they are recorded here in the Indian affairs survey record.

Mr. MCQUILLAN: That is a change over what the practice used to be a number of years ago.

Mr. THISTLETHWAITE: I cannot say; it has been this way for some time.

Mr. MCQUILLAN: Well, in the days of the railway belt through British Columbia, 20 miles on each side of the C.P.R. came under the jurisdiction of the federal government, and it required a licensed dominion land surveyor to survey any lands within that 20 mile strip.

Mr. THISTLETHWAITE: They were dominion lands.

Mr. MCQUILLAN: You have nothing like that now?

Mr. THISTLETHWAITE: No.

Mr. HARDIE: Where at Hay River will this new sub-division be?

Mr. THISTLETHWAITE: That I cannot answer offhand; I would have to look at the request.

Items 196 and 197 agreed to.

Mr. AIKEN: On item 198, of the Map Compilation and Reproduction Division, this question I am going to ask also has something to do with the geographical names. I would like to ask if there is any effort being made to avoid duplication in geographical names in the map compilation, and also by the Canadian Board on Geographical Names.

Mr. GAMBLE: I think I understand the question to be: are we looking into the geographical names being used in our map compilations?

Mr. AIKEN: No, I merely related the two items together; it is only one question. I am wondering if an effort is being made to prevent duplication of names, lakes and so forth.

Mr. GAMBLE: Definitely. That is primarily the function of the Canadian Board on Geographical Names which is administered by the Topographic Survey Division. It is an inter-departmental committee. It is also broader than that; there are provincial representatives on the committee and each group of names used on maps is processed by it. We try to make sure the right name is given to each feature. In areas where the names are not too well established the

Board endeavours to get rid of any duplication of names which appear in the same area.

Mr. AIKEN: Does this board have any jurisdiction within the province?

Mr. GAMBLE: For the provinces that subscribe to the board, it does.

Mr. AIKEN: And they will, therefore, work towards duplication in the whole country?

Mr. GAMBLE: Yes, that is so. Some provinces have their own smaller boards and they process the names first. However, that does not mean they will be approved. They are then forwarded with their recommendation to the central board, the Canadian Board on Geographical Names. The recommendations of the provincial boards are generally, but not necessarily followed. Sometimes there is a lot of correspondence in trying to straighten out points of disagreement, but that is the way it functions.

Mr. AIKEN: Does the board have jurisdiction actually to change the names of existing lakes and give them new names where there is too much duplication?

Mr. GAMBLE: It does so have, it seldom suggests names; rather, it consults local authorities and almost invariably accepts the advice of authorities in the areas concerned.

Items 198 and 199 inclusive agreed to.

Mr. SLOGAN: I would very much like to get rid of these few questions on the hydrographic survey, if there is anyone here who can answer them.

The VICE-CHAIRMAN: I was intending to ask the agreement of the committee to discuss item 210 next, prior to getting into the Mines Branch items because it is more closely related to the matters we have been discussing than are the Mines Branch items.

Mr. SLOGAN: I would like to ask the minister a question before we pass on. I notice in the last press release of the department on February 24, the third paragraph reads:

> "Primarily, the expeditions are Canada's answer to the nations interested in the Polar basin that it intends to shoulder its own research responsibilities in the basin. Russia and United States have been active in the region for years."

Has this accelerated program in the Arctic been spurred primarily because of the fear of the government for Canada's sovereignty due to the exploration in the Arctic by the United States and the Soviet Union?

Mr. COMTOIS: Well, there has been very little accomplished by Canada up until now. We felt we should do something in that line. That is the reason this year we have our first reconnaissance party on the Polar shelf. We want to proceed next year with a larger and more elaborate program, and essentially a Canadian program.

Mr. SLOGAN: If I recall correctly, in the early 1900's the United States financed three expeditions to the Arctic by the explorer Stefansson. On the third expedition he ran out of money and he came to the Canadian government of the day, which was headed by Prime Minister Borden, and asked for a further $50,000 in order to carry out further research and exploration in the Arctic. This man was actually turned down; but the government of Canada at the time took over the whole expedition and financed it. I understand—correct me if I am wrong—that is how the five islands which bear the names of Conservative cabinet ministers got their names.

Subsequently the island, Borden, which was found to be two islands, was named by the following government Mackenzie King Island. Is that so?

Mr. COMTOIS: This happened before my time in the house. I cannot tell you the background of what happened at the time.

Mr. SLOGAN: Did you find, when you took over your department, that there was a great deal of work which could have been carried on previously which was neglected as far as the Arctic was concerned.

Mr. COMTOIS: I think the whole matter was under consideration by the officials of the department, but no decision was taken at that time. There has been more interest and more attention focused on it over the last two or three years. The public interest in general was directed more to the expeditions and discoveries in the north. It affects the sovereignty of Canada.

Mr. SLOGAN: It appears there was some interest in the early 1900's under Sir Robert Borden.

Items 198 and 199 inclusive agreed to.

The VICE-CHAIRMAN: Shall we, with the consent of the committee, proceed to item 210 before we get into the estimates of the Mines Branch, because it is more closely related to the subject matter of the questions which have been asked.

Mr. KORCHINSKI: This is apt to be a long discussion. Would it be in order for us to adjourn now.

The VICE-CHAIRMAN: Yes. We will adjourn until next Tuesday morning March 3rd, at 10 o'clock. Will you please remember to submit the names of the witnesses whom you wish called when the estimates of the dominion coal board are being examined, and would you let me have them before next Tuesday.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAR 10 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 5

TUESDAY, MARCH 3, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Hon. Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Mr. N. G. Gray, Dominion Hydrographer; and Dr. John Convey, Director, Mines Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20659-9—1

STANDING COMMITTE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.
Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, March 3, 1959.
(6)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Cadieu, Coates, Doucett, Dumas, Granger, Kindt, Korchinski, Leduc, MacInnis, MacRae, Martel, McFarlane, McGregor, McQuillan, Murphy, Nielsen, Roberge, Robichaud, Simpson and Stearns. (21)

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. John Convey, Director, Mines Branch; Mr. S. G. Gamble, Director, Surveys and Mapping Branch; Mr. N. G. Gray, Dominion Hydrographer; Mr. H. A. S. West, Secretary, Interdepartmental Committee on Air Surveys; Dr. C. S. Beals, Dominion Astronomer; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; Mr. G. H. Murray, Chief, Editorial and Information Division; and Mr. J. Murray Sutherland, Chief, Financial Services Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys.

It was agreed that Item 210, Polar Continental Shelf Project, would be considered on Thursday next, March 5th.

Items 202 and 203 concerning the Mines Branch were called. The Minister made a statement on the functions of that branch.

Dr. Convey explained the methods by which it is hoped to extract oil from the McMurray tar sands deposits by means of a nuclear device. Dr. Boyer answered questions on certain aspects of the matter. Dr. Convey also explained certain other functions of the Mines Branch, and, in particular, scientific research to asist the coal industry in various ways.

At 11.58 o'clock a.m. the Committee adjourned until 10.00 o'clock a.m. on Thursday, March 5, 1959.

Eric H. Jones,
Clerk of the Committee.

20659-9—1½

EVIDENCE

TUESDAY, March 3, 1959.
10 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Let us begin our proceedings.

At the last meeting I think it was Mr. Slogan, who is not here today, who had an inquiry of Mr. Norman Gray, Dominion Hydrographer, who was absent from the last meeting but who is here today. At least one question was deferred until his return. The question had to do with the hydrographic survey of lake Winnipeg. If it is the wish of the committee, we might have his statement now.

Mr. N. G. GRAY (*Dominion Hydrographer*): Mr. Chairman, the survey of Lake Winnipeg—recent surveys—have been going on for two years. The first survey started in 1901 and continued through to 1904. Then there was work I think in 1950, 1951, 1952, 1953, and 1954.

The most recent survey started two years ago. They were working two years on lake Winnipeg.

The CHAIRMAN: Are there any other questions of Mr. Gray? If not, that completes our items up to and including 201.

Mr. NIELSEN: I wonder in view of the fact that the witness I have mentioned will attend at the next meeting when item 210 is under discussion, whether we could hold the question of boundaries open for discussion, because the subject matter which will be discussed in my questioning of Mr. Cadieux will concern boundaries in the Arctic as well as items coming under item 210. Mr. Cadieux is an official of the civil service with the Department of External Affairs. I have requested his presence at the next meeting when we are to discuss item 210, for the purpose of examining the extent and the purpose of Russian activity between the 141st and the 60th meridians and with a view to establishing our own activities over the past twenty years in that regard; and on the question of boundaries. I wonder if that sector might not be left open for discussion.

Mr. DUMAS: We are not there yet. That would be on item 210.

Mr. NIELSEN: Because of Mr. Cadieux's obligations to his own department and to his own responsibilities, perhaps if we are able to get to item 210 by next Thursday, we could enter upon a discussion of that subject, let us say, on Thursday morning, in order to accommodate him. We might simply defer what we might be discussing at that stage.

Dr. MARC BOYER (*Deputy Minister of Mines and Technical Surveys*): May I suggest that the question of scientific activities in the north be deferred until the estimates of the Department of Northern Affairs and National Resources comes before this committee. We could answer only a few questions. Possibly we have volunteered more in the past meetings than are really the responsibility of this department.

The Polar Continental Shelf Project, as covered in item 210, is only the compact project that embraces a limited area. There are many other scientific activities located in northern Canada. The Department of Northern Affairs has a specific unit that covers the information and the activity in the north which might be more interesting when answering your questions than if you put them to this department.

Mr. NIELSEN: I realize the accuracy of what you say. However, after I had made further studies, it was my intention also to request the presence of this witness, and witnesses from the Department of Northern Affairs. I am particularly interested in pursuing this line of questioning for the purpose of establishing the extent and purpose of the activities of the Arctic expeditions initiated by the U.S.S.R. in the socalled Canadian sector between the 141st and the 60th meridian, and comparing them with the activites of this department, particularly in view of hydrographic research. That is why I prefer to bring it up in connection with this department, and to have an examination then rather than under the Department of Northern Affairs.

The CHAIRMAN: Is there any other discussion on this matter?

Mr. DUMAS: Maybe we could agree with what Dr. Boyer has said. This department is being asked to perform certain work, and it is limited to that extent. In respect of this polar basin exploration, I understand that this year they will only prepare the work for next year and the following years; so their activities are very much limited.

If perhaps we could go over this whole question of activity in the Arctic while we are going through the estimates of the Department of Northern Affairs, it would be probable that we would be able to secure more information.

You could ask Mr. Cadieux to come as a witness when we are studying the estimates of that department.

Mr. NIELSEN: With all deference to Mr. Dumas, I have spent quite a number of days in research on this problem, and I feel that a relevant opportunity offers itself in the examination of item 210, with perhaps a slight overlapping into the question of boundaries, and under the item that we have just finished discussing.

Mr. DUMAS: It would mean that we would be a little limited.

Mr. NIELSEN: I would like to have an opportunity to question people like Dr. Nicholson at the same time, and Dr. van Steenburgh who is not here today, while the estimates of this department are under discussion, because Dr. Nicholson has been to Russia and he has been discussing this very subject. If the committee would go along with me in this request, it would be very much appreciated. In the light of my research, and the efforts I have made I would like to pursue this line of questioning.

Mr. DUMAS: Why do you object to having this discussion under the estimates of the Department of Northern Affairs, where the field would be larger and where we would be able to have more information? Dr. Nicholson could be called as a witness, and also Mr. Cadieux.

Mr. NIELSEN: Surely, Mr. Chairman, there would be no objection to my calling Mr. Cadieux while the estimates of this department are under examination, rather than as a witness under the estimates of the Department of Northern Affairs? I prefer to do it in the way I have suggested.

Mr. DUMAS: It would mean duplication.

Mr.NIELSEN: I do not think so.

The CHAIRMAN: I agree with you that there might be a limited discussion; but let us go as far as we can.

Thursday would appear to be a very important day for this committee. We might discuss it at that time and determine just how far we could go. Would that be all right?

If it is agreeable to the committee we will have Mr. Cadieux from the Department of External Affairs at our next meeting, together with Dr. Nicholson.

If you happen to look at your estimates on page 54, as Mr. Dumas and the deputy minister said, you will see that item 262 refers to the same subject

matter. I think you will all agree that we will have unlimited scope there. So let us go ahead on Thursday and produce what evidence we think should be produced at that particular time.

Mr. DUMAS: Of course.

The CHAIRMAN: Agreed.

Well then, gentlemen, are there any other questions on these items? This morning we are on the estimates of the Mines Branch, items 202 and 203:

MINES BRANCH

Item 202	Administration, Operation and Maintenance	$3,527,130
Item 203	Construction or Acquisition of Equipment	269,245
		$3,796,375

Hon. Paul COMTOIS (*Minister of Mines and Technical Surveys*): Perhaps it would be pertinent for me to say a few words of explanation about the work of this branch, just to keep the members posted on what is being done there. It will not take long, and I think it would help in the future discussion of that vote.

This vote provides for the normal operation and administration of the Mines Branch which is composed of the physical metallurgy, radioactivity, fuels, industrial minerals, and mineral dressing and process metallurgy divisions. The divisions are maintained and serviced by a scientific library and the administration and maintenance sections. The naval section, mainly financed by defence funds, occupies building space and requires branch services. The principal functions and concerns of the mines branch, which relate to research and investigations for the mineral, metallurgical, and fuel industries and other government departments, are listed in detail in the projects of the divisions.

Now the physical metallurgy division: the efforts of this division embrace almost every field of metallurgical science and engineering in order to assist the Canadian metal and mineral industries by developing fabricating methods and industrial alloys, and to find more uses for the products of Canadian mines. Fundamental research is carried on in order to enhance the properties of metals at sub zero and elevated temperatures. The strength of metals and alloys are well below that which is theoretically feasible, consequently considerable research is being directed toward investigation of the interatomic forces, in an effort to determine the cause of this important discrepancy. In addition to serving industry, our scientific services are utilized by other government agencies and by the armed forces.

Then we come to the radioactivity division. This division is responsible for the Mines Branch research and process application work in connection with the uranium mining industry. Research work is carried out to develop new processes, and to improve existing processes and adapt them to meet changing ore conditions. Process application work is carried out on new ores. Research and service work is also done on physics projects such as radiation measurements, applications of radioactive isotopes and electronic circuit development. Specialized analytical services are provided, and mineralogical studies and research are carried out on radioactive ores. Broadening the field of study of the divisional staff to include the ores of the less common economic metals is anticipated.

Then the fuels division: I should say that the function of the fuels division is to characterize Canadian fossil fuels evaluating their quality for specific utilization, to undertake research on the production, beneficiation and utilization of these resources and their derivatives, particularly those resources that may have strategic or economic importance in the future and to aid industry by investigations and consultations in the solution of their technical problems.

Then we come after that to the industrial minerals division. This division is engaged on research and development work on Canadian resources of industrial minerals, including industrial waters. The responsibilities and activities of the division are distributed between five sections, each of which conducts work within a specialized field. The ceramic section is concerned with evaluation of ceramic raw materials and problems related to their processing and use. The milling section is primarily occupied with the development of methods of concentration of industrial minerals. The construction materials section deals with mineral raw materials used in the construction industry—mineral aggregates, building stone, cement raw materials, et cetera. The industrial waters section is responsible for water quality surveys of drainage basins across Canada, as well as the investigation into problems related to the industrial and domestic use of waters. The non-metallic minerals section conducts field and laboratory studies on the occurrence, recovery, and utilization of non-metallic minerals not covered by the work of the other sections, and in so doing cooperates closely with the milling section.

Then the last information, the mineral dressing and process metallurgy division: The principal function of this division is to encourage the efficient development of Canadian mineral resources. Thus the division accepts ore samples from prospecting or mining companies, or individuals, and develops data on the most economic treatment process and flowsheet. If the ore body is of sufficient importance, enough data is obtained to enable a milling plant or metallurgical plant to be designed. The division also accepts samples of metallurgical products from operating companies, and undertakes work to assist the companies to improve their operations.

I think this information will be helpful to the committee. Dr. Convey is here and is available for any question or detail pertinent to this branch.

Mr. KINDT: Mr. Chairman, oil and gas will come under this particular branch?

Mr. COMTOIS: Yes.

Mr. KINDT: Would the atomic experiment which is to be conducted in the McMurray tar sands also come under this branch?

Mr. COMTOIS: Yes.

The CHAIRMAN: Do you want to elaborate on that, Mr. Kindt?

Mr. KINDT: If there is a witness here who can just briefly tell us what the program of that branch is with respect to oil and gas, I would appreciate that comment.

Dr. John CONVEY (*Director, Mines Branch*): With respect to our work in the fuels division concerning the development of oil and gas, it falls into the theme of the branch as a whole. In other words, our work is directed, through surveys of Canadian mineral resources, to technical development of the same. By "technical development" we mean the bringing into being of economic operations in the field of oil and gas.

To take gas first, we do very little other than a check on the gas deposits themselves with respect to the existence of such things as helium within the gas. However, when we come into a study of the oil, we have work under way concerning the utilization of the heavy oils which you find in the Lloydminster field; that our main effort is a long-term approach for the extraction (separation and refining of oil from the Athabaska tar sands. In that work over the past years we have been associated with the Alberta Research Council in the development of a process for the extraction (separation) of the bitumen.

We have also looked into the possibilities of the actual mining of the tar sands. So I would say that our view, as I have mentioned, is long-term for the extraction of the bitumen from the tar sands; and from there on we are

interested in the actual treatment of that bitumen to win the high-grade products. We have in Ottawa a laboratory wherein we are performing the hydrogenation treatment of the bitumen. That is the processing of the oil under high pressure and the use of hydrogen; and in that way we hope to be able to produce marketable products.

Mr. NIELSEN: Your laboratory techniques will perform a similar reaction to that of a bomb being set off, is that the idea?

Dr. CONVEY: In a sense yes, but the bomb is a novel application—a proposal of the past 12 months. Would you like me to give you an idea of what we are trying to do?

Mr. NIELSEN: Yes.

Dr. CONVEY: With respect to the possibility of using an A-bomb in the winning of the tar sands we are faced with this problem, that there are some 17,000 square miles underlaying the tar sands. These deposits are impossible to mine with conventional mining methods except for some 2 per cent of outcrops; hence we are faced with the problem of trying to develop this huge amount of oil by methods of trying to extract the oil in situ—that is, from the ground.

There have been various methods brought forward with respect to winning this: none of them has proved successful. In most of them, to get steam down, electricity, et cetera, the cost of that energy is greater than the value of the oil you would win. Then along came the United States using atomic energy devices underground.

It so happens that in the use of these underground nuclear devices harmful fission products are produced by the atomic explosion. Fortunately they are sealed in a glass shell surrounding the very hot fire ball following the detonation of the bomb. If you use a two kiloton bomb, that creates a cavity 150 feet in diameter and the rock within that neighbourhood is literally melted. As it proceeds from the inside of the crater to the outside you get the colder rock. Hence this molten rock freezes out, and you have produced a slag, a glass-like material. Into this enter all the fission products.

We have been working in atomic energy for the past 10 years to produce a glass block into which we could seal these unwanted fission products. Once you seal them in a glass block they are free from contamination by water.

Mr. NIELSEN: Forever?

Dr. CONVEY: No, not forever, for the simple reason that if you put too much of the glass together, you get fission products again. But at least it gives you that sort of time lag.

Now, with respect to the underground detonation, in this 150 foot crater I have mentioned there are about four inches of glass formed around the inside of this huge bowl. This takes place in about 10 milliseconds. Then within about another half of that time—you are now getting into one-five-hundredth of a second—it freezes out. The pressure from the explosion has in the meantime fractured a lot of the immediate rock and your fire ball begins to cool. As it cools the whole thing caves in, bringing down the fractured rock into this hot crater.

The idea of the tar sands experiment is this, that a nuclear bomb—we do not like to use the word "bomb", we should say "a nuclear device"—will be placed about 200 feet below the level of the tar sands bed. At the site we are considering the bed is about 200 feet thick and the detonation of this bomb will create this crater, this fire ball. On collapse, the tar sands will fall into the main crater itself. There you have heat and pressure. The heat will be used to lower the viscosity of the bitumen. It will as it were, cause the oil,

to flow, and that will settle towards the bottom of the crater. Then conventional pumping methods will be used to bring the oil to the surface.

We realize there are one or two technical problems to be worked out before such an experiment is brought into existence. The first is to assure ourselves that there will be absolutely no contamination of that oil by these unwanted radioactive products. We have to be sure that the crater which is formed is according to what we expect. The health factor must be considered and, again, one other thing is associated with the fact that these sands, physically, behave in a fashion which is unlike most rock deposits. We want to be sure that the sand will actually fall into the crater.

When the sand falls into this hot crater and the oil is allowed to run, we sincerely hope—and we do expect—that there will be a certain amount of coking. There will be hydrocarbon gases emitted which will be hot. They in turn will act on the rest of the bitumen and will aid the recovery of the oil from the field. So that the results will be such that at least we can tap these deposits.

There is one thing that has to be borne in mind. These experiments are aimed at the deep lying deposits; they are not for the winning of the tar sand that outcrops. They do not interfere whatsoever with any of the processes which are today being tried out—in other words, the hot water processes or the cold water processes for the separation of the bitumen from the sand, or the other processes that have been developed. These do not interfere with this experiment, and neither does the experiment interfere with them.

Mr. KINDT: What would be the time lag between the blast and the pumping of the oil?

Dr. CONVEY: Well, for instance, in the Mount Ranier experiment in the United States, they tunnelled back into the ground to within 500 feet of the main chamber in which the detonation was set off, and they did that two days after. Four days after they went to within 200 feet of the main centre.

Estimates would indicate that we should be able to get at the oil in a matter of weeks, or perhaps in a matter of days. The long term proposition would be that we should not need to go near it for twelve months, if we should so choose. The temperature would still be there to give us the results we are after.

Mr. COATES: Would this oil then be obtained at a price equivalent to oil on the world markets today?

Dr. CONVEY: This work is not really associated with the development of oil deposits for the immediate needs of the oil industry. It is a need which is addressed to the future.

Mr. COATES: What you are saying is that the production of oil under this experiment would not be economical at the present time?

Dr. CONVEY: That is what we would have to find out after the experiment. But I can say that the Richfield Oil company, which is associated with this field, believe they can win oil at a price of $1 a barrel.

Mr. COATES: What would be the cost per barrel?

Dr. CONVEY: That would be a good guess; you see, after you get this oil out, you have to find what it would cost to process it.

Mr. NIELSEN: Is it the intention of the department to carry out this experiment?

Dr. CONVEY: The situation at the present time is that the first request arising out of this experiment came through the Richfield Oil corporation to the atomic energy control board.

Mr. NIELSEN: In Canada?

Dr. CONVEY: In Canada; and they in turn passed it over to us, since they considered that it was a mining proposition.

Since that time, during the last twelve months, we have held some four meetings in which we have met our opposite numbers in the United States, and discussed the technical problems associated with this experiment.

At the present time we are setting up—I think the minister could refer to this—a technical group composed of our own department, the Department of National Health and Welfare, Atomic Energy of Canada Limited, and the Alberta Research Council—the Alberta conservation board for gas and oil conservation—the Richfield Oil Corporation, and the United States atomic energy group. That is the very group associated with the sharing of the experiment in the underground experiment.

Mr. NIELSEN: The department has not yet reached the stage where it could conduct this experiment itself?

Dr. CONVEY: No.

Mr. NIELSEN: Is there any provision made in these estimates for the work that this department is doing along the lines described by you?

Dr. CONVEY: Only to the extent that during the next twelve months it will fit right into our long-term oil research program.

Mr. NIELSEN: But no money has been asked for in connection with this program?

Dr. CONVEY: There is no special commitment in our estimates in this next year.

Mr. NIELSEN: Has any additional technological study been done by the department for the purpose of pursuing this experiment?

Dr. CONVEY: No. There have been additions to the staff for the work on oil research, but that comes under the hydrogenation program which has been in operation for the past ten years. However, there has been no additional staff as such for this particular project.

Mr. COATES: If this were successful, could you give the committee any estimate of how much oil might be made available?

Dr. CONVEY: Yes; again calling upon an educated guess, it would appear that if successful, it would double the world's known recoverable reserves of oil.

It would put us in a position of being completely independent of the Middle East.

Mr. NIELSEN: Is it correct to say that there are 250 billion barrels potentially in these tar sands as compared to 81 billion barrels of known world reserves?

Dr. CONVEY: Yes. That is an approximate answer. The figure usually quoted is 300 billion barrels.

Mr. COATES: You have said that even this would not make all the oil in the tar sands available.

Dr. CONVEY: This would mean that we could get 50 per cent recovering from 98 per cent of the area which is heardly equivalent to the recovering known by methods used in the oil industry today.

Mr. KINDT: Would that mean that 300 billion barrels potential in the McMurray tar sands? There is an estimated 12 billion barrels of potential in the rest of Alberta;—in other words, nearly 25 times as much in the McMurray tar sands as there is in the rest of Alberta?

Dr. CONVEY: Oh yes.

Mr. KINDT: When you compare the McMurray tar sands with the oil of the United States, there are, I understand, about 60 billion barrels of potential there, which would mean about five times as much in the McMurray tar sands as there are in all the United States. Is that right?

Dr. CONVEY: Yes; those figures are approximately correct. But we can look at it in another way.

If the Middle East supply were cut off from this continent, we have to face up to this contingency, that in the United States, over the past year or two, they have not found any new major deposits of oil. They have merely improved their methods of bringing it to the surface.

Should we be thrown into the position where we have no oil coming in from the Middle East, the Canadian reserve could be used up by this continent in one year.

The use and availability of the tar sands in the future is very important.

The prize at the end of this experiment is too great for us to close our eyes to it. We have to go into it and find out whether it is technically possible.

Mr. KINDT: This leads me to the importance of the tar sands, which I think for many years has been well appreciated by governments and research people although there has not been sufficient effort in the way of scientific follow-up put into the project. Now the bomb is to be accepted; it is a splendid piece of research; but as we all know, research has to be negative as well as positive.

Therefore there will need to be a follow-up by an extension of the research work which is necessary in order to push back the discovery frontiers in respect of that tremendous reserve which is one of the biggest resources here in the Dominion of Canada in the way of oil.

Dr. CONVEY: I think a little bit more effort put into it and a follow-up by the Department of Mines and Technical Surveys would certainly be justified. I think there would be many things coming out of his atomic research which you will want to follow through. They will be working with private industry, but there should be no relaxation in the effort that is put into it.

Mr. NIELSEN: When does the department feel it will have reached a stage at which this experiment may be commenced on the spot in the oil fields, in connection with the tar sands?

Dr. CONVEY: If everything went smoothly in other words, when we have visited the United States test sites, and had our own test work on slags, for instance, to guarantee that the fission products which are in the slags will free the sands from any contamination and assuming that we could reach the same results under the tar sands as they have had in the United States, then at the earliest it would be about a year from now.

Mr. NIELSEN: Will this process, concerning which these items are now being examined in the laboratory, assist in the extraction of any products from the sands other than liquid oil?

Dr. CONVEY: No. We are not interested in any of the by-products at this stage of the proceedings. It could be possible that we could find with experience that there are other products that we could go after.

Mr. NIELSEN: Inasmuch as you have indicated that your recovery at this stage as a result of your experiments will result in approximately 50 per cent recovery, does your experiment today indicate that the other 50 per cent of material would in any way be lost as far as using this method is concerned?

Dr. CONVEY: Well, to answer your question, there is one point comes up and it is this: that we are creating a pressure area, and we may get better than a 50 per cent recovery. We can only hope for it. Whether we get it

or not will be a result that can be determined only from the experiments themselves.

Mr. NIELSEN: I am thinking too that perhaps further technical advances may be made in the field with this type of recovery. I wonder if the process is now being considered, having in mind the utilization of this atomic device, and any possible future technological advances in effecting recovery from the material left over, as it were, after you have exploded the nuclear device?

Dr. CONVEY: No. You see, research into the recovery of oil—what you might call secondary recovery, to get that extra two or three per cent—would be continued; and it could be quite possible that more than 50 per cent would be recovered.

Dr. BOYER: Might I add that in the recovery of oil, particularly petroleum —and I would compare petroleum with natural gas—in the recovery of oil by present methods of drilling and raising the gas pressure that brings up the actual oil to pump from the reservoir, 50 per cent is a very high figure in the actual normal way of getting petroleum.

If we wanted to get 100 per cent of the oil in ordinary drilling operations, we would have to wait for years and years until the pressure drives out the oil.

Oil is found in small pores in the rock in the reservoirs, and there is always at least 50 per cent which remains with normal drilling operations. But from pressure or pumping, or from secondary recovery, by forcing water through, you could get the residual part of the oil.

So if 50 per cent was got from this experiment, that would be very favourable when compared with ordinary normal methods.

Mr. STEARNS: If this project comes off, are we going to build a nuclear device, or get it from the United States?

Dr. CONVEY: The nuclear device would be provided by the United States.

Mr. STEARNS: Could we hazard a guess at what one nuclear device might cost?

Dr. CONVEY: Yes, a two kiloton bomb will cost about half a million dollars. When you go from two to ten to about 100, the increase in price is not too marked; but if you go into the larger scale bombs you are then getting into the H-bombs, which will cost you a little over a million dollars.

Mr. STEARNS: Thank you.

Mr. COATES: In regard to our present oil reserves and how quickly they could be depleted, and further to your earlier statement with regard to oil reserves in North America, in both Canada and the United States, and in the event of war the great need to get oil under these circumstances, we would be interested in the possibility of obtaining the necessary oil requirements. Would it be possible, under present conditions, to extract this oil from the tar sands under any of the available procedures?

Dr. CONVEY: Yes, we could get at that part of the 2 per cent of the sands which outcrop, where you can go in and use open-pit mining and then use the water separation method. We can separate the bitumen from the sand and eventually produce your refined product.

Mr. COATES: What about this other 98 per cent?

Dr. CONVEY: That is dependent upon the classes of the experiments, such as the bombs.

Mr. COATES: You would say that at present there is no way of obtaining the oil?

Dr. CONVEY: Economically.

Mr. COATES: No—

Dr. CONVEY: There have been experiments tried out. One is associated with actually putting down electrodes and putting a high current through these electrodes. In so doing you create heat, which will allow the oil to flow. The cost of the electrical energy in that case is worth more than the oil you extract.

A second technique is suggested, that you pipe steam down into these deposits. A tar sands bed itself is usually impermeable to most of these things so that it would merely run along the surface and you would get a sprinkling.

Mr. COATES: The great secret seems to be to melt the rock.

Dr. CONVEY: No, the great secret is to shake the bed up, and break it up so as to allow heat to permeate. We are hoping it will be shaken up enough so that it will actually fall down into this hot crater and then, in disturbing it and using extra heat and pressure, we can extract the oil.

Concerning the research that has gone on in the past—and perhaps we should have increased our effort—I may say that there has been quite an amount of effort put into it by the Alberta government and ourselves. But lack of staff is what has held us back, in so far as pushing it a little faster than we have done is concerned.

Mr. COATES: Lack of money?

Dr. CONVEY: Lack of money, that is the big answer.

Mr. NIELSEN: Are any consultations being continued with the provincial government of Alberta with regard to these experiments?

Dr. CONVEY: Yes. We have moved in any direction without their full cooperation.

Mr. NIELSEN: And they are with you, I presume, on this committee's discussion with your opposite numbers in the United States?

Dr. CONVEY: Yes, they have been with us on every discussion except the first one, which was really one of these "feeling-out" procedures.

Mr. NIELSEN: Are they eager in respect of the conduct of these experiments?

Dr. CONVEY: Eager to the extent that they think we should get a move on.

Mr. MCQUILLAN: Is there not a danger of moving too quickly on this side? We do not need this oil in the near future.

Dr. CONVEY: I think you may rest assured that we are going into this with our eyes wide open and we are not going to run.

Mr. MCQUILLAN: I hope not.

Dr. BOYER: I believe Mr. Kindt's question was asking if more money should not be put out and more effort be put out by our department on a type of research in this particular area of tar sands.

We have done quite an amount in the past on an elaborate scale, and even on a pilot-plant scale. In recent years the oil companies themselves that owned leases in there have gone into research and development projects of their own, which sort of took the burden off the shoulders of the provincial or even the federal government to dig large-sized pilot plant projects which would have been very costly.

We are still doing research work in processing the oil that can be extracted from the tar sands, because it is a heavy oil and it contains certain impurities. Dr. Convey might possibly elaborate a little more on the hydrogenation work of transforming the heavy product into a lighter one, and leaving to the large companies the task of looking into the experiments, which means a certain amount of outlay of capital for a pilot plant.

In general, on the research work we have handled, I would like to point out the total amount of $3,796,000, shown as a vote for the mines branch. This

is all research; and nearly all of the amounts of money in the other branches of our department is also research.

Mr. KINDT: Before you sit down, Mr. Deputy Minister, would you mind saying a word as to the outcome of the research with respect to the centrifugal force that was used for the extraction of oil in the tar sands?

Dr. BOYER: It was mentioned, but I believe Dr. Convey is better qualified to answer a technical question. That has been conducted by one of the companies that has leases in the area. Dr. Convey could better answer that question than myself.

Dr. CONVEY: The Can-Amera Oil Company is the one that has carried on experiments in the west. What it consists of, essentially, is that you mine the tar sands and then, by a hot-water process developed by the Alberta Research Council, you separate most of the bitumen from the sand. There is still a little of the sand sticking to it. That is then fed into a centrifuge, and that centrifuge rotating at a rapid speed will separate the bitumen from the sand and the water. It then has to be processed.

We are looking into their reports. We have details of the whole effort now and we could give a much better answer on that in the near future than we can at the present time. But, looking at it just generally right now, if the hot water process is not economical enough to compete with the boring of a hole and bringing the oil to the surface, if you add another factor in your method of processing it you can expect the cost to go up accordingly.

Mr. KINDT: I understood from preliminary work that they had their figure at three and a quarter.

Dr. CONVEY: That is their figure at the present time. We can neither corroborate it or deny it.

The CHAIRMAN: Is that for the oil?

Mr. KINDT: That is for the barrel oil extracted from the tar sands by the method which is being described.

Dr. CONVEY: But there is no doubt that they can extract bitumen. Their method is successful technically. What the economics are, we have to go into.

The CHAIRMAN: Dr. Convey, would you like to add just one point there? In the estimate that has been given of the likely quantity in that area, what would the total be in dollars and cents at today's prices?

Dr. CONVEY: In the area in which they are carrying this out?

The CHAIRMAN: Yes.

Dr. CONVEY: I would have to do a little arithmetic. There is 2 per cent of 300 billion barrels, and I could work it out that way.

Mr. KINDT: That is phenominal.

Dr. CONVEY: It is quite a large figure.

The CHAIRMAN: Worth while having it on the market.

Mr. NIELSEN: Would it be interesting to the committee, I wonder, for Dr. Convey or perhaps someone else in the department to tell us how much money has been spent to date by the Department of Mines and Technical Surveys, by the provincial government, and by private enterprise, in endeavouring to discover an economical extracting process for these tar sands?

Dr. BOYER: I believe, if the answer were limited to the question as put, it would not possibly show the amount of research that has been done in connection with the project, because the extraction is only one phase of it. Once you extract the heavy oil or tar from the tar sands there is still the matter of processing it and making it acceptable to refiners, because of the high content of sulphur and because it is not liquid enough; it has a low density.

I believe we could look over the records as far as this department is concerned and we could come up with some approach to a figure of what we have spent over the years; but it dates back, possibly, to some 15 or 20 years that we have been doing research projects now and then. It includes a geological survey project some years ago which proved the potential of these tar sands, the reserves, which included quite an amount of drilling. All those costs I suppose could be put together in showing how much this department has spent. As far as the research council is concerned, we might obtain a figure. So could we reserve the question and try to obtain a figure for you?

The CHAIRMAN: Quite.

Mr. KINDT: Following the suggestion of the chairman, if we assume 300 billion barrels of oil, and if we assume that their valuation is, say, $3 a barrel —probably a little high, maybe it should be $2.50, but let us say $3 a barrel— that would be $900 billion. It is so much money that the human mind cannot comprehend it.

The CHAIRMAN: Dr. Convey, before you leave that subject, what is just going through my mind now is, if you obtain the oil by the process of these bombs, is there any likelihood that through that process you are going to lose any of the end products that could be used in petrochemical industries?

Dr. CONVEY: We doubt it. We feel that the oil that would come to the surface would contain most of the end products that come from the refineries.

Mr. COATES: Further to that, you stated earlier that it was hoped by the company to obtain this oil at a dollar a barrel, was it not?

Dr. CONVEY: A dollar a barrel.

Mr. COATES: The present cost of oil is $2.50 a barrel. The thing that is beginning to worry me is, are you going to put all the oil producers in the world out of business to get this oil?

Dr. CONVEY: I doubt it. Remember, that a dollar a barrel is a theoretical calculation. It is almost equivalent to saying that you can run an atomic reactor to give you power at a cost much less than a normal thermal-power station. That is easy to calculate on a piece of paper, but it is much more difficult as an engineering enterprise to bring it into existence.

Mr. NIELSEN: How much of these tar sands lie in the Northwest Territories? Can you roughly estimate a percentage?

Dr. CONVEY: I could not estimate that. I do not think there is any. They come down in a belt, and I do not think they quite know where they end. Remember that these 17,000 square miles constitute only a guess, but as more exploration work goes on, they seem to find more.

This winter the Richfield Oil corporation has some 27 drilling rigs putting holes down in those areas. The more holes they drill, the more value the deposits seem to acquire.

Mr. KORCHINSKI: To what depth do these tar sands go?

Dr. CONVEY: The deepest part, I understand, the area that we are interested in, is about 1,000 feet; and it dips away from there. Where it ends I do not know.

We have one experiment under way in our laboratory which is of a fundamental nature. What we are trying to do is to find out if there is any relationship betweeen the oil and the bitumen one gets from the tar sands, as compared with the oil we obtain further south at the Redwater and the Lloydminister fields.

If we can show a definite link between the two, it would indicate that over the years some of this oil has migrated and flowed into those deposits that we know of today. But it takes a long time for that oil to flow. Tar sands are funny stuff to work with. They are a challenge.

There is another process too: that of putting down a steel tube and causing an ultrasonic wave to travel down the tube to shake the sand loose at the bottom. That is all right, but it seems to work only in the immediate neighbourhood of the pipe.

Sound waves sent through sand deposits, become dampened in practically no distance at all. When you try to cause heat to flow through, you find that the tar sands are almost a perfect insulator. About the only thing you can get into it is an electrical current.

Mr. COATES: Then the atomic experiment is not the only one?

Dr. CONVEY: No. There are other ideas which are still in the process of development. This happens to be one which has arisen in the last twelve months, and it seems to indicate that it has possibilities.

A little over twelve months ago, when it was approached, we thought it was just another one of those schemes; but then we began to look into the result of other underground detonations in the United States. If you stop to think about all the reports of other underground detonations you will recall it was suggested that when they went underground to fire their atomic bomb they would avoid fall-out, and would be independent of water, and would not interfere with international areas. This was publicized to a great degree.

They went underground and found they had a lethal device which was literally self-concealing and which had a great future for mining.

That was another thing connected with the experiment. We are not merely going to look at it with respect to the tar sands. It has an application in mining: hence the importance of the long term view. But once the United States found these wonderful results, they began to advertise them. Maybe we should not advertise them as publicly as we do.

I think it has been said that the background for the Russian proposal to ban nuclear weapons arose from the result of the work that had been done underground.

Mr. COATES: Would you say that this is the first really peaceful use of atomic power, atomic weapons, or atomic devices?

Dr. CONVEY: No, by no means. The by-products from the atomic industry in the field of medicine and agriculture alone have been well worth the effort put into it by atomic energy. And in the power field, it still has its future. In mines, I think this is probably one of the possible immediate and large-scale results to come from atomic energy.

Mr. NIELSEN: I would be interested in your elaborating on your remarks when you said there was a suspicion that the suggestion by the U.S.S.R. to ban atomic bombs or nuclear bombs arose from the fact that they had gone underground too. Why do you say that?

Dr. CONVEY: Let us face it! In the actual underground detonation, you can get all the military information that you wish.

The CHAIRMAN: What is that again?

Dr. CONVEY: I said that in the actual underground detonation you can get all the military information that you wish.

Mr. NIELSEN: As opposed to detonating them in the air or under water?

Dr. CONVEY: Yes, because you can measure the extent of the shock wave, and you can measure the damage it will do to rock whose physical characteristics you know to a certain extent. It is merely a matter then of extracting from that data the knowledge as to what would happen if you did it above ground.

Mr. NIELSEN: As a scientist would you say that having detonated them underground, there would be no purpose in exploding them anywhere else than underground?

Dr. CONVEY: As a scientist I would say it would be nice to get rid of all testing above ground. I see no reason why they should do it above ground, once they have obtained this information from testing underground. But I am not speaking as a military man now.

The CHAIRMAN: I think we may be straying a little beyond our department.

Mr. KINDT: As I understand it, when this underground detonation takes place with the atomic bomb, it melts the silicon deposits, and it forms this glass dome which in turn collapses.

Have there been any experiments made elsewhere, let us say in the United States, which would lead you to the conclusion that this whole dome will colapse? And also one other question: what is the thickness of the glass dome at the time the bomb is set off?

Dr. CONVEY: To date there have been some seven or eight experiments carried out in the United States. Every one of them has followed the same pattern.

The thickness of the glass bottle—the one which surrounds your crater—is a function of the size of the bomb that you use.

A two kiloton bomb would create walls four inches in thickness while a nine kiloton bomb would bring the thickness of the walls up to twelve inches. Then the slag falls to the bottom and you get crushed rock above it.

In the slag you have all the fission products that have to be handled with care. But if you cover the deposit with broken rock for about three feet, you can work 24 hours a day above it. In fact, this test was carried out in Nevada in limestone which contained about 20 per cent of water. They are now drinking the water from that test site

The CHAIRMAN: After how many years?

Dr. CONVEY: After only twelve months.

Mr. KINDT: I have one other question which is a little aside from oil. It has to do not with the discovery of oil, but with the subject of viscosity. I understand that your branch has done technical experiments, probably with Dr. Grace of the research council at Edmonton, on the viscosity of oil.

There is a big problem in getting oil that is of high viscosity to pass through a pipeline without diluting it with water or some other substance.

What has been done with respect to that research?

Dr. CONVEY: Not very much at the present time, because once you decide to keep that oil free of some diluting material, it becomes difficult to render the oil fluid, other than by means which I believe form part of the initial processing of the oil. We hope that by the extraction of certain impurities which exist in the crude oil, we can increase the fluidity. Our hydrogenation experiments are aimed in that direction.

Mr. KINDT: How could you keep it from freezing at certain times in the year?

Dr. CONVEY: You mean the oil itself?

Mr. KINDT: Yes. You would not have a complete emulsion?

Dr. CONVEY: You have to avoid an emulsion. If you have water in it at all you are in difficulty in connection with the western pipelines. So all the water must be extracted. You do not put an emulsion through a pipeline if you can avoid it.

Mr. KINDT: How does that answer the question of viscosity when the object of the research is to affect the oil so that it will flow in the pipelines?

Dr. CONVEY: We hope to do it by removing impurities which seem to act as nuclei for the coagulation of the oil, and which increase its viscosity.

The CHAIRMAN: Are there any other questions about oil?

Mr. NIELSEN: Dr. Convey, could you inform the committee if any experiments have been made or are contemplated on the question of Arctic oilfields? We have heard a lot these days about staking in the Arctic islands for leases. Has the department carried on any work in that connection?

Dr. CONVEY: At the present time the Mines Branch is not involved in any of the recent oil rushes into the north. That is not a Mines Branch matter. Whether our geological surveys are involved, I do not know.

Our branch would be brought into the picture when they actually bring the oil to the surface and are interested in refining it and so on.

However, where gas deposits have been found, we immediately get samples to see if they contain helium. Helium is in very scarce supply and we test every known gas well that comes in, to see if it would be possible to extract helium from that gas. Even in some of the oil wells where there is a suspicion that there may be helium, we do the same sort of test.

Mr. KORCHINSKI: In regard to the tar sands, who, at the present time, owns the oil rights in those tar sands? I do not know if that is a proper question to ask you.

Dr. BOYER: The ownership still rests in the government of the province of Alberta. There are leases of one type or another, given on those tar sands, and the leasing companies thereby acquire the right to extract the oil from the tar sands by paying royalties to the government, the same as in respect of other concessions or leases for petroleum in the more southern regions of the province.

The federal governmnet still owns an interest in one tract of land out there in which it had acquired the rights during the war or soon afterwards to experiment with a pilot plant.

Mr. KORCHINSKI: It is only because of that right of the federal government that it is doing the experiments; otherwise it would not be within its proper field?

Dr. BOYER: We still hold the rights to that certain tract of land, but those rights have been transferred to one of the companies which are presently experimenting in that area.

Mr. NIELSEN: The one company is the Richfield company?

Dr. BOYER: I would not be sure.

Mr. KORCHINSKI: You would not know how many oil companies have been given leases to experiment there?

Dr. BOYER: I would not know the figure. But I think it would be somewhere in the order of from 25 to 30 at least.

Mr. KORCHINSKI: I imagine all these oil companies are carrying out experiments on their own; but are they working in conjunction with other oil companies? Are they working together?

Dr. CONVEY: I think you will find that most of them are working independently up to a certain point, and then in the end they cooperate.

As to this proposed experiment which we know about now, one of the conditions laid down in our work with the United States is that all results will be declassified and be made available to all those interested.

Mr. KORCHINSKI: How many different methods of extraction have you tried already, to date?

Dr. CONVEY: Although we may not have tried them all, we have kept an interest in assessing results of at least five.

Mr. KORCHINSKI: Of the methods used, the best results produced is which one?

Dr. CONVEY: You have got to divide this into two problems. There is one associated with winning the oil and the deposits which cannot be mined. We cannot mine this stuff. Just think of trying to burrow a hole and trying to put men down into a deposit 200 feet thick, with oil and all the gases that can come off and kill you; and there is the fire and explosive hazard. So the devices tried for the winning of that area, which is 98 per cent of this deposit, are nil. There have been no tests. It has been interesting fundamentally.

When you come to that part of the tar sands that the companies mine, there have been developed three techniques. There is the cold water process developed by the Alberta Research Council. This is merely in winning bitumen, which is successful. There is what we call the hot-water process developed by the mines branch, which is also successful. It is the other way 'round, excuse me—the hot-water process by Alberta, the cold-water process by the Mines Branch.

Then there is the centrifugal process which has been developed over the last few years; and that really combines the Alberta process with the centrifugal process, with the separation of the bitumen.

Those are the three, and technically they have succeeded. But economically there is a question that they do not compete with modern oil-winning methods. Beyond that you get into the refining stage. There is a colossal amount of research going on both by the oil companies and by laboratories such as ours here in the mines branch.

The CHAIRMAN: Dr. Convey, there is one question that, as a layman, I was wondering if you could answer. In places with this type of exploration and recovery, supposing you hit an enormous gas field through an explosion, what would be the likely result?

Dr. CONVEY: If we should hit an enormous gas field I think they would put the pipe lines in immediately and start using the gas, and we would not have to go through that intermediate stage of the refining process.

The CHAIRMAN: I have been waiting for questions, gentlemen. I think maybe Mr. Dumas is already "rarin' to go".

Mr. SIMPSON: With relation to the tar sands, during excavations so far would you be able to say what the maximum amount of overburden is that they have found over these tar sands. Also could you say what the overburden might be in the area in which we might expect to conduct this experiment?

Dr. CONVEY: To give an over-all picture on the whole deposit would be a rather difficult thing to do; but in the area of the test site which we would like to use, if we had this experiment which is proposed, the overburden is about 800 feet. There would be 200 feet of sand and then we go 200 feet below that again to put the device; and the experiments in the United States indicate that with an eight kiloton bomb, for instance, you would be free from breaking through the surface at a depth of 800 feet.

With the proposed experiment which we are considering, the magnitude of the device would be approximately 2 kilotons, and at a depth of 1,000 feet it will not even ruffle the surface. You will feel it, but it will not do any damage. We have this huge bed of tar sands which we think will act just like a blanket, and will dampen most of the shock-wave which will come through. Even if it does come through and you feel it on the surface, you have muskeg on the top and that again will dampen it.

In the United States, at two and a half miles from the actual centre of the detonation, all they could feel was just a slight sensation of a tremor, and a dull thud.

Mr. COATES: Would you then sink a shaft; is that it?

Dr. CONVEY: No. On the original work they tunnelled into a mountain and then tried the device. But today one does not need to do that; all you need to do is drill a six-inch hole, put your bomb at the bottom of that—which, incidentally, is also wrapped in a compound which encourages the trapping of the fission products—then loose sand above that for about 15 feet—you can put concrete down if you wish—and that is all that is needed.

Mr. DUMAS: And this would be 1,000 feet down?

Dr. CONVEY: This would be 1,000 feet down.

Mr. DUMAS: Because where you want to carry it to the exterior, I understand, is on the Richfield oil leases?

Dr. CONVEY: That is correct.

Mr. DUMAS: The overburden is about 800 feet, and then you have 200 feet of tar sands; and the bomb would be placed right underneath?

Dr. CONVEY: Two hundred feet down below that. It is 1,200 feet from the surface.

Mr. KINDT: Is it not true, that around McMurray, the tar sands outcrop is almost on the surface: you are almost on the edge of the pre-Cambrian shield? Apparently as you proceed west and south from that area the overburden becomes greater and greater. It may only be a few feet down to the tar sands at McMurray, whereas if you go back into the Richfield area, they are prospecting at about 1,000 feet. Did you choose the 1,000 feet area because of the fact that it was an atomic bomb?

Dr. CONVEY: The test sight originally was Richfield, to whom we have got to give credit for being far-sighted enough to get into this. This particular area over which they had leases is one in which the depth is far enough down that there would never be any danger of our even disturbing the waterway, which is about 400 feet above the tar sands. In other words, we could guarantee there would be no contamination of that water bed.

That is one of the reasons why this area has been chosen. But should it prove successful, then one can use graded devices or nuclear devices at shallow depths; and, of course, the real thing would be if we could use an H-bomb at sufficient depth, you have the creation of colossal amounts of hydrogen. That hydrogen will actually go into business and refine the oil.

You have temperature, pressure and hydrogen, but you would have to put it a lot further down than we are considering at the present time.

Dr. BOYER: Mr. Chairman, most of the questions of the members have been on petroleum and natural gas. These are all handled under the fuels division of the Mines Branch. Possibly the members of the committee would like to know from Dr. Convey how much research and technical investigation we do in relation to coal so that these questions could be sorted out while this department is before the committee.

Mr. COATES: Mr. Chairman, I would like to ask a question with particular reference to research that was carried out by the department at No. 2 colliery in Springhill. Is that in your field?

Dr. CONVEY: Yes.

Mr. COATES: I believe you went into Springhill soon after the bump at No. 4 colliery; is that correct?

Dr. CONVEY: We were in two or three years before that.

Mr. COATES: I believe two of your men were down in the mine the day the bump occurred, and that as a result of the work your department has done in Springhill you now feel that even though there was no way of preventing the bump which occurred in the No. 2 colliery, you feel you are now in possession of information that will assist other mines of a similar depth in Canada. Is that correct?

I believe a report was made to the Nova Scotia Royal Commission by men who were stationed at Springhill, and I was wondering if you would give to this committee some of the information obtained since then as a result of investigations into this bump; that might be of assistance.

Dr. CONVEY: Well, the Springhill effort on our part is but a part of a major program in mining research which we have carried on now for some 10 years.

In Canada, as in other countries, we are faced with the problem that we will have to go to greater depths to win some of the minerals which we are after. Fortunately most of our mines in Canada at the present time are still shallow, but the day is coming when we will have to go to greater depths.

The day is almost upon us when we will have to mine lower grade ore deposits, and that means the removal of larger tonnages of material.

In mining you find that there is a gradual deterioration of the actual mine workings, due to the fact that the surrounding rock creates stresses. There is a pressure created which shows itself in a scale which varies from an explosive hazard up to something in which you have your mine areas gradually closing. By that I mean that you find the rock in the one place is extruded into your roadways, and they gradually close.

In mining practice, what you do is keep digging more of the road bed, or the roof, to allow your transportation to continue.

On the opposite end of this scale you have these locked up stresses releasing themselves by means of what the coal miner calls "bumps", and what the hard-rock miner calls "rockbursts".

The bumps in the coal mines are associated with an explosive releasing of stress until the weaker material, the road bed in Springhill, suddenly is shot up. In Springhill, for instance, the road bed, which was seven feet from the roof, came up and hit the roof in a fraction of a second. Ordinarily, or at other times, you will find these stresses releasing themselves by means of a force which will push the floor up maybe a foot or two feet. It is just as though you standing there and the soles of your feet are hit by a hammer.

The other type is one in which you will find the coal itself is blown out, hundreds of tons of it in a fraction of a second. In other words, the coal is used as a medium for the release of stresses.

In the hard-rock mines it is a question of the main rock itself blowing out just as the coal does.

With this in mind, some ten years ago we in the Mines Branch decided that we would have to try to see what we could do. If we could not measure these stresses, at least could we devise means or techniques through which we could notice when the stresses were building up to the danger line. The obvious place to do our initial work was not in the laboratories here in Ottawa. The laboratories themselves had to be the actual mines. So we assembled a group of mining engineers and physicists and we married them together which, incidentally, is one of the functions of the Mines Branch; we must marry together pure scientists with engineers. We must get these chaps together.

The only stress-measuring technique we had in those days was associated with measuring stresses in metals. It was a carry-over of those techniques into actual mining operations which was our initial task.

We soon found out that the stresses we were working with in mines were beyond our fondest imagination. We could not measure these stresses, quantitatively or qualitatively, because they were too huge.

For example, in drilling a hole in a coal bed, you can only go a few feet and no further, and when you withdraw your drill rod, the hole will close up.

We have what we call the gauge measuring technique, which we developed in our laboratories. With some of these holes the stresses were such that it just squeezed them out.

In other words, when you think of Springhill, the magnitude was such that it brought the floor of the mine up and hit it up against the roof. That extended for quite a few hundred feet, both across the mine working faces and the back.

When you calculate what force would be required to create such a disturbance, it is terrifying. You find you are getting into the field of seismology.

We wanted to produce these qualitative measurements to enable us to tell when stresses are building up and are reaching the stage where it would be unsafe to work the mine any further. But we have not reached that stage yet.

We placed a team in western coal mines. Some of them have closed down. We also placed a team at Springhill. They are pooling together the results of the work they must do to enable them, over the past few years at least, to recognize the magnitude of the problem. We are not yet in a position to say that we can measure quantitatively the measurement of stresses. But our techniques are such that we can recognize the disturbances.

Mr. COATES: You had not reached the point in Springhill where you could say that the pressure in a mine had piled up to a degree that a bump might occur?

Dr. CONVEY: No, we had not reached that stage in our work.

Mr. COATES: I will now ask you a question which you might not care to answer. If you do not, it will be quite all right with me. But the miners in Springhill were very fearful about going into the mine for the last two or three months, because the company had re-aligned the walls.

Before that time apparently they were working at different degrees of distance. In one level it might be further than in the next level, or in the next level and so on. And the company lined these three faces up, in the hope that it would cut down the number of bumps that might occur. At the time they did so the miners were very very fearful there would be a bad bump, which in fact did occur, although for some time before that the number of bumps seemed to decrease after they had re-aligned these faces.

I wonder if you have anything to say about it? You might not want to.

Dr. CONVEY: In actual mining practice corrective methods are used against these bumps.

In Springhill they have an active mining engineer running their establishment. These bumps are not predictable. But from what I understand up to the occurrence of the hump, there was no indication that the stress was relieving itself as it had done in the past by "spitting" at the coal face, which would indicate that everything was under control. In other words, they had not reached any dangerous stage.

So the fact that they had lined the faces up, as you suggested—I do not know if that enhanced the occurrence of the bump, or whether it did not. Personally, I do not think it did.

Mr. MACINNIS: The lining up of the faces has nothing to do with the procedure to prevent bumps. That is a procedure they must follow in mining. Sometimes, in recent reports, you will see that they are only going to work

on one shift for the simple reason that they are keeping the night shift off so that they can get the walls lined up.

Mr. COATES: At Springhill they always staggefed the walls until very recently.

Mr. STEARNS: The fact that the floor came up to the roof of the mine would show that the stress complely relieved itself at that time, and that it had exhausted itself?

Dr. CONVEY: We do not know whether you can say it had relieved itself.

Mr. STEARNS: In other words, you could drill into it?

Dr. CONVEY: We have drilled into the pavement and we have put a hole right down into the coal seam which was in existence below it, and we know exactly at what depth the rock has been fractured. But if you started in to work the coal face again whether you would not get another bump right away, we do not know.

These studies up to the present time are completely inaccurate to indicate where the bump occurred or what caused it. There are theories with respect to the occurrences of bumps, but how to find out is difficult.

Mr. COATES: What information would your department derive from these experiments in the mine after the bump, which would assist other mines in Canada? I feel there are a number of hard rock mines which are very deep in Canada.

Dr. CONVEY: Yes. We have work under way at the present time in Wabana, and we have done some work in other mines. This work we are doing will gradually extend into other fields as soon as we have money enough to hire the teams.

The work at Springhill has been one in which we had covered only a portion, as to how the pavement had come up, how it stemmed out from the fragmentation of the rock, and the angle at which it came up; so we may be able to calculate as to the centre of the main disturbance.

The driling team put one drill down so that we could get a measure as to the depth at which the bump really started from the fractured rock. It would be nice if we could get a pattern of drilled holes into the wals and the pavement in the rock fission. But we are faced not only with the cost associated with this work, but with the danger in it as well.

Although there seems to be no danger in the way of a recurrence of the bump, there is a question of the men themselves actually going in through the crawl holes. We cannot ask anyone to go in to do drilling under those conditions.

Mr. ROBICHAUD: I wonder if Dr. Convey could tell the committee if any contacts have been made with European countries to determine the possibility of new chemicals to be derived from coal.

Dr. CONVEY: Well, we keep in touch with our opposite numbers in Germany, in Europe, and so on, and in Britain; but here in Canada the pioneer chemical work associated with the extraction of possible products from coal is being undertaken by the Alberta research council.

Mr. ROBICHAUD: Does the federal government participate in that work?

Dr. CONVEY: We are associated with it, but only to a small extent.

Mr. ROBICHAUD: What about the coal tar picture?

Dr. CONVEY: That is our business. We do go into that. We have our program broken down into three phases: one is associated with the cleaning and handling and the eliminating of ash from the final product, so as to reduce the amount of ash which is associated with some of our Canadian coals to make them a little more useful for home consumption.

The next phase is associated with what we call combustion. That is a big program which we carry out. Our effort there is to produce means whereby Canadian coal may be burned efficiently.

We have worked in connection with the heating plant of this very building; we have done work for them in our laboratory, and we have done it in connection with other plants. We have actually suggested changes in the grates and even in the metals used in some of the grates.

Most of the coal burned for use in heating plants in Canada is of United States origin and is described as United States coal.

Our experiments at the present time are carried on in cooperation with Dosco, and we attempt to look for some of these coal-burning establishments to suggest ways and means in which they can reduce their costs—their fuel costs—in the way of using Canadian coals.

Mr. ROBICHAUD: Are you familiar with the coke oven designer known as Caunt?

Dr. CONVEY: Yes.

Mr. ROBICHAUD: He resides in Windsor?

Dr. CONVEY: Yes.

Mr. ROBICHAUD: Can you give us any comment on this coke oven? Is it practical or economical?

Dr. CONVEY: We feel at the present time it is not economical. Caunt did his first work quite a few years ago, and the improvements since his time have been quite marked. But we do not feel that the process could be put into operation at the present time and prove to be economical.

That is the third phase of our research in coal and it is associated with coking and the distillation products you mentioned.

Mr. MACINNIS: Are your investigations directed along the lines of ascertaining the best metallurgical coal?

Dr. CONVEY: In North America the only real field of good metallurgical coal exists in western Canada.

Mr. MACINNIS: Over across the river they have a pulverizing plant in conjunction with their furnaces. Would that not be an answer to part of the problem here in the heating of these federal buildings?

Dr. CONVEY: Yes. We have a staff of combustion engineers who are looking into the problem of government heating plants.

Mr. MACINNIS: In the marketing of this industrial coal, would it be feasible for Dosco themselves to instal such a pulverizing plant?

Dr. CONVEY: If you pulverized the coal and started to export it in cars, you would run into fire and explosive hazards, unless you had the pulverizing equipment right at the plant itself. Not even if you could transport it by pipeline and mix a little water with it would you have the answer.

Mr. MCQUILLAN: You said that the best metallurgical coal was to be found in our west. What part of the west?

Dr. CONVEY: In the Crowsnest area. Good coking coal is becoming scarce and that is increasing the cost of operating blast furnaces so much that you will have noticed over the past few years there has been an intensive effort to improve iron ore reduction techniques to try to cut down some of these costs, but we still need a good type of metallurgical coke.

The CHAIRMAN: Are they pulverizing coal in any places in the world and transporting it with water?

Dr. CONVEY: Not pulverizing it; but in the United States I understand they have some transportation systems in which their finer sized coals are transported by pipe lines.

Mr. ROBICHAUD: Do you know of any Canadian delegations, either from the mines department or otherwise, which have visited the United States or Europe in order to familiarize themselves with the study of producing chemicals from coal?

Dr. CONVEY: No delegations as such; but we have had from our fuels division two representatives in the last two years who were over in Germany, France and Great Britain and witnessed what they are doing.

I might add that one of our mining engineers went to Poland in October. The reason we were invited was that the Polish government knew of our work in ground stress work and we were invited over to participate in this international congress.

Mr. ROBICHAUD: This was more in regard to the physical aspect than the chemical?

Dr. CONVEY: Yes. They did not look into the chemical aspect; but the two I mentioned previously have looked into the gasification of coal.

Mr. KINDT: Mr. Chairman, you mentioned that coking coal has the best qualities in western Canada, being in the Crowsnest Pass, which of course is in my constituency. In order to capture the Japanese market we are having a problem there of finding a coal with the least ash content. That is the economical aspect of it. I do not intend to ask any questions on that, but I should like, before you sit down, to ask a question or two on the ash content of coal.

The eight percent figure, which the Japanese would like to see, we are able to meet in part in the Crowsnest Pass. There are a number of other mines which are being considered, at Canmore and Nordegg, to be specific, that have an ash content of around that figure.

The Japanese are extremely interested in getitng coking coal with an ash content of at least 8 per cent, and of course they want to get it as cheaply as possible.

Is anything being done by your branch which would assist in discovering which of the various mines operating in western Canada, or potentially operating, would meet the requirements of the Japanese from a technical point of view on the ash content of coke?

Dr. CONVEY: Yes. One of our combustion engineers accompanied the delegation from Canada to Japan, and our work at the present time is that of bringing into Canada samples of Japanese coal. They use the high-rank Canadian coal to blend with their lower rank stuff. That is why they are asking for such a stringent ash content from Canada.

So we are taking the Japanese coal samples and blending our own with them. In this way we can do two things; we can show the Japanese there is more than one coal in Canada which will blend with theirs in the correct proportions.

We are blending various Canadian coals at the same time, so that we have the whole of the western area—that is, Crowsnest up to Canmore—and we are looking into the characteristics of all those coals and actually blending them with Japanese coals to meet the Japanese requirements. But we felt that if we did not have a technical man go to Japan and see what they were doing, in the end result we would be wasting time here. So he actually went; and he has come back. He knows just what is required and we are trying to meet those requirements.

Mr. KINDT: In other words, your efforts in the research field are not leaving it entirely to the Japanese?

Dr. CONVEY: No.

Mr. KINDT: The Japanese up to now, as I understand it from the coal operators, have been importing a certain amount of coal for experimental

purposes. For instance, 2,000 tons were shipped for experimental purposes by the Japanese, and around 50,000 tons were shipped from Canmore. Experimental coal shipments have gone from other areas and the Japanese have been conducting those experiments in Japan. Is it your view that this experimentation will also take part in Canada?

Dr. CONVEY: Yes. We want to satisfy ourselves that we can meet their requirements. The best way to do so is to know what they are doing with our coal when they get it there. That is why we have initiated this, and it is under way now.

Mr. MCFARLANE: Dr. Convey, which side of the Crowsnest Pass produces the best coking coal—the east or west side?

The CHAIRMAN: I wonder, gentlemen, if we are getting away from the idea that the deputy minister expressed when he suggested that we confine our questions regarding coal to technical questions that we do not need to ask the officials of the Dominion Coal Board when they appear before us. Are there any other questions on coal?

It is getting near the 12 o'clock hour, Dr. Convey, but you made a statement a little while ago in your remarks about the effect of this atomic blasting project on the mining of metals generally.

Probably somebody like Mr. Dumas, or somebody else who knows more about mining than I do, will pursue that idea. The statement was made earlier that it is not only to effect the recovery of oil, but it would have a terrific impact on mining generally.

Mr. DUMAS: Before something is said about that I think that some experiments will have to be carried out. But do you see any future in this—

Dr. CONVEY: Yes. In the American ploughs have program they have one method in which they will fire a nuclear device in a deep deposit of salt. The heat created there will be such that when they pipe water down into that deposit they will have the generation of large amounts of steam. The steam will be piped up under the ground again and will develop force. In other words, it will drive the turbines. That is one.

The other one is that in some of the lower-grade copper deposits we find that in these operations you have to mine the deposit, bring it to the surface, mill it and then process it. In the processing we find that a lot of the chemical leech techniques are used today.

The idea now is that if we could use a nuclear device to fracture these deposits—in other words, brign them down—we would be free of the crushing costs and grinding costs.

Then the next thing is that we would be free of the processing cost in so far as upkeep of equipment is concerned because of the effects of corrosion on leech tanks, et cetera.

So the leech liquors will be piped down into the ground, into the crater, and then the product containing the metal will be brought back to the surface. That is a plan which has been planned and outlined.

Mr. DUMAS: It has not been carried out?

Dr. CONVEY: No, it has not been carried out.

Then there is another experiment which will probably be carried out this summer, and that is the exploding of a nuclear device underneath the oil. We have deposits in the United States, deposits owned by the government. They carried out quite a mining experiment project a few years ago, and now they are going back into the same deposits and will use an atomic device to improve their mining cost.

It will not have the same end results as the tar sands. It is a little too fine for that and it will just end in a breaking up of the oil shale. Those are some examples.

Then there is one that is coming quite close to reality, and that is the creation of a harbour in Alaska. In the past, one had to go to costly drilling explosions for the creation of such a hole in the ground. It is proposed now that with the use of some three small bombs and two big ones one can create a harbour one mile in diameter and about 200 feet deep, with about a 1,200 yard entrance. You can fire the whole thing at once and it can be carried out at about one five-hundredth the cost by conventional methods.

The CHAIRMAN: Gentlemen, just before you go I think that the statement of the minister this morning was so important that I am going to ask the minister of the department, in future when these statements are read to the committee, to furnish the members of the committee with a mimeographed copy. That is because the statement that was read—I have read it here—is quite important.

We will not be discussing this statement at the next meeting, but, in case we were, I was going to ask that it be mimeographed.

This has been a most interesting morning. It is a forerunner of others to come; that is quite evident. I think that next Thursday at 10 o'clock sharp we will start on a very interesting subject, as suggested when we opened this meeting.

Mr. STEARNS: Mr. Chairman, would it not be practical for statements like the minister's to be incorporated in our printed proceedings?

The CHAIRMAN: They will be in the printed proceedings, but I am suggesting that when these important statements are made at the beginning of a meeting the members should have copies before them.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAR 13 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 6

THURSDAY, MARCH 5, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Dr. John Convey, Mines Branch; and Dr. N. L. Nicholson, Director, Geographical Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20791-0—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin *(Timmins)*,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir *(Cape Breton North and Victoria)*,
Payne,
Richard *(St. Maurice-Lafleche)*,
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, March 5, 1959.
(7)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Cadieu, Doucett, Drouin, Dumas, Gundlock, Kindt, MacInnis, MacRae, Martel, Martineau, McFarlane, McQuillan, Murphy, Nielsen, Robichaud, Simpson, Stearns and Woolliams.—19.

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Dr. John Convey, Director Mines Branch; Mr. H. A. S. West, Secretary, Interdepartmental Committee on Air Surveys; Dr. C. S. Beals, Dominion Astronomer; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; Mr. G. H. Murray, Chief, Editorial and Information Division; and Mr. J. Murray Sutherland, Chief, Financial Services Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys.

The Committee agreed to let stand Items 202 and 203, consideration of which had been commenced on March 3rd, and also items 204 to 209; and to proceed with Item 210, Polar Continental Shelf Project. It was also agreed to re-open Items 189 to 199, which had been approved on February 26th, and further to consider them in conjunction with Item 210.

On Items 189 to 199 and 210, Dr. van Steenburgh was called and questioned.

Items 189 to 199 were confirmed as approved; Item 210 was allowed to stand for further consideration at a subsequent meeting.

During the examination of Dr. van Steenburgh on Item 210, Mr. Nielsen produced a map of the north polar area on which certain data was recorded. Following debate, on motion of Mr. Nielsen, seconded by Mr. Robichaud,

Resolved,—That the map of the north polar area published in the New York *Times* on March 16, 1958, be reproduced and distributed to members of the Committee.

The Committee agreed to decide later whether the said map should be ordered printed in a subsequent issue of its proceedings.

The Committee reverted to Items 202 and 203 concerning the Mines Branch. Dr. Convey was further examined. The said Items were approved.

Item 204, Geographical Branch, was called and considered, Dr. Nicholson being examined thereon. The said item was approved.

The Committee agreed to the request of Mr. Kindt that Mr. David Young, manager of the Coleman Collieries, Coleman, Alberta, be called as a witness

20791-0—1½

on the consideration of the estimates of the Dominion Coal Board, and that he be called to appear at an early meeting, the date thereof to be set by the Chairman.

At 11.55 o'clock a.m. the Committee adjourned until 10.00 o'clock a.m. on Tuesday, March 10, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

THURSDAY, March 5, 1959
10.00 a.m.

The CHAIRMAN: All right, gentlemen, we have a quorum. Gentlemen, we were on items 202 and 203 on Tuesday last. Are there any questions or statements before we continue the discussions of these items?

Mr. NIELSEN: Mr. Chairman, I had indicated to the committee at the last meeting that I was going to request that the committee proceed this morning to a discussion of item 210. I also asked that items 189 to 199 be re-opened in so far as the discussion might be led into the question of Canadian boundaries.

I made this request in the hope that I would have a witness from the Department of External Affairs to appear before the committee; but the appearance of this witness is required this morning before the Standing Committee on External Affairs.

There are matters I had hoped to establish through the evidence of this witness. They must therefore be deferred until such time as the witness is available to us. In the meantime, however, I see that Doctor van Steenburgh is back from his trip to Toronto, where I understand he very successfully addressed the prospectors and developers association.

Perhaps, Mr. Chairman, you will allow me to revert to the subject matter of last Thursday's meeting in order that we might complete Dr. van Steenburgh's evidence in so far as that evidence will enlighten the committee as to the extent and purpose of the scienific—if they may be called that—stations which have been established by these Russian parties between the 141st and 60th meridians?

Mr. DUMAS: Mr. Chairman, I would not have any objection to that if it were not that we will have to come back again to this item 210. This is under item 210?

Mr. NIELSEN: Actually it relates more to items 189 to 199, but it does overlap into item 210.

Mr. DUMAS: Why do we not do that when we come to item 210?

Mr. NIELSEN: I was thinking of your suggestion made the last time with respect to my request to have a witness from the Department of External Affairs. Perhaps it might be that the witness will be required to attend before the Committee on External Affairs for a period of time which will not allow him to appear before this committee. It may be wise, therefore, to make that examination of the external affairs witness before the committee when it is examining the estimates of the Department of Northern Affairs.

If you would agree, Mr. Dumas, we have already dealt with the subject matter, and I would like to complete this particular line before we get too far away from it. There are actually two separate points with which I must deal in this examination. The subject matter I propose to bring up before the committee this morning is closer, as far as relevancy is concerned, to the subject matter that was discussed last Tuesday.

If I could have your concurrence in that, Mr. Chairman, and the concurrence of the committee, I will only take about 10 minutes to complete the questions I have in this regard.

The CHAIRMAN: Mr. Nielsen, will that complete, as far as you are concerned, the study of item 210?

Mr. NIELSEN: As far as my questions are concerned of Dr. van Steenburgh, yes.

The CHAIRMAN: Is that agreeable to the committee?

Mr. ROBICHAUD: Well, we will be coming back to item 210 later on.

Mr. DUMAS: We will have to come back to item 210 when we come to that item.

The CHAIRMAN: I think that when we come to item 210, gentlemen, we must bear in mind that we must confine our questions to the item itself, and to the estimates of the Surveys and Mapping Branch, which are items 189 to 199.

Mr. NIELSEN: That is quite agreeable, Mr. Chairman, as far as I am concerned.

Item	210	Polar Continental Shelf Project	$ 567,849
		SURVEYS AND MAPPING BRANCH	
Item	189	Branch Administration, including a Grant of $1,000 to the Canadian Institute of Surveying and Photogrammetry	$ 82,820
Item	190	Geodetic Survey of Canada	788,606
Item	191	International Boundary Commission	83,224
		Topographical Surveys, including expenses of the Canadian Board on Geographical Names—	
Item	192	Administration, Operation and Maintenance	1,980,020
Item	193	Construction or Acquisition of Equipment	100,000
		Canadian Hydrographic Service—	
Item	194	Administration, Operation and Maintenance, including Canada's fee for membership in the International Hydrographic Bureau	3,661,349
Item	195	Construction or Acquisition of Buildings, Works, Land and Equipment	2,777,057
Item	196	Legal Surveys and Aeronautical Charts	775,463
Item	197	Provincial and Territorial Boundary Surveys	43,800
		Map Compilation and Reproduction—	
Item	198	Administration, Operation and Maintenance	1,283,532
Item	199	Construction or Acquisition of Equipment	180,200
			$3,497,226

The CHAIRMAN: Then we will proceed with Dr. van Steenburgh. Doctor, could we have a map before us? I was not here for that interesting meeting of a week ago.

Mr. NIELSEN: May I suggest a map of Canada showing the ice cap as well as a bird's eye view from the north pole?

The CHAIRMAN: Are you ready, gentlemen, to proceed?

Mr. NIELSEN: Dr. van Steenburgh, is this a map of the stations established by the Russian expeditions between 1937 and 1956?

The CHAIRMAN: In what area?

Mr. NIELSEN: In the Arctic.

Mr. DUMAS: Mr. Chairman, I think that if we are to proceed like this, each member should have a copy of this map. We want to know where we are going.

Mr. NIELSEN: Shall we pass it around?

Mr. DUMAS: Why do you not have copies made of that? I will object to it unless we have copies of all the documents relating to it.

Dr. W. E. VAN STEENBURGH (*Director-General of Scientific Services*): May I make a suggestion to the chairman? I am not sure—Mr. Nielsen may know—whether this map is still classified or not. It was.

The CHAIRMAN: If there is any doubt about it, will you keep it in your possession.

Mr. NIELSEN: I would not want to introduce classified material; but last Tuesday it is my recollection that Dr. Nicholson said that it was not.

Dr. NICHOLSON: A version of that has been published in the New York *Times*.

Mr. NIELSEN: So that you do not think it is classified, Dr. Nicholson?

Dr. NICHOLSON: I do not think so.

Mr. DUMAS: It is not a question of whether it is classified or not.

The CHAIRMAN: I want to clear that up first, Mr. Dumas, because, if it is classified, that answers your question.

Mr. NIELSEN: It does not appear to be classified, according to the evidence.

The CHAIRMAN: I know you would not attempt to introduce it if you had any idea or suspicion that is was classified.

Mr. MACINNIS: I understood, Mr. Chairman, that in answer to Mr. Nielsen's question last Tuesday one of the witnesses said the stations were no longer classified.

Dr. VAN STEENBURGH: That question did not apply to this particular map; it applied to the bathometric chart covering the Arctic, and that was unclassified just about a week ago. For the benefit of the committee, I might say that I have copies of all this material, but my copies carry the classification of "confidential". I have not been advised that this has been declassified.

Mr. MACINNIS: Then it must still be classified.

Mr. NIELSEN: No; Dr. Nicholson's opinion, given just a moment ago, is that this particular map is not classified. I have no desire to introduce in evidence before this committee any material that may be classified, so perhaps we could clear this point one way or the other—definitely—now. Is this map classified, or is it not?

The CHAIRMAN: I wonder if the minister should answer that question, or the deputy minister.

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): I do not think it is.

Mr. NIELSEN: I cannot see, myself, how it can be classified, because this particular map was published on March 16, 1958, in the New York *Times*.

Mr. ROBICHAUD: The point is, it is a document to which no other members of the committee have access.

The CHAIRMAN: Let us first finish the classification question.

Dr. MARC BOYER (*Deputy Minister of Mines and Technical Surveys*): I believe, if it bears the classification "confidential", it is rather for the purpose of making it for Canadian eyes only.

Mr. SIMPSON: Where did the map come from?

Dr. VAN STEENBURGH: This map was prepared by a compiler in the Defence Research Board. It is taken from translations from Russian literature dealing with their landings on the polar ice cap.

Mr. MCQUILLAN: Is this dealing with landings on what might be referred to as the Canadian polar ice cap?

Mr. NIELSEN: I do not think this witness is qualified to answer that question. That was one of the purposes I had for calling this other witness who is unable to be here this morning. All I want to do now is qualify the production of this map as evidence before the committee.

Mr. McQUILLAN: My point is, we are not here to discuss landings of the Russian scientists on an ice cap over which we could not possibly claim jurisdiction.

Mr. MACINNIS: Who brought that particular map to the meeting?

Mr. NIELSEN: I did.

Mr. MACINNIS: Where did you get it from?

Mr. NIELSEN: In my opinion it is not a classified map, because it was published in the New York *Times*, and anything that is published in the New York *Times* is not classified, Mr. Chairman.

Mr. MACINNIS: Where did you get it?

Mr. NIELSEN: It was supplied by the department.

Mr. WOOLLIAMS: Mr. Chairman, I may be presuming, but I was wondering if you would give some direction as to what may or may not be classified maps. Could you clarify that for the committee?

The CHAIRMAN: Mr. Woolliams, I think that could be quite easily answered, and rather than my answering that question—which would not be very difficult —I would ask the deputy minister to explain what is classified, because you are discussing matters which pertain to his department.

The committee wants to know the definition of "classified", when an item or a subject, or a map or a document is classified. The committee would like to know just what that means.

Dr. BOYER: If the classification were of the order of "top secret" or "secret", nothing of that nature could be brought within this committee except by special arrangement, and no official record of it would go to the public. If the classification is "confidential", it may mean several things. It may be confidential material that is prepared within a department for a government decision that is to be taken later; and until the cabinet has reached a decision, it is confidential. Or it may be because it was borrowed from other documents that have been obtained in a certain way, say from Russian literature, and are not for circulation. The interpretation, then, is rather for Canadian eyes.

I would think, in regard to this map, seeing that it has been published in a New York newspaper, the word "confidential" may not be attached to the map, but possibly to some of the documents which accompany the map in question. I do not know what these documents are.

Mr. WOOLLIAMS: In other words, your point is that information derived from the map, sir, might be confidential; but the map itself, having been published in one of the leading American newspapers, would be classified as being not confidential in the realm of information?

Mr. NIELSEN: Now that we have dealt with that, if I may submit a reply to Mr. Dumas and Mr. Robichaud, that we will not introduce the map in evidence this morning until the committee can be supplied with copies of it; but I will confine my questions to the analysis that has been made.

Mr. SIMPSON: Does anyone know whether the map is authenticated or not?

Mr. NIELSEN: This will appear, perhaps, in the questions that will be asked of the witness.

Would it be correct to say that approximately 95 such stations were established by the Russians between the 141st and the 60th meridian, between 1937 and 1956?

Dr. VAN STEENBURGH: I have not counted the number of landings in that area, but I would assume your figure is fairly correct.

The CHAIRMAN: What figure are you referring to?

Mr. NIELSEN: My question was whether or not it would be correct to say that approximately 95 such stations have been established by the Russians between the 141st and the 60th meridian, between 1937 and 1956?

Mr. DUMAS: At what latitude?

Mr. NIELSEN: Between the 70th and the 90th.

Mr. DUMAS: I think we are dealing with something which has to do with External Affairs and I strongly object. If the committee wants to proceed with it I shall leave and return only when the estimates of the Department of Mines and Technical Surveys are resumed.

Mr. NIELSEN: Mr. Chairman, we are dealing with an item concerning the construction of the ship which is intended to undertake scientific investigations in Arctic waters. My point is this: that it is of vital interest to Canada to conduct experiments in the light of Russian activities in question; it is vital for the department, in my opinion, to do this.

I want to pursue this line of questioning about the establishment of those ships in the western Arctic.

Evidence at the committee meeting given about three meetings ago showed that it was the intention to utilize in the eastern Arctic the ship which is now being sent to tender, and which is to be built.

I wanted to show to this committee that the activities of the Russians are mainly in the western Arctic, that that was where this ship should be, and where the personnel of this department should be directing their attention.

Mr. DUMAS: That is a long way from this area where you refer to 95 stations.

I think Mr. Nielsen's intentions are justified, but I think he should apply to someone in the Department of External Affairs when he would receive all the information he required.

Mr. ROBICHAUD: What item are we discussing now?

The CHAIRMAN: We are dealing with items 189 to 199 in conjunction with item 210. Perhaps we might restrict the questions to the functions of this department, in view of the evidence we were given regarding this ship. Perhaps we might hear further argument.

Mr. NIELSEN: In reply to the point made by Mr. Dumas: the Department of External Affairs is not responsible for the establishment of scientific expeditions in the Arctic, consequently, with all due deference to Mr. Dumas, I would point out that no objection was raised when these matters were discussed quite fully at our previous meeting. This question would only take about ten minutes. It was only intended to tie up the loose ends of this discussion.

Mr. MCQUILLAN: Is it Mr. Nielsen's intention to try to divert the work of this ship from the Atlantic seabord and the Labrador coast to the Canadian western Arctic?

Mr. NIELSEN: The purpose of my question is this: I feel that the construction of one such scientific ship for this purpose in the Arctic is not enough. I think I indicated my opinion to this committee: that I do not think this department is getting sufficient funds to do all that they need to do, nor all that they want to do.

I strongly feel that at least one or possibly two, further ships should be constructed, and that provision should be made in the estimates for investigation in relation to operations in the Arctic. That was the sole purpose of my question.

Mr. MCQUILLAN: It is a very complicated subject. Undoubtedly the United States government would be interested in this work as well.

The CHAIRMAN: Would you agree, Mr. Dumas, in view of the evidence that was given a week ago, that we would be quite in order to proceed in a limited manner?

Mr. DUMAS: No I would not agree.

The CHAIRMAN: Were you questioning the proposed evidence before this committee on a number of expeditions that were made by the Russians as a proper type of evidence to come before this committee?

Mr. DUMAS: We have been told that the department has on file some of those reports, and that they are classified as confidential.

The CHAIRMAN: Do you mean reports about the expeditions?

Mr. DUMAS: Reports of some of those expeditions—that the reports made have dealt with them.

Mr. MACINNIS: What was the intention of this meeting, following last week's meeting?

The CHAIRMAN: That was explained, Mr. MacInnis. We had to apologize at the beginning of this meeting for not knowing before hand, that the witness we expected to have with us is now before the External Affairs Committee.

Mr. NIELSEN: And Dr. van Steenburgh?

The CHAIRMAN: We do have with us Dr. van Steenburgh, who was not able to be with us at the last meeting.

Mr. MACINNIS: Well, we have already been here half an hour.

The CHAIRMAN: This is a very delicate subject we are dealing with. I have always said that I would allow latitude to the members. But there is a limitation to latitude.

Mr. MCQUILLAN: Is there not also a limitation on time as far as this committee is concerned?

The CHAIRMAN: Yes. Please go on Mr. Nielsen. Mr. Dumas and Mr. Robichaud, should they feel that the questions are not right, know their privileges, and I shall be glad to listen.

I hope Mr. Nielsen will keep in mind the objections which have been raised. Let us try to get along together.

Mr. MACINNIS: I would like to remind Mr. Nielsen of a question which was just put: was it his intention to have this ship taken from the east coast and put on the west coast? Previous to that he said that there should be two or three more ships. He was basing his argument on the fact that the ships should go to the west coast. He made that statement also. Just what are you proposing to do?

Mr. NIELSEN: There is no inconsistency.

Mr. MACINNIS: There is. You have already said that this ship would serve its purpose better by going to the west coast.

Mr. NIELSEN: There is no inconsistency in that statement. They could be taken as alternatives. I prefer the former, but I would settle for the latter.

Mr. KINDT: Can we say what they do want, and get on with it?

Mr. NIELSEN: In view of the fact that in all likelihood the Russian parties which have been established between 1937 and 1956 were in the area between the 141st and the 60th meridian of longitude, and the 90th and 70th degrees of latitudes, being approximately 95 in number, what activities have been conducted during the same period by the relative branches of the Department of Mines and Technical Surveys?

Dr. VAN STEENBURGH: Except for aerial photography, geological reconnaissance, and geographical studies carried out in the Arctic archipelago we have had no expeditions that I can recall in the area under question.

Mr. NIELSEN: To your knowledge, when did Canada first become aware of these Russian activities in the Arctic in the sector I mentioned?

Dr. VAN STEENBURGH: It is hard to separate Russian activities in this sector from Russian activities in the entire Arctic.

It was only after their publications were issued that we were able to compile translations which showed the area of their activity; and, in this connection it should be pointed out that, while we have translated all the available material published by the Russians on this question, it may be that more information has never reached the Russian scientific journals.

You see these ice stations marked on this map. We cannot be sure that they are all the ice stations established in the area under question.

Mr. NIELSEN: Could you indicate on the map, for the benefit of the members of the committee, the closest point to the Canadian mainland, or to the Canadian islands, at which these Russian stations, or any of them, have been established during that period from 1937 to 1956? There would be no objection to referring to the map.

Dr. VAN STEENBURGH: This is a very difficult question to answer. I have no actual information as to how close the Russians have come to our coast. All I have is this map. A copy of it is here, and it indicates that the Russians have had their ice station somewhere between 100 and 150 miles north and slightly west of Ellesmere Island.

Then, of course, they have had numerous stations closer to the pole. I used the distance of 75 miles from Canadian territory before, but we are not sure of it.

Mr. MACINNIS: I would point out that this is a question which has already been asked.

Mr. NIELSEN: No. I think the answer given last time was that the station was 75 miles east of the 141st meridian. It was not asked relative to the coastline of Canadian territory.

Mr. MACINNIS: I am sorry.

Mr. NIELSEN: Would you say that the activities in the establishment of these stations by the Russians in the sector I have mentioned have been increased during the period 1954 to 1956?

Dr. VAN STEENBURGH: A trend of the Russians to establish stations in the Arctic was started shortly after the last war. It increased in tempo up until the Korean war. During that war the activities in the Arctic seemed to diminish and they increased again after the Korean war.

It is difficult to assess the level of Russian activities. They have been, over the years, manning certain ice islands; at least one of them was manned last year, and they apparently intend to continue this exploration into the future. The magnitude of their effort is beyond my knowledge.

Mr. NIELSEN: But from your knowledge of the Arctic, are there open water breaks in this ice pack in the sector that I have mentioned?

The CHAIRMAN: What is that?

Mr. NIELSEN: Are there open water breaks in this ice pack?

The CHAIRMAN: You mean channels?

Mr. NIELSEN: Channels, or open water, or lakes, within the ice?

Dr. VAN STEENBURGH: Up until late June the ice pack is fairly firm. At that time it begins to soften, and later, July, August and early September there are leads.

Mr. NIELSEN: Is it the intention of the hydrographic or any other branch of this department to establish similar stations on the ice within the sector I have been mentioning?

Dr. VAN STEENBURGH: It is the intention of the Department of Mines and Technical Surveys beginning in March this year and extending into the future, to establish ice stations on the shore-fast ice and the ice pack out to at least the edge of the continental shelf.

Mr. NIELSEN: Do you know where the edge of the continental shalf is in the sector that I have mentioned?

Dr. VAN STEENBURGH: Relatively speaking, yes; but positively or specifically speaking, no. It would appear to vary anywhere from 50 to 125 or 150 miles out from the shore.

Mr. NIELSEN: Is it not one of the purposes in establishing those stations to delineate exactly the extent of the Canadian continental shelf?

Dr. VAN STEENBURGH: Yes.

Mr. NIELSEN: So that would be one of the purposes for which the ship coming under this item would be sailing in Arctic waters?

Dr. VAN STEENBURGH: Not in the area under discussion. The ship in question will be working over the eastern continental shelves and the channels between the southern island of the archipelago, and as far north as ships can operate.

Mr. NIELSEN: Is it the intention of the department to conduct investigations of a similar nature with a similar ship or ships in the future in the western waters of the archipelago?

Dr. VAN STEENBURGH: Canadian oceanographers are extremely interested in the oceanography of the Beaufort sea close to the Arctic archipelago; and if we had the resources and the staff, both the fisheries research board and ourselves would undoubtedly be interested in investigating this area.

Mr. NIELSEN: I have one last question: you mentioned that there are, during the summer months, breaks of open water in the ice pack. Are those breaks sufficiently large to permit the surfacing of submarines?

Dr. VAN STEENBURGH: I believe so.

Mr. NIELSEN: Thank you.

Mr. McQUILLAN: Are those breaks large enough to permit any extensive use of a ship in that area?

Dr. VAN STEENBURGH: No.

Mr. McQUILLAN: Heve the limits of the continental shelf been established on the Atlantic and Pacific coasts?

Dr. VAN STEENBURGH: There have been many more soundings taken on the Pacific and Atlantic coasts. Various oceanographic groups operating in these areas have delineated quite clearly the limits of the shelf in the lower latitudes.

Mr. McQUILLAN: When you say lower latitudes, to what do you refer?

Dr. VAN STEENBURGH: To all the western coast up to the Alaskan border. And on the east coast, well up towards Davis Strait or slightly beyond.

Mr. KINDT: Is it your thought to use this ship at some time as a mother ship with other methods of establishing your stations in areas where the ship could not navigate, or what methods would you be using to get into those areas where the open water prevents the use of a ship?

Dr. VAN STEENBURGH: Our expedition this year to the polar continental shelf is precisely for that purpose. We will operate over the ice as long as it is possible in the spring and early summer.

However, for the present we do not know for sure how long we can actually operate. This reconnaissance expedition will bring us information that will allow us to plan for future years.

Mr. KINDT: Would you rather defer consideration for another year and build a ship for the western Arctic, in order that we might have it operating on research during the coming summer? What would be the need for such ships?

Dr. VAN STEENBURGH: There are two purposes for ships of this nature; one is hydrographic, and the other is general physical geography.

Even if we had many more ships than we have at the present time, it would probably take us 100 years to do this hydrographic requirement. As far as geography is concerned, one ship represents a very small token of effort in this field.

Mr. MARTEL: Could Dr. van Steenburgh tell the committee if they have any information about the Russian plan to establish an atomic reactor and thereby warm up the waters of the northern and Arctic areas?

Dr. VAN STEENBURGH: I am afraid that is out of my field.

Mr. MARTEL: The *Financial Post* carried a feature report on this subject about a year and a half ago. Do you think such a plan would have an influence on the Canadian or far northern Canadian continental shelf? Have you any information on that?

Dr. VAN STEENBURGH: No.

Mr. WOOLLIAMS: I wonder if there is any border line as to who has jurisdiction over these northern islands as far as Canada is concerned?

The CHAIRMAN: I think you are straining, Mr. Woolliams—

Mr. NIELSEN: That was one of the reasons.

The CHAIRMAN: —at this particular moment.

Mr. NIELSEN: In order to tie up this discussion, might I suggest that this map be reproduced and distributed to all members of the committee, and also included in the record of our proceedings at the time when the map is approved by the committee?

The CHAIRMAN: Agreed? Agreed.

Mr. MCQUILLAN: I would like to ask one more question: it would appear to me that a great deal of your hydrographic work would have to be done in the area referred to where there would be ice-floes or ice-gaps. A ship is not going to be able to manoeuver in that area, to get any great amount of information; it is only going to be possible to cover a very small area. So would it not be more likely to serve the purpose better by making use of aircraft?

Dr. VAN STEENBURGH: That is what we are planning; that will be the means used this year.

Mr. MCQUILLAN: Air service would assist the work much better than trying to operate a ship.

Mr. NIELSEN: I wonder, as a result of that question, if you can tell the committee whether ships have been known to sail between the northern portions of Ellesmere islands and the Polar ice-pack?

Dr. VAN STEENBURGH: I do not think so.

Dr. NICHOLSON: Not since the American Nares expedition which went to the northern part of Ellesmere Island, but not along the route which you just traced.

The CHAIRMAN: Your remarks suggesting that copies of the map be distributed to the members of the committee are noted.

Mr. DUMAS: I have one more question, when you are through.

The CHAIRMAN: I am going to suggest to the committee that there has been evidence given that a copy of this map was reproduced in a New York paper. I think in view of the fact that there has been some concern about the classification of it—although it has been cleared up—I am going to ask Dr. Nicholson or someone from the department to verify the fact that it is an exact copy of the map that was reproduced in the New York paper.

Mr. NIELSEN: That is not so, because I have drawn red lines on it indicating places between the 60th and the 141st meridian, and the 141st meridian and the 165th meridian.

The CHAIRMAN: I think, Mr. Nielsen, we will settle that by stating that we, as a committee, are perfectly clear as to what we are having produced as evidence, and I assume that this matter will be taken care of by the doctor.

Mr. KINDT: I have a question.

The CHAIRMAN: I think Mr. Dumas was ready with his question when I interrupted him.

Mr. DUMAS: In answer to the question asked by Mr. Nielsen regarding the proximity of the Russians to Ellesmere Island, what proof do you have that they were 75 miles from the shore of Ellesmere? They could have been 125, 150, or 200 miles.

Dr. VAN STEENBURGH: Or they could have been only ten miles.

Mr. DUMAS: You have no proof?

Dr. VAN STEENBURGH: Except the translation containing the published map showing the ice-stations. This information comes from Russian sources. If they have failed to include part of the information, we lack it.

Mr. DUMAS: For your information you depend on this Russian report?

Dr. VAN STEENBURGH: Entirely.

Mr. NIELSEN: I have one further question: that information is up to 1956. Have we any similar information covering the period from 1956 to date?

Dr. VAN STEENBURGH: We know where the Russian ice island was located last summer but to the best of my knowledge, the information that was presented to the committee this morning is the latest available to us.

Mr. DUMAS: Do you know the exact location where the ice island was last summer?

Dr. VAN STEENBURGH: Yes, but we have no information on aircraft landings on the ice pack.

Mr. DUMAS: What was the date of this report? What date did this report carry, the report that was mentioned before? I am speaking of the Russian report.

Dr. VAN STEENBURGH: It is my impression, although there is no date on this map, that this only includes information up to the end of 1956. Can you add anything to that Dr. Nicholson?

Dr. NICHOLSON: You are right.

The CHAIRMAN: Are you all through with the witness?

Mr. KINDT: May I ask one question? We have heard a lot about Russian ice islands. The thought in my mind is that there are some unchartered land islands covered with ice to the left of what we now consider on maps as being Canada's domain. Is there any possibility—

The CHAIRMAN: What do you mean by "the left", the west?

Mr. KINDT: The west. It could be that with the examination of the continental shelf and with a more thorough examination of this area, small

islands of one kind or another, which at some later time might become extremely important, are undiscovered. It seems to me that the importance of making this examination is to be sure that if there are any undiscovered islands, they be discovered now and made a part of Canada rather than of Russia. Is that the turning point to which you go with regard to the work you are doing?

Dr. VAN STEENBURGH: Well, there have been very few actual landings on the ice cap from which to take scientific information. It should be remembered, however, that that area has been flown over many times by commercial as well as by official aircraft, and I shall be extremely surprised if any investigation we carried out in the area that you indicate results in the discovery of additional islands.

Mr. NIELSEN: I think the Minister of Northern Affairs is on record as saying that even if we find land masses within 50 or 100 feet of the surface, we should dump gravel on it and claim it.

The CHAIRMAN: Mr. Dumas raised an important point just a few minutes ago referring to the evidence of Dr. van Steenburgh. He was concerned about information regarding Russian activities as having come from Russian data.

I wonder, Mr. Dumas, if you want to follow that up? Would you mind if I asked the witness this question. From your experience, this scientific data from Russian sources would be quite reliable?

Dr. VAN STEENBURGH: It would be reliable as to content, but it may not contain all the information they have.

The CHAIRMAN: That is all right. Are there any other questions, gentlemen?

Mr. GUNDLOCK: Mr. Chairman, I have a question—perhaps it is not a proper question, but it is this: why are we only considering Russian activities? Is Russia the only country that has such activities in this area?

The CHAIRMAN: I am wondering if that particular question is one that should be asked of this witness.

Mr. NIELSEN: Perhaps the direct question could be asked. Are the United States active between the 141st and 60th meridians and between the 90th and 70th parallels?

Mr. GUNDLOCK: Yes, the United States or any other nation?

Mr. WOOLLIAMS: Are we not getting into the realm of security?

Mr. ROBICHAUD: We are getting into the realm of external affairs.

The CHAIRMAN: Yes. As I said, we have to be very careful with this particular subject, and also that we are not running into the affairs of another department of government.

Mr. GUNDLOCK: Well, we have been discussing Russian activities. I do not think we need worry about any other nation.

Mr. NIELSEN: As far as I am concerned, Mr. Chairman, I have brought out the points that I wanted to bring out.

The CHAIRMAN: Yes. Are there any other questions? Then, gentlemen, would you like to permit the witness to take his chair? Would you like to have Dr. Convey back?

Gentlemen, are you agreed that we have now finished with items 189 to 199 and 210?

Mr. DUMAS: Well, they have been passed before. We said there was no objection to going back to them, but they have been passed before. We are on items 202 and 203, and I would like to pursue a point.

The CHAIRMAN: What is the wish of the committee concerning item 210? Do you have any further questions on item 210?

Mr. DUMAS: I suggest we have discussed it enough.

Mr. NIELSEN: I think we would like to reserve the right to further discussion, should the witness I have already requested become available before the committee has finished with his department's estimates.

The CHAIRMAN: We did pass items 189 to 199 before, and we just reopened them for the convenience of Mr. Nielsen. Go ahead, Mr. Dumas.

MINES BRANCH

Item 202 Administration, Operation and Maintenance	$3,527,130
Item 203 Construction or Acquisition of Equipment	269,245
	$3,796,375

Mr. DUMAS: Dr. Convey, last Tuesday we were reviewing the question of the Fuels Division. There is one question I would like to ask you. How far have you carried out your investigation on the chemical constitution of coal pitches?

Dr. JOHN CONVEY (*Director, Mines Branch*): We have not done very much in that particular field and our effort has been associated with this problem when and where staff were available. At that time we have looked into some of the by-products, associated with the pitch and tar materials.

Mr. DUMAS: Is it a product that is widely used by industry?

Dr. CONVEY: Yes, to quite an extent; but with the refining of oil we find that we have a glut on the market today of pitch and tar, and with the availability of such amounts we felt that from a research viewpoint, our effort could be directed into more profitable channels.

Mr. NIELSEN: Mr. Dumas, have you finished with this line of questioning?

Mr. DUMAS: Yes.

Mr. NIELSEN: I wonder if the witness could tell the committee whether his branch is undertaking any work with regard to the discovery of new uses for metals such as gold or silver, and the like?

Dr. CONVEY: Yes. We have under way at the present time a research program associated with further uses for gold. This project was activated within the last three months and we are working in cooperation with the Canadian Metal Mining Association.

Our efforts, along these lines, are with respect to the alloying possibilities of gold. Another approach is that gold can provide what we would call a metallic insulating barrier, which would prevent gaseous ions from passing through a metal. Hence it may have possibilities in missile work.

Mr. ROBICHAUD: Can you also give us a report on the progress that has been made in the development of zinc alloys? I understand special research has been done in this field.

Dr. CONVEY: Yes. About five years ago the Mines Branch brought in the primary producers—that is, the two main companies—the Consolidated Mining and Smelting Company and the Hudson Bay Mining and Smelting Company, together with secondary users, and we created what we call an advisory research committee on zinc, representing the Canadian zinc industry.

With this cooperation we set up research projects aimed at further uses of zinc and, again, we divided our effort into two main parts, one associated with galvanizing and the second associated with the possible development of new zinc alloys.

In the galvanizing program we have the full cooperation of at least two of the steel companies in Canada.

Mr. NIELSEN: I think, Mr. Chairman, that I asked Dr. Convey during the last meeting whether it would be correct to compare the content of the Athabasca tar sands with the world production. I used the figure 250 billion barrels as the content of the Athabasca tar sands, and 81 billion barrels as the total world production. I think I was incorrect, and perhaps Dr. Convey would correct it for the record.

Dr. CONVEY: Yes. The 250 billion barrels represent the recoverable oil reserves of the free world.

The CHAIRMAN: You are not speaking of production, Mr. Nielsen? You used the word "production" a moment ago.

Mr. NIELSEN: I am sorry; I meant "reserves." What was the figure in the sands?

Dr. CONVEY: In the sands it runs around 300 billion barrels. That is assuming we could bring into production the major part of the tar sands which lie at a depth which, at present, we know, but there is no known method to bring the oil out from the sands.

The CHAIRMAN: You are talking about the recoverable amount, are you?

Dr. CONVEY: Yes.

Mr. NIELSEN: Going back to the new uses of metals, Mr. Chairman, may I ask this: does the witness feel that the work that is being done by the Mines Branch along the lines of research for new uses for metals is showing definite results in the way of encouraging the increased consumption of metals, and particularly Canadian production?

Dr. CONVEY: Yes. Looking at it over the past few years in the field of nuclear fuels—that is, the uranium work—I would say that our efforts have paid dividends.

In the field of what one may call every-day alloys in iron and steel, our research has enabled the steel producer to improve his processes. In the field of high temperature alloys we did produce one particular alloy which was used for at least two years in jet aircraft; but that same metal today has found another use, namely, as a means of producing anvils, with which one forms blade materials for jet aircraft.

In zinc research I would say that through our efforts we have improved the Canadian zinc situation, particularly in the initial refining work. What our program at the present time will yield will be known in the future. In another phase over the past ten years, through the efforts of the research program of the Mines Branch we nursed and brought into production the Canadian magnesium metal industry.

Those are examples, in passing, which I think indicate that we have a positive answer to your question.

Mr. DUMAS: Earlier, Dr. Convey, you said you were conducting a program of research for industrial uses of gold, and you said that this was done in co-operation with the Canadian metal mining association. Did you mean to say that the Canadian metal mining association is paying part of the cost of this research?

Dr. CONVEY: Yes. The Canadian metal mining association will be providing funds to the extent of $5,000 towards the payment of the salary of one individual who will work with us.

The CHAIRMAN: Mr. Dumas, would you like to extend that? I was hoping someone would bring this up. Would you like to ask Dr. Convey if, to his knowledge, there have been any further uses for gold?

Mr. DUMAS: This has been discussed before; but there was a publication which appeared I think in one of the Canadian metal mining association monthly reviews regarding uses of gold for nuclear reactors. Can you say something about that?

Dr. CONVEY: Yes, that has come up on several occasions. But gold alone is not a good metal for nuclear reactors because, under radioactive bombardment, the gold is transformed into mercury. However, there is a possibility that through alloying gold with some other metal we may be able to beat that particular misbehaviour of gold within a reactor. There has appeared on the horizon within the last few months an indication that an irradiated gold is being used in the medical field. I do not know the details associated with this, but we are attempting to find out as much as we can.

Mr. DUMAS: How many individuals are working on this research program?

Dr. CONVEY: With respect to gold?

Mr. DUMAS: Yes.

Dr. CONVEY: There is one senior research engineer, who is also in charge of the nuclear metallurgic work. With him there will be one full-time research scientist and perhaps the assistance, part-time, of three technicians. That is independent of the possible discussions which this research team will have with their colleagues throughout the branch.

Mr. DUMAS: I understand you will be reporting periodically to the Canadian metal mining association on the results of your research.

Dr. CONVEY: Yes. We will provide to the Canadian metal mining association progress reports as frequently as they want them. We hope they do not ask for them too rapidly.

Mr. AIKEN: Mr. Chairman, may I add something along the same line? I read in the newspaper just this morning that gold is being used in connection with the illness of Mr. Dulles, the Secretary of State in the United States, along this very line that has been mentioned. That was in the newspapers yesterday and this morning.

Mr. MARTEL: They are using gold in Pioneer IV, according to the press report.

Dr. CONVEY: That is in one of the missiles. I have already stated that we would use it as an insulating barrier between different metals. In fact, there seems to be a tendency today in metallurgy to return to the point at which we were quite a few years ago.

If you have old cutlery at home; one particular type of cutlery made by Rogers of Britain, you will have a carving knife that keeps a good edge. It looks a little rusty and dirty, but you never really have to sharpen it. That is due to the fact that this type of knife blade was made by rolling about five sheets of metal down until you have a knife blade. In other words, it was a sandwich of metals.

That is where we are going now. We are going back to the idea of sandwich metals; and gold seems to be, not a glue, as it were, sticking them together, but a spread,—something which will give us the quality which we are after.

When you study metals there is on thing you find very early in the business. All metals are made of crystals and they are not as impermeable as we might think. Gases, such as hydrogen, quite frequently can go straight through a metal as though all you had in front of it was a wire mesh.

When you get into the higher temperatures in using metals, you find that these gaseous materials just seem to pour through the metal itself. It

would be bad enough if they chose to come through the metal, but they have the bad habit of interfering with the structure of the metal as they come through. Hence, the search is to find metals that will prevent this migration; and gold seems to be one of the possible answers.

We have run into troubles, such as a few years ago in our hydrogenation experiments on the tar sands. We produced a special type of stainless steel for making the valves of the huge cylinders in which we process the bitumen at a fairly high pressure of hydrogen. This is performed at a relatively high temperature. When we approached a company with respect to making these valves for us, they felt they had more experience in this business than we had so they made the valves out of the alloys to their specification. Under test we found, with a hydrostatic test of about 20,000 pounds per square inch oil pressure, that they passed the hydraulic test. But when we put them under hydrogen pressure it took literally about six minutes for hydrogen to come right through them. Therefore we went back to the alloy we had made in our own laboratories.

However, these are just examples of the troubles one must encounter. When you get into missiles, where you have your hub gases coming from your rockets, something has to withstand the ravages of these high-temperature gases. This is the position in which we find ourselves today, first, where the aeronautical group are producing better propellants and we, on the other hand, from the metals viewpoint, are trying to devise a container which can hold these propellants when they are doing the business that they are intended to do.

Mr. NIELSEN: Do you feel, with the provision made in these estimates for staff, that you have a sufficient number of people to carry out all the work that you want to do?

Dr. CONVEY: No. That is an annual question which is brought up. I must admit that we get a fair share of the assistance which is granted to the department each year. However, in our own meetings in the Mines Branch, when I meet with my own staff they usually ask for five times the number we receive.

Our staff, as you may know, consists of about 647. About 7 per cent of that is clerical staff. The rest, I would say, is divided in the ratio of about three to two; three technicians to two professional personnel.

Many of the projects are shared. At times quite a few of them have to be shelved in order to attend to those problems of high priority. If we had more staff we could do much more than we are doing at the present time. Equipment-wise we are not too badly off.

Mr. NIELSEN: In projects such as those now being conducted in the discovery of new uses for metals, and like projects, if your staff were increased do you feel you could make greater progress along those lines?

Dr. CONVEY: Absolutely. As it is today, what really happens is that when a particular project which is of interest to one or two companies comes up, we will provide so much help for these companies. In turn, they will provide us with the staff we lack. I must say that our technique is one in which the projects that we aim for are those which will benefit not one but many firms.

Mr. NIELSEN: Do I understand you correctly, Dr. Convey, that in some of these projects the departmental staff is supplemented by staff provided by private industry?

Dr. CONVEY: Yes. We have under way at the present time, for instance, in the study of nickel and the nickel alloys, a scheme whereby the International Nickel Company has housed in our laboratories one senior engineer and one technician.

In zinc we have one research engineer and two technicians.

In steel castings, wherein we work directly with the Steel Castings Institute of Canada, we have one senior engineer and one technician.

The CHAIRMAN: These are joint efforts with the companies producing that particular product or trying to do research work on them?

Dr. CONVEY: Yes. Then there are those I have mentioned, outside of the International Nickel Company. The others are really group efforts involving the country at large. One reason we brought the International Nickel Company into the laboratories was that we were being flooded with queries concerning nickel alloys and, quite frequently, their failure under certain circumstances, and I felt they should be doing something to help themselves.

They considered the best way to do that was to bring their men right into our own laboratories and work alongside us.

Mr. ROBICHAUD: In the detailed list of the staff here I notice an item of $10,572 for chauffeurs. What is their special duty? There were none last year.

Dr. CONVEY: "Chauffeur,"—that involves about three individuals, and in order to merit putting them one grade above the class of a labourer we gave them the title of "chauffeur". Their duties are in the handling of lift truck equipment, for the feeding of the furnaces and the smelter furnaces, both in the foundry and in the main smelting laboratories. They are not chauffeuring; they are actually operators, but in order to give them a grade a bit better than the class of "labourer", they have the designation of "chauffeur".

Mr. ROBICHAUD: In the estimates for materials and supplies I notice—the detail is on page 276—that you have exactly the same amount as last year, $230,000. How do you arrive at those estimates and at the same figure for two consecutive years?

Dr. CONVEY: The estimates are based on past experience, under which we have detailed just how much we have spent on a particular item during the preceding years.

Then one looks at it and tries to forecast just what will be the increase in the cost of these supplies over the year to come, and this year we have shown no increase simply because we were not granted an increase.

Mr. ROBICHAUD: What policy is being followed in the case of overtime? Last year you had an item of $15,000; this year it is reduced to $9,000. What does it cover?

Dr. CONVEY: Overtime, for the most part, covers operations within the machine shops. In our machine shops we produce quite a lot of our own equipment, equipment which would cost large amounts of money if we were to buy it outside. They are what one might call "tailormade" items.

We also have overtime in the foundry. We have overtime on the smelter, as once a melt is started, say on an iron ore, it is run for 24 hours a day, three shifts.

The reduction in overtime is primarily due to this fact—we had expected that our prevailing-rates staff would be classified as "mines craftsmen" as from April 1, simply because we find that one-half of our staff are already classified "civil servants". Our mines craftsmen in our machine shops are working on pattern making, et cetera. It would have been much more economical to operate if we could have brought them all in as mines craftsmen.

That has been turned down for the time being. However, the figure that you see there for overtime represents only part of the bill. When

we had a 24-hour smelter run last year, over a period of a month or two months on the smelter, for instance, the companies concerned with that particular pilot plant operation provided us with at least 12 more pairs of hands. So they have to pay all that extra overtime.

Mr. ROBICHAUD: That is their own responsibility?

Dr. CONVEY: Yes. That is one of the conditions we lay down when we bring them in to work with us. The work will be under our direction, but they pay for all extras and the amount that you see for "overtime" in those particular estimates would represent, I would think, perhaps one-half of what is really spent.

Mr. WOOLLIAMS: Mr. Chairman, in view of something that this witness said in reference to the tar sands, I would like to ask a few questions on that subject, and I may preface it by saying that the Royalite Company of Calgary have done some research, as I understand it, up in that area.

Did I understand the witness to say there was no known way to separate the oil from the tar sands, or is there no known economic way to do it?

Dr. CONVEY: I think, if you had been here last Tuesday, you would have had your answer on that. We went into detail on that.

The CHAIRMAN: Mr. Woolliams, that has been pretty well covered.

Mr. WOOLLIAMS: I was not able to be here; I was away.

The CHAIRMAN: The proceedings have not been printed yet, but you will find some very interesting reading in those of last Tuesday.

Mr. WOOLLIAMS: Could I just have an answer to that question?

Dr. CONVEY: Yes. There are processes for the winning of bitumen from the tar sands; but there is no known process for the winning of the bitumen from the tar sands which are buried underneath overburden. On the open pit operations you can apply either the cold water process, the hot water process or the Can-America process.

Dr. BOYER: A question was asked at the last meeting as to how much money had been spent by the government of Canada on research and investigations into the tar sands. I have the answer, if you wish to have it.

The CHAIRMAN: Yes.

Dr. BOYER: The amount spent by the Department of Mines and Technical Surveys on research on the separation of the tar from the sand, and on research on refining processes, once they are extracted, amounts to three-quarters of a million dollars.

In addition to that there was a capital amount of $1,900,000 that was spent a number of years ago on drilling certain parts of the area and building a pilot plant. This amount of money outstanding, $1,900,000, is recoverable when a company which has a lease from the federal government over the section which was drilled, gets into production. There is the responsibility of returning this money to the government from the profits they would make from their operations.

Each year we are now spending about $80,000 in continuing research, particularly in the study of methods of refining and improving the product that might be extracted from the sands.

In addition to these amounts of moneys from our department, the National Research Council spent about $2¼ million some years ago on the process that was described by Dr. Convey, that is, on the cold water process. Therefore, the total amount spent by the federal government was about $5 million.

The CHAIRMAN: Was that effort about 10 years ago joined with some Canadian company?

Was it the Canadian Oil Company, or have you that information?

Dr. BOYER: At the time it was called the Abasands Oil Limited. The company still exists and I believe it has pooled its lease with another company. But the responsibility still remains on the original company to return that capital amount of money to the government if eventually it gets into production.

The CHAIRMAN: Are there any other questions?

Mr. MARTEL: Are you still making research on lithium metals?

Dr. CONVEY: Yes. Our research there is divided into two categories. One category is associated with the actual winning of the lithium salts from the raw mineral. As in metal, we are pursuing it as an additive in some of the lightweight alloys. As a metal on its own, its use is very limited. It is difficult to handle; but its major use is perhaps as a storehouse of hydrogen which is used in the H-bomb.

Mr. MARTEL: Could this lithium produce fuel of some kind?

Dr. CONVEY: It can be used indirectly. As I mentioned, it has the power of absorbing large amounts of hydrogen, and those amounts can be easily liberated. For instance, one of its uses during World War II, when pilots were ditched—that is, brought down into the ocean—was that they could, by means of a little container, allow a little salt water to get into it. In the container was a lithium salt, and that immediately liberated hydrogen, which inflated balloons which would carry up a little aerial; and through that aerial they could transmit distress signals. It was used in that respect; but its eventual use was as a means of storing hydrogen.

Mr. MARTEL: Would it enter into the making of solid fuel?

Dr. CONVEY: Yes. It is in that group of metals. But the greatest use for lithium is—as lithium carbonate, I believe—in high-grade lubricants, grease and oil. At least 98 per cent of its production goes into the lubricating business.

The CHAIRMAN: All right, gentlemen. Shall we approve items 202 and 203?

Mr. KINDT: Mr. Chairman, in approving those items I should like to pay tribute to Dr. Convey on his masterful presentation and his clarity of thought as a witness before this committee.

The CHAIRMAN: I think you express the idea of every member.

Mr. AIKEN: Mr. Chairman, this is not a further question, but an observation. I think one thing has been obvious from the examination of the estimates of the mines branch, and that is that we have one of the biggest jobs to be done in this country right in this department. I think that in considering our final report, this would be a proper place to mention the fact that the activities of this branch could be vastly increased in view of the development of natural resources in Canada.

That might also apply, not only to mines and minerals, but to technical surveys as well.

Mr. NIELSEN: I very strongly support Mr. Aiken in that observation and would suggest that it be kept in mind when preparing the final report.

The CHAIRMAN: Thank you. I agree with your observation; and I might also say at this juncture that the conduct of this committee in studying the estimates of this department is certainly much more detailed than last year, which is to my satisfaction and I think, to that of everyone.

Items 202 and 203 agreed to.

GEOGRAPHICAL BRANCH

Item 204 Administration, Operation and Maintenance, including a Grant of $500 to the Canadian Association of Geographers and a Grant of $3,500 to the University of British Columbia in aid of Research in Foreign Geography .. $358,681

Mr. NIELSEN: Mr. Chairman, what does the research in foreign geography that is mentioned in this item cover?

The CHAIRMAN: Dr. Nicholson, the director, will answer that, Mr. Nielsen.

Mr. NIELSEN: What is "research in foreign geography", Dr. Nicholson, that is mentioned here?

Dr. N. L. NICHOLSON (*Director, Geographical Branch*): The item that is mentioned is to aid a special project which is being carried out by the University of British Columbia on an area in the Soviet Union in which the federal government is interested.

The CHAIRMAN: Will you speak a little louder, doctor, so that all the members can hear?

Dr. NICHOLSON: I will reply to that question again. The question was, what does the item for research in foreign geography at the University of British Columbia refer to specifically? It is to aid the special study of an area in the Soviet Union in which the department is interested.

Mr. NIELSEN: What is the area, and what is the interest of the federal government?

Dr. NICHOLSON: Some of the aspects of this project are still classified. But among other things, this is a test to determine to what extent the facilities available for research in the Soviet Union are present in Canadian universities.

Mr. NIELSEN: As there are some aspects of this subject which are still classified, I do not think I should pursue that line of questioning, because I might ask a question which would embarrass you.

The CHAIRMAN: It would not be answered.

Mr. NIELSEN: So perhaps it might be wise to refrain from questioning along that line.

Mr. ROBICHAUD: Do I understand that this new atlas of Canada has been prepared and produced under this branch?

Dr. NICHOLSON: Yes.

Mr. ROBICHAUD: How many copies of it have been printed to date?

Dr. NICHOLSON: We printed 5,000 copies of each sheet.

Mr. ROBICHAUD: How many copies have been disposed of?

Dr. NICHOLSON: Nearly 4,000. Of course, not all have been distributed, because the covers were produced by the Queen's Printer; and the Queen's Printer has been acquiring the covers in lots of 1,000. He is a little behind in his total number.

Mr. ROBICHAUD: Has there been any extensive demand from all over Canada for this atlas?

Dr. NICHOLSON: The demand has been surprisingly great.

Mr. ROBICHAUD: Does the demand come mainly from individuals or from universities or schools?

Dr. NICHOLSON: It has come from people in every walk of life. We have had a great many demands from private individuals.

Mr. ROBICHAUD: Have any copies been distributed free of charge?

Dr. NICHOLSON: No.

Mr. NIELSEN: May I ask one question—the same question I asked Dr. Convey—with regard to the operations of the geographical branch: do you find your branch is restricted in what it is doing, or should be doing, by lack of staff or lack of funds to carry out its responsibilities?

Dr. NICHOLSON: I feel that we are greatly handicapped.

Mr. NIELSEN: Could you elaborate a little on that statement?

Dr. NICHOLSON: Our general responsibility is to investigate, as it were, the surface of the country. In the north this means producing maps of and investigating the terrain, whereas in the south it means producing land-use maps.

Even this, perhaps, might be elaborated upon by geographers; but it applies to the fundamental work which has to be done first; certain intensive development in the making of an inventory of the surface.

We have the geological survey of Canada which is essentially making an inventory of the resources below the surface; we have the topographical survey which produces base maps; but our function seems to be essentially to make an inventory of the surface.

The amount of money that we have for field work generally this year, I think amounted to something like $28,000. That works out to as little as one thousandth of one cent per person in Canada. This is far too small a proportion for trying to do the job which I believe should be done.

The Department is commencing to make an inventory of the areas of the polar basin which are of interest to Canada, but we are missing the essential part, which is the land in between.

Mr. NIELSEN: Up to date what progress has been made in making an inventory of this area?

Dr. NICHOLSON: I have a map showing the areas, which the branch has investigated.

Mr. NIELSON: Perhaps we might have a look at it. Perhaps you might explain what the lines on the map in colour mean.

Dr. NICHLSON: This map shows the activity of the geographical branch in northern Canada during the past ten years. The red colour indicates the areas that our people have visited. The colours in the legend show the year in which we visited those areas. You can see that they are very spotty. The reason for this is that our parties naturally, with the facilities available, are very small. There are never more than two or three persons as a general rule; and the amount of territory that we can cover is limited.

We have tried to overcome this limitation of field work by using carefully chosen areas in the Arctic along with aerial photography to enable us to interpret aerial photographs of parts of the country that we cannot visit.

This map shows where our people were in the field. We have been able to extend our knowledge or inventory by reason of the field experience, and applying it to air photography in the areas we could not see in the field.

Mr. NIELSEN: There seems to be a tremendous amount of red ink on the map indicating the years in which visits were made.

I wonder what year that was? What year is shown by the bright red?

Dr. NICHOLSON: The bright red is the total picture. The little circles indicate the year.

Mr. NIELSEN: Has your activity been stepped up in the last few years?

Dr. NICHOLSON: Perhaps very slightly.

Mr. NIELSEN: To what extent do you feel that your activities should be undertaken in this field? Do you think you should double them, triple them or what?

The CHAIRMAN: You mean in an orderly fashion?

Mr. NIELSEN: Well, naturally. I think there seems to be very little activity undertaken in the north, speaking personally.

Dr. NICHOLSON: I had not thought of it on those terms. There would be limitations. Frankly, one could not expand the activities indefinitely, or tenfold, because trained people would not be available in sufficient numbers. Probably the activity could be doubled, with the resources that are coming out of the universities.

The CHAIRMAN: Would it necessarily mean a survey of the projects we are now discussing before you could make a reliable estimate?

Dr. NICHOLSON: Yes.

Mr. NIELSEN: Why, Dr. Nicholson, do you feel that you should expand these activities of your branch?

Dr. NICHOLSON: Because the demand for information on terrain is increasing faster than we can supply it.

Mr. NIELSEN: Would you relate these remarks to the recent oil staking in the Arctic islands?

Dr. NICHOLSON: It is very clear. This on the map is generally the area in which the oil leases have been given. Our activity in these islands has been extremely limited. You will notice that we have not had people on Victoria island since 1949.

But to give you an example of the approach we are trying to make; we attempt to forecast the need for terrain information. Sometimes we can do this fairly successfully.

For example, when the DEW line was about to be constructed, our branch was approached to provide detailed terrain analyses which would aid those who were planning the precise sites, and choosing where to go. We had information for part of the area, but for the other part we had to guess. I would have been happier had we been able to give them the same amount of information for the whole area. That is one example.

Mr. NIELSEN: Yes.

Mr. AIKEN: I wonder if you could clarify the division of duties as between your branch and the Surveys and Mapping Branch?

Dr. NICHOLSON: We carry on where they leave off. Our situation is rather like that of the Geological Survey of Canada.

You will recall the minister said that in the case of surveys generally, before you can have a geological survey you must have a base map. That is the job of the Surveys and Mapping Branch. Before you can have a terrain analysis map, you must first have a base map.

Mr. AIKEN: You merely do the vertical survey, while the Surveys and Mapping Branch do the horizontal survey?

Dr. NICHOLSON: No. We merely take the maps and photographs generally, all of which come under surveys and mapping, and we use them as a pool in order to plot geographical information.

Mr. AIKEN: What would the purpose under your branch be when you go out there? Would it be to tie together the survey information?

Dr. NICHOLSON: No. We merely check the air photographs, and if they contain areas which are doubtful or if we cannot interpret the survey properly from the photographs, then we go into the field on the spot.

Mr. AIKEN: They provide the skeleton, and you fill in the parts?

Dr. NICHOLSON: That is right.

The CHAIRMAN: Shall we approve item 204?

Mr. NIELSEN: Before the item is approved, might we have reproduced in the committee proceedings the table showing the number of parties by years in the various locations, which appears as the legend on the map?

The CHAIRMAN: Agreed?

Agreed.

(The table follows.)

ACTIVITIES OF THE GEOGRAPHICAL BRANCH
IN NORTHERN CANADA 1948-1958

1948	1	BIRD, Dean, Laycock, Bird (Baker Lake)
	2	Gadbois (Kogaluk-Payne Rivers)
	3	FRASER (Mackenzie River, Arctic Coast)
	4	JENNESS (Operation Magnetic—Western Arctic by air)
1949	5	MANNING, Packer, Coombs, Merrill, Burns Baldwin, Macpherson (NAUJA, Foxe Basin)
	6	Gutsell, Lake (Yukon River)
	6A	JENNESS (Banks & Victoria Island by air)
1950	7	BIRD, Dean, Bell, Bird (Southampton Island)
	8	GADBOIS, Mackay (Mealy Mtns.)
	9	Black (Labrador Coast)
1951	10	MACKAY, Fraser (Darnley Bay)
	11	Gadbois (Eureka)
1952	12	MACKAY, Stager (Cornwallis Island)
	13	GADBOIS, Laverdiere (Alert)
	14	DEAN, Brown (Kenogami-Albany Rivers)
	15	DRUMMOND (Koksoak-Kaniapiskau Rivers)
	16	WOOD, Sim (Hudson Bay Railway)
	17	BIRD, Bird (Wager Bay)
	18	Black (Labrador Coast)
1953	19	FRASER, Laverdiere (Boothia Isthmus)
1954	20	MACKAY, Stager, Sim (TUHLIK, Mackenzie delta)
	21	Fraser, (Mackenzie delta)
	22	BIRD, Bird (Bathurst Inlet)
	23	MARSDEN, Falconer (Coppermine)
1955	24	FRASER, Frebold (Cambridge Bay)
	25	MACKAY, Stathers (TUHLIK, Liverpool Bay)
	26	ROBITAILLE, Hudon (Mould Bay)
	27	SIM, Marsden (Eureka)
1956	28	FRASER, Henoch (King William Island)
	29	BIRD, Marsden (Contwoyto Lake)
	30	ROBITAILLE, Trotier (Cornwallis Island)
1957	31	SIM, Bissett (Melville Peninsula)
	32	MACKAY, Henoch, Wallace (TUHLIK, Yukon Coast)
	33	ROBITAILLE, Wargon (Foxe Peninsula)
	34	Ross (Northern Foxe Basin)
1958	35	HENOCH, Brown (Peel River)
	36	MACKAY (Richards I., Mackenzie Delta)
	37	FRASER, Maxwell (Western Arctic Coast & Boothia)
	38	SIM, Moscal (Melville Peninsula)
	39	BROCHU, (Lake Hazen)
	40	IVES (Indian House Lake)

Item 204 agreed to.

The CHAIRMAN: There are two matters to be dealt with. I do not wish to detain the committee more than two or three minutes.

Mr. MCQUILLAN: I move we adjourn, Mr. Chairman.

The CHAIRMAN: We are getting along very nicely with these estimates, and we are giving them a much better perusal than we did last year. We have ahead of us items 205 and 206 which did not take us very long to do last year; and then, items 207 and 208; then an item under "general", that is 209; and following which we should finish with item 210. Then we commence with the estimates of Dominion Coal Board.

For that reason I wish to indicate that Mr. Kindt has suggested that we have brought before the committee, when we are dealing with items 211, 212 and 213 of the Dominion Coal Board, Mr. David Young who is an industrialist, and who would be expected to give evidence on the Japanese coal market. He was a member of the mission to Japan, was he not?

Mr. KINDT: That is right.

The CHAIRMAN: In order to have him here, would he come at his own expense?

Mr. KINDT: No, he would not. He would be called as a witness. I would like to have him give evidence not only on the Japanese coal market but also on the effectiveness of the subvention on coal to the Japanese market, and on the effectiveness of the subvention on coal to western Ontario. I would in addition like to have him give evidence before certain other committees while he is here, either by conference or otherwise, on the tourist industry, and on making the Frank Slide in Alberta a national monument; and also to deal with thermo-electric possibilities in the Crownest Pass in relation to the East Kootenay hydro electric development. This man is one of the outstanding industrialists in Alberta and I hope that he will be available.

With respect to my former request to have Mr. Whittaker appear, I learn that he is not available.

The CHAIRMAN: As yet we have not had referred to us the estimates of the Department of Northern Affairs and National Resources, under which the tourist and travel bureau would come. I am sure the committee would go along with your suggestion in regard to coal. Would that be satisfactory to the committee? Do you object, Mr. Robichaud?

Mr. ROBICHAUD: No, not at all. But I think we should have it clearly understood that Mr. Young's appearance before this committee would have to do with coal only. Otherwise there would be no limit to where we should stop.

The CHAIRMAN: I agree. We must confine ourselves to the items under discussion.

Mr. KINDT: What I had in mind was that, since he is also familiar with these other problems, we might have private meetings on these other problems that are not related to coal.

The CHAIRMAN: Are you agreeable, Mr. Nielsen?

Mr. ROBICHAUD: I am sure Mr. Dumas would have no objection.

The CHAIRMAN: You are speaking for Mr. Dumas?

Mr. ROBICHAUD: Yes.

The CHAIRMAN: All right, Mr. Kindt. You can rely on our desire to have that witness called.

I am inclined to think that the matter might come up about next Thursday, a week from today. But if not, would it be all right with the members of the committee, if the witness is here on that particular Thursday, and if we are not quite ready, that we bring up that particular item in order not to delay his attendance in Ottawa?

Agreed.

Mr. WOOLLIAMS: I am in accord wih Mr. Kindt. I would have liked to have a chance to discuss it with him. I have discussed his recent visit to Japan with certain industrialists; but I would like to have a discussion with Mr. Kindt, because I have another witness in mind.

I wonder if next Thursday would make it too much of a rush? Could it not be set ahead a little? I do not want to delay matters, but I would like to have a chance to talk it over with Mr. Kindt and to meet with you later.

The CHAIRMAN: You may have a chat with him and we will try to work out what should be done.

You have heard the statement about this particular map and the discussion this morning. I am advised by the expert witness that in the map reproduced in the New York papers there were some erasures of material which this other map contained. I understand the department could produce for your information the map that was in that New York *Times*. Is that right?

Dr. VAN STEENBURGH: I would like to say that I believe the map which was shown in the New York *Times* would have no clearance implications whatsoever, and that it would be a better map.

Mr. NIELSEN: That is the one we should have, then.

The CHAIRMAN: Is it agreed that we have the one which appeared in the New York Times? Could we have a motion?

Mr. NIELSEN: I so move.

Mr. ROBICHAUD: I second the motion.

Motion agreed to.

The CHAIRMAN: The meeting is now adjourned until next Tuesday at ten o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAR 20 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 7

THURSDAY, MARCH 12, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Hon. Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburg, Director-General of Scientific Services; and Dr. C. S. Beals, Dominion Astronomer.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20801-7—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

ERRATUM (*English Edition only*)

Minutes of Proceedings and Evidence, No. 6, March 5, 1959.

Page 141, 6th line from bottom: delete "American".

MINUTES OF PROCEEDINGS

THURSDAY, March 12, 1959.
(8)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Cadieu, Coates, Doucett, Drouin, Granger, Gundlock, Hardie, Kindt, Korchinski, MacInnis, MacRae, Martel, Martineau, McFarlane, McQuillan, Mitchell, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Payne, Simpson, Slogan, Stearns and Woolliams—(26).

In attendance, from the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Mr. J. F. Mazerall, Assistant Secretary, Interdepartmental Committee on Air Surveys; Dr. C. S. Beals, Dominion Astronomer; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; and Mr. G. H. Murray, Chief, Editorial and Information Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys.

On motion of Mr. Woolliams, seconded by Mr. McQuillan,

Resolved,—That immediately following the Committee's examination of the estimates of the Dominion Coal Board, the last items in the estimates for discussion, the Committee do revert to an unrestricted discussion of the main items of the department, to assist members in preparing recommendations for inclusion in the report of the Committee to the House.

Items 205 to 208, Dominion Observatory, were called. Dr. Beals explained the functions and operations of the said branch; he was questioned thereon. The said items were approved.

Referring to Item 210, Polar Continental Shelf Project, on motion of Mr. Nielsen, seconded by Mr. Coates,

Resolved,—That the map which has been distributed to members, and which was published in the New York Times, concerning the intensified Soviet exploration in the Arctic be published in the proceedings of the meeting.

On adjournment at 10.55 o'clock a.m. the Committee agreed next to meet at 10.00 o'clock a.m. on Monday, March 16, 1959.

Eric H. Jones,
Clerk of the Committee.

20801-7—1½

EVIDENCE

THURSDAY, March 12, 1959.
9.00 a.m.

The CHAIRMAN: Gentlemen, it is a minute after 9.00 o'clock and we have a quorum. At the last meeting we finished items 202, 203 and 204. The next items in the estimates are 205 to 208, which are to be found at pages 41 and 42 in your book.

Mr. WOOLLIAMS: Before we move on to that, Mr. Chairman, I wonder if I could make a motion this morning?

The CHAIRMAN: What is your motion?

Mr. WOOLLIAMS: Mr. Chairman, I move, seconded by Mr. McQuillan, that immediately following the committee's examination of the items on the Dominion Coal Board, the last items in the estimates for discussion, the committee do revert to an unrestricted examination of the main item of the estimates of this department to assist the members preparing recommendations for inclusion in the report of the committee to the House.

The CHAIRMAN: Have you a copy of the motion?

Mr. WOOLLIAMS: Yes, I have.

The CHAIRMAN: Gentlemen, we have a motion here: moved by Mr. Woolliams and seconded by Mr. McQuillan, that immediately following the committee's examination of the items on the Dominion Coal Board, the last items in the estimates for discussion, the committee do revert to an unrestricted examination of the main item of the estimates of this department to assist members in preparing recommendations for inclusion in the report of the committee to the House.

Before I put the motion, is there any discussion on this?

Mr. COATES: Will you enlarge on what you mean?

Mr. WOOLLIAMS: There are some things that I wish to discuss and bring up at that time.

The CHAIRMAN: You intend having a review; is that the idea?

Mr. WOOLLIAMS: That is right.

The CHAIRMAN: Some items were not cleared up to your satisfaction?

Mr. WOOLLIAMS: That is correct.

The CHAIRMAN: Is there any other discussion, gentlemen?

Mr. MUIR (*Cape Breton North and Victoria*): That will be a general review?

The CHAIRMAN: Gentlemen, are there any other comments? The motion has been moved and seconded. You have heard the motion. All in favour?

Motion agreed to.

The CHAIRMAN: Dr. Boyer, the deputy minister, has a slight correction to make in the printed proceedings of March 5th. There is a slight correction to be made to page 141 of the proceedings on behalf of Dr. Nicholson, director of our geographical branch. As Dr. Boyer says, "I should like to request that in a statement attributed to Dr. Nicholson, which appears in No. 6 of the minutes

of proceedings and evidence—six lines from the bottom of page 141—the word "American" be deleted. The statement with this correction would then read:

> Dr. NICHOLSON: Not since the Nares expedition which went to the northern part of Ellesmere Island, but not along the route which you just traced.

That correction will be made, Dr. Boyer.

Have you the witnesses ready, Mr. Minister, from the dominion observatory? We shall proceed with items 205 to 208.

DOMINION OBSERVATORIES

Dominion Observatory, Ottawa and Field Stations—	
Item 205 Administration, Operation and Maintenance, including the expenses of the National Committee for Canada of the International Astronomical Union, the fee for membership in the International Astronomical Union, and a Grant of $3,500 to the Royal Astronomical Society of Canada	**$ 896,930**
Item 206 Construction or Acquisition of Buildings, Works, Land and Equipment	**$ 486,800**
Dominion Astrophysical Observatory, Victoria, B.C.—	
Item 207 Administration, Operation and Maintenance	**$ 146,838**
Item 208 Construction or Acquisition of Buildings, Works, Land and Equipment	**$ 67,975**
	$1,598,543

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): Yes, Mr. Chairman.

The CHAIRMAN: Do you wish to make a statement first?

Mr. COMTOIS: I do not think it will be necessary. Everybody knows what is going on at the Dominion Observatory. Dr. Beals will give a statement and a general review of his branch of the department, and after that any member of the committee may ask questions relevant to the various divisions of Dr. Beals' branch. I think that is the best way to deal with the matter.

The CHAIRMAN: Dr. Beals.

Dr. C. S. BEALS (*Dominion Astronomer*): Mr. Chairman, I though it might be of interest to the members of the committee if I were to make a statement explaining the origin of our branch. Our branch had its origin in the need for precise astronomical observations in connection with the survey of railway lands, and provincial and international boundaries, which work was first carried on actively during the last years of the last century.

The first Chief Astronomer of Canada, Doctor W. F. King, who was one of our greatest scientists, was not only the founder of the Dominion Observatory but also of the Geodetic Survey of Canada. The Geodetic Survey was associated with the observatory for quite a number of years, but it is now a part of the Surveys and Mapping Branch. The most important task of the observatory now is research in the fields of astronomy and geophysics.

As you know, astronomy deals with all those objects and materials outside the confines of the earth. Geophysics deals with the character of the interior of the earth—right to the center. However, there are always exceptions, and we do make use of methods of astronomy to study the earth's atmosphere. The study of the earth's atmosphere is also important to geophysics since it modifies quite drastically the character of the earth's magnetic field.

Our work consists partly of pure research and partly of practical research. Owing to the rapid advance of science it is becoming increasingly difficult to distinguish between them, since the pure research of yesterday becomes the practical research of today.

Our branch is divided into five divisions, and I should like to say a few words about each division. These remarks might form a basis for questions later on.

The division of positional astronomy at Ottawa is concerned with the maintenance of an accurate time service for Canada. It also covers those branches of astronomy which deal with navigation and surveying, as well as the motions of the stars and the solar system. Some studies of the earth's atmosphere are made by observing objects beyond the atmosphere.

Another of our divisions in Ottawa studies the physical nature of the sun, the moon, the earth, man-made satellites, comets and meteors, interstellar clouds, that is, gases between the stars. The nature of the earths' atmosphere is important to this division. The methods of radio astronomy are about to be applied by the division, and it might interest the members of the committee to see the sketch of our proposed radio astronomy telescope at Penticton, British Columbia. It has got beyond being a proposal now since the telescope is on the ground and only requires erection.

Then there is the division of geomagnetism which is concerned with the earth's magnetic field. This division carries out magnetic mapping, operates magnetic observatories and carries out airborne magnetic surveys over Canada and the surrounding oceans. This work is an aid to aerial and marine navigation. The division recently carried out an intensive survey of the Pacific Ocean.

The division of gravity studies the manner in which gravity differs from place to place over the earth's surface. These studies give information on the over-all shape of the earth and the varying density of the earth's crust. Such information is of great value in the search for economic minerals and in general studies of the earth's interior. Gravity is important in regard to what we might call "space vehicles", about which we have been hearing so much lately. We have been told that these "space vehicles"—as I prefer to call them—can be directed rather accurately from one part of the earth to another. Such accurate direction would be impossible without a very accurate knowledge of the gravity field of the earth.

Finally, there is the division of seismology which is concerned with the motions of the earth's crust, known as earthquakes. Our studies of earthquakes lead to information concerning areas in Canada with special earthquake hazards, which is of interest to the building industry and to those who are constructing large projects such as hydro electric dams, and so on. Also—and this is to us perhaps the most interesting part of the subject—seismology deals with the structure of the earth's interior. For example, it told us that the interior of the earth is mostly liquid, iron and nickel, and quite recently it has been decided that it is not entirely liquid. Most of the interior of the earth below 2,000 miles is liquid, but in the very center there is a big iron marble of about 750 miles in diameter which, owing to the great pressure upon it, is solid.

This map shows the general activities of the division. Sir, would you like me to speak briefly about this map so that questions can be asked about it?

The CHAIRMAN: I think perhaps you might make an explanation first.

Dr. BEALS: The purpose of the map (pointing to a map) is to indicate the extent of our various activities in Canada. The astronomical observatories are shown here as these conical structures. There is one in Ottawa. This is the radio astronomy observatory at Penticton, which is now coming into being. This is the astrophysical observatory at Victoria, British Columbia.

We have a large number of seismological stations throughout Canada. They are in purple on the map. There is one at Resolute Bay in the Arctic. We are now in the process of establishing stations at Alert, which is the most northerly point in Canada, and at Mould Bay. There are stations at Halifax, Severn Falls, Shawinigan Falls, Ottawa and Saskatoon, and one at Banff. There are several on the Pacific coast in the vicinity of Victoria.

In our studies of geomagnetism our main project for the coming year is an airborne survey of the area which has been discussed so thoroughly at these meetings; that is, the area between the northern islands and the pole. The great increase in Arctic flying and the fact that flights are going over the pole with considerable regularity now makes it important that there should be good magnetic maps of this area.

This will illustrate some of our work in the field of geomagnetism last year. We covered the province of British Columbia with our airborne magnetometer, and these are the flight lines from which it was done. In a moment I will show you some of the magnetic work we did on the Pacific Ocean, but I will finish with this map first.

In the field of gravity, these are the areas which we are proposing to cover this year.

The CHAIRMAN: Will you mention the areas?

Dr. BEALS: This area is partly in Manitoba, and partly in southern Saskatchewan. This area on the map is partly in Saskatchewan and partly in Alberta. The purpose of those particular projects is to link up with the very extensive mapping surveys carried out by the oil companies. Each oil company does its own surveys and they are not related one to the other. Also, they are not connected with the world gravity stations. It is our intention to establish base stations throughout these areas and use the very extensive material which has been turned over to us by the oil companies. The purpose of this is to enable us to make an accurate gravity map of this part of the country. I should mention that the oil companies do not give us all their data, but they give us enough to make reasonably good regional gravity maps. The area I am now pointing out to you, adjacent to those already mentioned on the map, illustrates what we were doing last year in gravity work.

There are two other projects planned for this year. This one, in connection with the geological survey, is to make gravity observations of part of the Labrador trough in order to facilitate the geological observations which are now being carried on. This area east and north of Hudson Bay is part of our continuing study of gravity in Canada as a whole.

Last year we covered this more southerly area, also east of Hudson Bay area, and we are extending further north this year. Gravity in these northern areas is done with the aid of small aircraft. A gravity meter is carried in the aircraft. Landings are made on the numerous lakes in the area and observations are made from the shores of the lakes, not from the aircraft.

This represents the airborne magnetic survey we made last year. As you can see, as far as Canada is concerned it covers that part of Alberta and this part of British Columbia and a little bit of the Yukon, here; and I think in a few places we did go into the Northwest Territories. The survey then went down to San Francisco and across to Hawaii, down to the Society islands and to Samoa and Fiji. From there it went to New Zealand, to Sydney, Australia, to Brisbane, and from Brisbane to the Philippines, Manila, calling at Tokyo and Attu island in the Aleutians on the way back. Then there was a call at Alaska—I think at Fairbanks—and some of the loose ends in British Columbia were completed before the survey was completed.

I might explain why we undertook the survey of this area over the Pacific Ocean in addition to Canada. For the purposes of aerial navigation it is particularly important to have good magnetic maps of the oceans, and if that is not done by the countries bordering oceans, obviously it will not be done at all. The number of nations having equipment capable of carrying out this work is very small. As far I know only the United States and ourselves have equipment of this kind. Therefore, in connection with the international geophysical year we undertook to make this flight over the Pacific

ocean, and already we are getting letters and requests from other countries to provide the data which we obtained. I was very pleased, in connection with thesee requests, that the design of the magnetometer is such that it gives us the information we want directly and without a great deal of computation. Normally in a major survey one expects to wait some months before the data is ready; but it has been a very much shorter time in our case and we are getting out now some of the data on this Pacific flight.

Another interesting thing about the Pacific flight is that it has been many years since there has been a magnetic survey of the Pacific ocean. This work was formerly done by a ship, operated by the Carnegie Institution of Washington the "Discovery.". That ship was destroyed by fire some years ago. A new ship was being built in England to carry out similar work but it was decided that this kind of work was better carried out by aircraft, and in future the oceans of the world will probably be surveyed mainly in this way.

There is one more map, if I may show it to the members of the committee. This is a gravity map of Canada in so far as we have been able to get it at the present time. It is not necessary to call attention to the fact that it is quite a task to make a gravity survey in a country as large as Canada, and it is fairly obvious that more has been done in the south than the north.

Going from the south to the north on the map there are, as you can see, various observations spotted, and we eventually hope to fill in the spaces between them. As far as the map is concerned, the areas where gravity is large are in red. Medium areas are in yellow. The places where gravity is proportionately small are coloured dark blue. The blue areas are particularly easy to see in the case of the mountains of British Columbia.

I have been requested to give a brief explanation of gravity. Gravity is the force which is exerted on one body which is in the vicinity of any other body. While I think most people do not realize it, if you have a couple of lead balls and you hold them up one in each hand, there is a small force between them tending to pull them together. It is so small that you would not detect it, when you were holding them up. But when you have a body as large as the earth, it very strongly attracts other bodies. The reason people can fall when they are not supported is because the force of gravity is acting upon them.

We are very interested in making gravity observations because gravity varies from place to place on the earth's surface, the variation difference being because of differences in the density of the earth crust. These differences in crustal density are very important to geologists and prospectors, looking for oil and minerals. For instance, limestone is rather light and not very dense, and if there is a great deal of it we get a small value of gravity. On the other hand granite and gneiss is heavy, and we get a large value of gravity if these rocks are plentiful in the vicinity of the place where we are making observations.

Gravity is important to oil prospecting in the prairies because it is possible to outline the precambrian basement under the limestone layers, in which oil is normally found.

Mr. Chairman, having given this brief outline, there are possibly individual points which can be brought out by questions.

Mr. AIKEN: Do I understand that gravity is not in the nature of a centrifugal force, but it depends entirely on what is underneath the earth's surface, or largely?

Dr. BEALS: Yes.

Mr. AIKEN: At that particular point?

Dr. BEALS: That is right. The centrifugal force of the earth's rotation is in the opposite direction to gravity and when we calculate gravity at any particular point we have to subtract the value of the centrifugal force.

Mr. AIKEN: That makes the gravity survey particularly important in connection with mines and minerals, as well as with regard to studies of the interior of the earth?

Dr. BEALS: Yes; particularly with regard to some types of minerals, for example, a salt deposit. A salt deposit is rather easily investigated by gravity methods. Also, a sulphide deposit, which is a very dense material. Those are the sort of things which lend themselves to this kind of study.

Mr. AIKEN: With regard to the value of geophysical surveys I have one more question. Can you explain the technical value of the geomagnetic surveys which you are carrying out in the northwest of Canada?

Dr. BEALS: Our geomagnetic surveys are mainly for the purpose of aiding aerial navigation. For example, the magnetic pole of the earth is approximately here at this point on the map.

The CHAIRMAN: Will you name the area, Dr. Beals.

Dr. BEALS: I am sorry. It is here, in Viscount Melville Sound, a little south of Cornwallis Island and north of Somerset Island.

If you were in this area and were depending on a magnetic compass, you would have to remember that it points south rather than north, and it is important to anyone using a compass—

The CHAIRMAN: Where is the area to which you referred?

Dr. BEALS: It would be in the northern part of the Arctic islands. The particular area here, is Ellef Ringnes Island. There the magnetic compass points to the south rather than north.

The CHAIRMAN: You had your pointer pointed about 4 inches above that. You just indicated it on the map. Where was that?

Dr. BEALS: I was pointing to an area on the Arctic ice, north of the islands. Here, in Banks Island, the magnetic compass would point to the east.

Mr. MCQUILLAN: What is the movement of the magnetic pole per annum? It is continually changing, is it not?

Dr. BEALS: Yes. It moves rather slowly. We have been plotting it for a number of years. I am not prepared to say whether we would yet be able to tell you exactly how far it moves in a year.

Mr. MCQUILLAN: Can you give us any indication, as a result of your studies as to what extent that movement has been?

Dr. BEALS: If we are prepared to accept the older observations—some of which, I might say, were extremely good, but not as extensive as we are now able to make with modern methods of transportation, it moved from the Boothia peninsula up to this point in Viscount Melville sound, a distance of about 200 miles in 130 years. I think perhaps I should try to obtain the exact dates for the record, if I would be allowed to do that. As I have said, the only uncertainty which arises here is while Ross' observations were extremely good, he was not able to surround the pole with observations, as would be possible today; and probably the position of the magnetic pole was not as precisely located then. However, we still have a good deal of confidence in Ross' observations.

Mr. COATES: Why does the magnetic pole change its position?

Dr. BEALS: That is a question which is very difficult to answer; I wish I could answer it. Perhaps I should say it is one of the subjects of our investigations. It is not possible to answer unequivocally a question like that at this time.

Mr. KORCHINSKI: Are the changes which occur directly due north, or are there variations?

Dr. BEALS: It is mainly to the north—a little bit to the northwest. At the present time I believe the direction of the motion is somewhat to the east, and north.

Mr. KORCHINSKI: But it is not a constant line in one direction at all times. Of course, it may vary. You could not draw a straight line and say this is a possible path it would follow in the future.

Dr. BEALS: We could not be sure of the path it would follow in the future.

Mr. MCQUILLAN: Do you have a map that shows the extreme areas of what I will refer to as earthquake faults in Canada?

Dr. BEALS: We have an earthquake map of Canada indicating the areas of major earthquake hazards. Although I have not such a map here, we have published one, which is in some demand by various interested parties.

I think all of you are aware of the fact that there is an earthquake zone on the west coast, but many people are not aware of the fact that it does not extend inward for a very great distance from the coast. While we say that this area, the Queen Charlotte and Vancouver Islands area in the vicinity of Victoria and Vancouver, is an area of earthquake hazard, a relatively short distance inside—that is, east of the panhandle of Alaska and down through the Hazelton area and points of south and more or less central British Columbia—could not be classed as such an area.

Mr. MCQUILLAN: Have they reached the point yet where they can make any predictions as to the imminent danger of earthquakes?

Dr. BEALS: The matter of predicting is a tricky subject. People have been trying to predict earthquakes for a good many years.

Mr. MCQUILLAN: I mean scientifically.

Dr. BEALS: Yes. In Japan, where the prediction of earthquakes is a serious matter, many methods have been tried and they were at one time quite seriously trying to predict them by the behaviour of certain fish which were kept in captivity. However, in so far as Canada is concerned, I would say that we could predict in a general way where we thought an earthquake would be likely to come, but as to when they would come, I am sorry to say we cannot tell.

Mr. MCQUILLAN: I happen to represent a great part of that particular area. Maybe sometimes people wish there would be a big one,—but not me. I have spent a good deal of time on the Queen Charlotte Islands and it seemed to me in certain periods there would be tremors almost every few nights.

Dr. BEALS: That is a remarkably active area, and I think some of the earthquakes which have occurred in recent years in the Queen Charlotte Islands were of much greater magnitude than, say, the San Francisco earthquake, but the damage was less because of the absence of buildings.

Mr. MCQUILLAN: Was the earthquake that occurred in 1946 of as great a magnitude as the one in San Francisco?

Dr. BEALS: I cannot say offhand; I think it was. Certainly it would be comparable.

Mr. COATES: Your department deals in space, Dr. Beals, I would imagine; and since it is such an important topic today, I was wondering how much work you do in regard to this subject. Are any other departments of the government doing any work in relation to space? Do you consider that your department's work at the present time is in keeping with the work generally done by other nations in the world?

Dr. BEALS: That is not a particularly easy question to answer. I may say that we have aided and helped in this satellite program, by tracking satellites—and I must say mainly the Russian ones, because they are the ones we can see. Once a satellite is launched it belongs to everyone, generally speaking. One reason for tracking it very carefully is because it gives information not only about the earth's atmosphere, but also about the earth's gravity. This ties in rather closely with some of our own gravity work, because it is our understanding that the studies of the satellites which have been put up in recent years have indicated that the flattening at the earth's poles is different from what we had formerly thought it was. For that reason it has been suggested that we take some of our gravity equipment, which is of very good quality, to the Antarctic and to the Arctic—as near the pole as we can get—in order to check on this matter of the flattening of the pole. Gravity is a good way to do that. I think what I have said indicates that we are cooperating with other nations. As far as we know our work is well coordinated with other countries, in this field of astronomy.

Mr. MARTINEAU: Has there been any progress made in connection with taking your equipment to the Arctic and Antarctic?

Dr. BEALS: We are planning as soon as we can, having regard to other commitments, to take our new pendulum equipment to Alert, which is the most northerly point in Canada. As for going to the Antarctic, I am afraid we have not as yet given that very serious consideration. However, it is possible we might do so in the future.

Mr. COATES: I notice there is no great increase in the amount of money that is being voted for this Department of Mines and Technical Surveys, and there is no great increase in the personnel. In the last two or three years I consider that work in space has become probably one of the most important considerations of all governments; and I was wondering along this line whether you considered that the department is placing enough stress on our work in this manner, and just how fast you can expand this type of work.

Dr. BEALS: As far as the Dominion Observatory in Ottawa is concerned, I should mention our staff has expanded about 35 per cent since 1950. I think that is a reasonable rate of expansion. Even if one had the money, it would be rather difficult to acquire the right type of personnel in a short time.

As to your question in regard to the adequacy of our effort, I would like to mention some of the equipment we have already—for example the cameras at Meanook, and Newbrook, Alberta. They are called Super-Schmidt cameras. They are extremely powerful and, therefore, very useful in studying the sky. They have also been used in the study of satellites, although they were not built originally for that purpose. We have purchased some additional equipment to that, which is here in Ottawa, without putting a great strain on our budget. Actually the strain is on personnel rather than on funds.

Mr. COATES: Can you tell us why the number of personnel has not increased; is it because it is difficult to get qualified men to work?

Dr. BEALS: Yes, I think I should say our requests for additional personnel have been sympathetically received, but we have not always obtained all the additional staff which we have asked for. I think that is a fairly general experience.

Mr. COMTOIS: May I point out in connection with item 205, that there is an increase of $119,000 just for administrative operation and maintenance. That is an increase of about 14 per cent over last year.

Mr. COATES: However, there was a decrease in the next vote in connection with buildings; but that is probably as a result of buildings being completed. Is that correct?

Dr. BOYER: This has been brought about by extra purchases for the type of equipment required in radio astronomy and we are purchasing an additional telescope for the Victoria observatory. Some of the major payments have been made on this extra equipment, and there is a reduction.

Mr. KINDT: I would just like to say, Mr. Chairman, that with all of the satellites that have been put into the skies, I have never been fortunate enough to see one. In reading the newspapers they have said: if you look into the northwest at such and such a time you will see it. I have stood at the back of the Parliament Buildings and craned my neck, but have never yet seen one. How would it be possible to observe one of these satellites? Is there any station which the government is manning here or in the west where one could have that privilege?

Dr. BEALS: Yes, I think we can answer that question in the affirmative. First, I should say it is not as easy to see them as one might think. For one thing, they do not appear exactly in the position in which they are supposed to. You may be looking for it in one location and the satellite may come up in another; and while you are straining your eyes to see it in one direction, it may be disappearing in another. It is not an easy thing to do. I found it is much better, if you want to see a satellite, to be in a group of people. In such circumstances, all eyes are not looking in the same direction. One of the group will see it; he will sing out, and then the others can also see it.

Mr. COMTOIS: Dr. Beals, would you mind relating the experience we had at the observatory last year when our group was there. At that time we were able to see the satellite for five or six seconds.

Dr. BEALS: Yes, the minister, the deputy minister and several other people were there. On several occasions I have tried to be the first to see the satellite, and to date I have not had that success. I think on many of those occasions we would not have seen it at all, and I think on the occasion to which the minister refers we would not have seen it, except for one of the younger people who had sharp eyes. At that particular time we only saw it a few seconds, but on other occasions I have seen it rise in the west, come right up over the zenith and down in the east; and it was in view about five minutes. As to a station where members of the Committee could go to see it, if there is another one up we would welcome anyone coming out to the Dominion Observatory. We go out on the roof there with a group of people. I think we have only missed seeing it on one occasion. Someone always sees it and draws attention to it. If anyone would like to come out, would you please call me on the telephone and I would be very glad to make arrangements so that an individual or a group would see it—that is, if weather conditions are favourable.

Mr. COATES: Do I understand that mechanical aids are not of too much assistance and that it depends largely on visual observation?

Dr. BEALS: Yes, I would say that. Glasses are not much use, as they cover too small an area. We do photograph them. However, we see them first and then point our photographic telescope at them and photograph them. Under certain circumstances it might be possible to photograph them blind.

Mr. COATES: I have read statements in the paper to the effect the Russians have a satellite revolving around the sun, and the Americans now have one up which is revolving around the sun. Is there any way of telling whether these satellites are in fact going around the sun?

Dr. BEALS: Well, you can tell when they start, when they are not too far away. But I should point out that it would take approximately a year for a satellite to go around the sun, about the same length of time it would take

for the earth to go around the sun. The chances of losing it in that time are pretty good. They are probably lost forever, once you lose radio contact with them. It would be much more interesting to get one orbiting around the moon.

Mr. NIELSEN: Mr. Chairman, may I ask Dr. Beals if the Geological Survey requires any of the information gained by the Dominion Observatories in their gravity surveys?

Dr. BEALS: Yes, they use a great deal of our information. As a matter of fact, one of our surveys this year is being conducted in cooperation with the Geological Survey.

Mr. NIELSEN: Do they use this information for the compilation of their geological maps?

Dr. BEALS: I am afraid I cannot answer that question; that would have to be referred directly to them.

Mr. NIELSEN: Dr. Beals, what portion of the magnetic survey of the Arctic would you say has not yet been completed?

Dr. BEALS: I should say the amount which has not been completed would be about that area which we showed on the map. If I may have that map down again, I should say that this in general represents the area that has not been completed. But there are some other areas further south to which we would still want to give some attention.

Mr. NIELSEN: Is Mr. Madill here today?

Dr. BEALS: No, I am sorry he is not.

Mr. NIELSEN: In terms of percentage, what portion of Canada has been surveyed, as far as gravity work is concerned?

Dr. BEALS: I should say we have done some kind of regional survey in a little less than one-third of the area.

Mr. NIELSEN: Would it be correct to say you still have two-thirds of Canada, including the sector between the 141st and 60th meridian, to complete?

Dr. BEALS: Yes.

Mr. NIELSEN: Would you say that a much greater density of stations will be required in the Arctic in the future to complete this work?

Dr. BEALS: Well, it is always desirable to have a greater density of stations; but I would think that it would be hard for us to get in the Arctic as great a density of stations as we are getting on the prairies. The conditions for landing largely govern what can be done.

Mr. NIELSEN: I understand that Mr. Madill, who is the chief of your geomagnetism division has expressed an opinion that a much greater density of stations will be required in the future, not only for general mapping and further geological studies, but for use in conjunction with airborne surveys searching for economic minerals. Would you agree with him.

Dr. BEALS: Oh yes!

Mr. NIELSEN: Would you say that the records of the fixed magnetic observatories are of paramount importance to the geophysical explorations of the Canadian Arctic?

Dr. BEALS: Yes, they are very important, and for this reason: there are often very unusual changes in the earth's magnetic field, which we call magnectic storms, and under certain circumstances these might be indistinguishable from the changes one would see on the record of an airborne magnetometer. It is important for a man using a magnetometer to know when the field is changing by large amounts, and on such a day he would not use his observations.

Mr. NIELSEN: You are planning in your gravity surveys to make additional determinations in Canada north of the tree line. What plans have you to continue this program of gravity surveying north of the tree line?

Dr. BEALS: We have already conducted quite a number of observations north of the tree line. For example, part of this area here is north of the tree line, and these two areas here are to a considerable extent north of the tree line. One area is Ungava and the other is partly in Labrador and partly in northern Quebec. There also has been a great deal of observation above the tree line in this area west of Hudson Bay. It is our intention eventually to cover the whole of Canada. However, it is difficult to give a detailed forecast as to exactly how this is going to be done.

Mr. NIELSEN: At the present rate of completing these surveys, how long will it take to complete the program?

Dr. BEALS: I should say if we continue at the present rate, we would have some kind of a regional coverage of Canada as a whole in another ten years.

Mr. NIELSEN: In view of the rate of expansion of industry and the demands which have been placed on the Department of Mines and Technical Surveys for information of this character, do you feel this program should be completed before the expiration of ten years, if possible?

Dr. BEALS: We would like to see it accelerated, and Dr. Innes particularly, the chief of our gravity division, feels that he would like to have more staff to complete this work more quickly.

Mr. NIELSEN: When did this program commence, in any substantial form?

Dr. BEALS: The regional program which we are discussing began about 1946 or 1947.

Mr. NIELSEN: Were the scientists in your branch aware of the desirability of commencing the program prior to 1947, and if so, what impeded the commencement of the program prior to that date?

Dr. BEALS: I believe a previous answer of mine gave a slightly wrong impression. A certain amount of gravity work has been going on since the establishment of the observatory in 1905, but the reason why it was only starting to accelerate in about 1945 is because of the invention of the gravity meter.

Mr. NIELSEN: Was that an invention of the scientists in your division?

Dr. BEALS: No, the gravity meter owes its invention to the initiative of the oil companies. The history of the invention of the gravity meter is a rather complicated matter, but it only came to fruition in the 1940's. That is the reason the large scale regional work did not start until then. The pendulum work, which was started by the observatory years ago and which we are continuing, is much slower than the gravity meter work. A good observer with a gravity meter will take an observation in ten minutes, whereas with the pendulum it would take a day.

Mr. NIELSEN: Would you say that any observations have been made either by the scientists in your division or elsewhere in the department, or those of any other country, which would lead to the conclusion that the Arctic archipelago is part of the North American continental mass.

Dr. BEALS: That is a pretty difficult question to answer, but I think that they would contribute to the evidence. I would say they would contribute to the evidence, but I could not go beyond that. However, I would say that we hope the gravity observations which we are proposing to secure in connection with the continental shelf project should help to answer that question.

Mr. NIELSEN: Mr. Hodgson, the chief of the seismology division of the Dominion Observatory, said that certain information gleaned from observations

made by Mr. Ewing of Columbia university led to the conclusion that the Arctic archipelago is part of the North American continental mass. Would you agree with Mr. Hodgson?

Dr. BEALS: On general principles I should agree with him, because I have confidence in his judgment. However, I do not think I have studied this part of the evidence.

Mr. NIELSEN: Would you say that generally the geophysical observations made represent merely a beginning in the Arctic, as compared with that kind of systematic study which has been carried out in more detail in the southern areas of Canada?

Dr. BEALS: If I understand your question correctly, I would say, yes.

Mr. NIELSEN: What stage has been reached in the geophysical study of Canada, north of the 60th parallel, as compared to southern Canada?

Dr. BEALS: The number of observations made north of the 60th parallel is much lower than the observations made south of it.

Mr. NIELSEN: By how much, in terms of percentage?

Dr. BEALS: I would say, ten per cent.

Mr. NIELSEN: Can you explain in detail, what the Dominion Observatory would like to do in the north? What are your plans and when were these plans formulated?

Dr. BEALS: The first part of your question is easier to answer than the second part. Our plans are to cover the Arctic in so far as we can in detail, similar to what we have done in the south. In regard to the time, I would say our plans have been formulated over a period of years.

Mr. NIELSEN: Beginning when?

Dr. BEALS: I would say about 1946.

Mr. NIELSEN: Would I be correct in saying, Dr. Beals, that it is of paramount importance for your division, particularly in the field of geophysical and gravity work, to anticipate the requirements of industry and of other government departments, such as that of Northern Affairs?

Dr. BEALS: Yes, I would agree with you.

Mr. NIELSEN: Were the requirements of these departments of government and of industry in Canada anticipated prior to 1946?

Dr. BEALS: That is a question which is difficult for me to answer. I have been associated with the Dominion Observatory in Ottawa only since 1946. Further, I think it is correct to say that scientists at the observatory before this time were conscious, very conscious, of the need for geophysical observations in the north and having regard to the facilities for getting there and the kind of equipment they have, I think they did some very good work. Mr. A. H. Miller, the former chief of the gravity division went down the Mackenzie River in some kind of boat, making gravity observations along the way. Mr. Madill, the present chief of the magnetic division, also made very extensive journeys in northern Canada by canoe, by ice-breaker and various other methods. So I think that for quite a long time prior to 1946 the people at the observatory were very conscious of this and were doing their best in that regard.

Mr. NIELSEN: That is an opinion with which I entirely agree. In view of that, and in view of the relatively little work that was done in the Arctic prior to 1946, to what would you attribute the lack of work carried out in the 60th parallel prior to 1946? What impeded this work?

Dr. BEALS: I think it was partly because of inadequate means of transportation, and partly due to the fact that instruments were less adequate. Certainly

as far as gravity is concerned, the question of instruments was paramount. Again I should mention the work of Mr. Madill, who stimulated the production of much improved types of instruments which are now available for measuring the earth's magnetic field and which were not available prior to his work.

Mr. NIELSEN: Would you say that there was any difficulties in the ideas of the scientists in your division in regard to this study? Was there any difficulty about those ideas, findings, theories or surveys which made them difficult for the government to emplement?

The CHAIRMAN: Are you talking about prior to 1947?

Mr. NIELSEN: Prior to 1946, Mr. Chairman.

Dr. BEALS: It may be so. Since I was not here at that time, I would not like to give any dogmatic answer.

Mr. NIELSEN: To the best of your knowledge?

Dr. BEALS: I think that our scientists got a reasonable amount of support from the government at those times. But there is always a certain amount of difficulty, and I do not think that the world as a whole—or Canada in particular—was quite as conscious of the need for such observations as they are today.

Mr. NIELSEN: Prior to 1956, would you say that Canada was discharging her responsibilities as far as geophysical and gravity work, in the polar region was concerned?

Dr. BEALS: I would not like to give a very dogmatic answer to that question. Certainly they were doing something; and having regard to the means at their disposal, I think I should say, yes.

Mr. NIELSEN: These "means at their disposal"—would it not be correct to say that had those means been greater, the work would have been accomplished prior to this in a much broader fashion than it has been.

Dr. BEALS: I suppose, in answering a question such as that, if more facilities are available, one could always do more. Yes, that is true.

The CHAIRMAN: You had the equipment there at that time, did you not?

Dr. BEALS: Prior to 1946?

The CHAIRMAN: You said, 1956, Mr. Nielsen?

Mr. NIELSEN: Yes, 1956.

Dr. BEALS: I am sorry; I thought you said "1946". May I have the question again?

Mr. NIELSEN: If you had had the facilities prior to 1956 this work would have gone ahead, particularly in the geophysical and gravity fields, much more quickly and on a much broader front than it has?

Dr. BEALS: I think we had some pretty good equipment prior to 1956.

Mr. NIELSEN: Excuse me; I am not talking about the quality or quantity of equipment; but if you had had the equipment, would these studies have been completed much more satisfactorily and on a broader front than they have to date?

Dr. BEALS: If we had had more equipment, yes.

Mr. NIELSEN: What is the scientific importance of these studies?

Dr. BEALS: That, again, is quite a difficult question to answer clearly and briefly. We are interested in the character of the earth's crust and the nature and origin of the earth's magnetic field. To a person like myself, whose main research work has been in the field of pure science, I think that is an adequate answer. Whether it would be to others, I am not so sure.

Mr. NIELSEN: What is the commercial significance of these studies?

Dr. BEALS: The same as for any other part of Canada. Our studies of gravity and magnetism in the Arctic provide base stations which can tie together detailed commercial surveys. We also provide information to control the observations of air borne magnetometers in this region.

Mr. NIELSEN: I do not want you to misunderstand this next question. In my personal view the Dominion Observatory, under your direction and the direction of the department in general, has performed a marvellous task—the scientific staff especially—with the facilities which were available to them in years past in accomplishing what they have accomplished. But despite that, would you not say I would be correct in stating that much more information would be avaliable, particularly among the Arctic islands in the areas where oil leases have been granted, if the Dominion Observatory had undertaken a broader exploration in the fields of geophysical and gravity work? Would this information not be more complete, and available to the oil companies today, if this work had been undertaken 10 years ago?

Dr. BEALS: Certainly; if we had undertaken more work earlier, there would be greater results today.

Mr. NIELSEN: Would I not be correct in saying that the Dominion Observatory scientific personnel under your direction realized the commercial significance of this work 10 years ago?

Dr. BEALS: I do not know whether anyone was quite as aware of the commercial possibilities in the Arctic 10 years ago as he would be today. I would question that.

Mr. NIELSEN: Were you, Dr. Beals?

Dr. BEALS: No, I do not think so. I had always been very interested in the Arctic for a great number of years before I came here. One of my boyhood ambitions was to go down the Mackenzie on boat or barge. However I do not think I was as conscious of the possibilities in the Arctic 10 years ago as I am today.

Mr. NIELSEN: I have asked you about the commerical and scientific significance of these studies. Could you tell the committee what the military significance of these studies is?

Dr. BEALS: I am afraid that is a question which is rather out of my field.

Mr. NIELSEN: Would you say it would be correct that the studies which have been undertaken in the gravity and geophysical fields, not only north of the 60th parallel, but in all parts of Canada, are very important in pinpointing commercial deposits of metals and of industrial minerals, and that, given an expansion of your program, gravity and magnetic methods of geophysical prospecting would, if extensively used, accelerate the discovery and development of the resources I have mentioned?

Dr. BEALS: In answer to that question I should perhaps say that the pinpointing of mineral deposits is not the aim of our observations.

Our observations may eventually help those who are carrying out more detailed geophysical surveys, but that is not our real intention. Our intention is to provide accurate base stations; to provide data which will help to tie together more detailed surveys. But detailed surveys for prospecting for minerals is not our function.

Mr. NIELSEN: I knew that it was not your function. My question was, would these things which I have mentioned assist in the acceleration of the discovery of these economic resources?

Dr. BEALS: I should hope that they would.

Mr. NIELSEN: Would you say that very large amounts of additional gravity data are required from the Arctic in order to complete your studies of the earth's form?

Dr. BEALS: Well, I do not know whether I would put the word "very" in there. I would say "quite large".

Mr. NIELSEN: I do not want to catch you in any way. I am quoting you from "Arctic Survey".

Dr. BEALS: Even so; I think I would say that for getting the shape of the earth in the Arctic, the flattening, and so on, a considerably greater number of gravity stations would be very desirable.

Mr. NIELSEN: This applies not only to overland areas, but over oceans as well, particularly in the case of the rotational pole?

Dr. BEALS: We would like very much to get gravity findings in the vicinity of the rotational pole; but there are considerable difficulties in making gravity observations in the ice. For that reason we are not so sure they would help as much as very accurate observations of northerly points of land.

Mr. NIELSEN: Is there any prospect of making gravity observations from the air?

Dr. BEALS: Various experiments have been carried out along that line and our own people who are concerned with very high accuracy in gravity observations have been rather skeptical because of the accelerations in an aircraft, which are difficult to distinguish from gravity. Yet we learn that some progress is being made in making gravity observations from the air.

Mr. NIELSEN: Is there any prospect of using present-day instruments on ice with any great success?

Dr. BEALS: I could answer that question better, say, two weeks from now than I can at the moment, because we have a project for measuring gravity on ice in Saskatchewan which has been going on during the last two weeks. But I believe that there have been some quite hopeful results in that observation, and we are proposing to try it on the polar continental shelf. So in another two or three months we would be in a better position to answer that question.

Mr. NIELSEN: Are there any new types of gravity meters being developed, and if so, will they make it possible to take accurate gravity measurements on ice?

Dr. BEALS: Yes. During these last few years we have been developing a new type of gravity meter which depends on the vibration of a weighted string; but we are not yet sure whether it is any better than the present type of spring-balance instrument. This gravity meter which we have been working on is designed for use in a submarine.

Mr. NIELSEN: Is it correct to say that when this development takes place the Arctic ocean may actually be better mapped, because it is covered with ice, than more southerly and more accessible ocean regions? Again I am quoting.

Dr. BEALS: That is quite possible.

The CHAIRMAN: You should have given the doctor an opportunity to re-read the book.

Mr. NIELSEN: What advances have the Russians made in this field, to your knowledge?

Dr. BEALS: I am sorry to say that our knowledge of the Russian advances in this particular field are very inadequate, and I am afraid I cannot give you a satisfactory answer to that question.

Mr. NIELSEN: Would it be safe to assume, despite the answer you have given, that the Russians are more advanced than Canadian scientists in this field?

Dr. BEALS: In the field of gravity?

Mr. NIELSEN: Yes.

Dr. BEALS: I should doubt it.

Mr. NIELSEN: In the field of geophysical studies?

Dr. BEALS: We had quite a good opportunity to talk to Russian scientists in 1957 when they were here on the International Union of Geology and Geophysics in Toronto, and I think we were fairly well convinced that apart from their greater numbers and as a consequence of a greater amount of funds available, they were not quite up to our own standards as far as instruments were concerned.

Mr. NIELSEN: You say "greater numbers and consequently greater finances available"?

Dr. BEALS: Yes.

Mr. NIELSEN: Do you feel, then, that the Soviets are spending more money in this field than Canada?

Dr. BEALS: I have no very great knowledge of this, but I should suppose they are, yes.

Mr. NIELSEN: Is there any indication that the Soviets are further ahead in the field of ocean mapping than Canada and the United States?

Dr. BEALS: That is a subject on which I am afraid I cannot speak with knowledge. I think that possibly some answer to that question might come out in the discussion of the polar continental shelf project.

Mr. NIELSEN: What significance would you say ocean mapping has as a commercial factor?

Dr. BEALS: There again—

Mr. NIELSEN: In the polar regions particularly?

Dr. BEALS: There again I feel that that is outside our field and I will not attempt to answer the question.

Mr. NIELSEN: Do the Soviets exchange information with the dominion laboratories?

Dr. BEALS: We have obtained a great deal of information from them. Yes, we have a great deal of information; but it is more in some fields than in others.

Mr. NIELSEN: Is there reciprocity in this exchange between Canada and the Soviets? Is the information that Canada exchanges with Russia screened by any other department of government?

Dr. BEALS: No, none of the information that we have sent to Russia has been screened, that I know of.

Mr. NIELSEN: Has there been any exchange, for instance, of information which has been gathered as a result of flights of satellites into space? Have we any Russian information?

Dr. BEALS: Yes.

Mr. NIELSEN: They have given it?

Dr. BEALS: We have some Russian information, yes; and we have, at their request, given them some of our information. That is, they have given us predictions as to where the satellites were to be at certain times, which has been very valuable to us in locating them.

The CHAIRMAN: I wonder if you would clear this up? Who determines classification in your department?

Dr. VAN STEENBURGH: May I answer that, Mr. Chairman?

The CHAIRMAN: Yes.

Dr. VAN STEENBURGH: Some several years ago the Department of External Affairs laid down very specific instructions regarding the exchange of scientific material with U.S.S.R. and their satellite agencies. For some years after that ruling was made documents of a sensitive nature were sent directly through external affairs.

Of recent years they have relaxed that regulation to some extent and now in certain areas of science, where there are no security implications, the scientists may exchange their material directly.

In most governments—and I am afraid it has not been entirely the policy in this government—the titles of papers sent to Russia were kept on file, and titles of Russian papers returned to the department were kept on file to see that the reciprocity principle in exchange of scientific literature would be maintained.

But external affairs is the department that is responsible for scientific material going to U.S.S.R. or its satellite countries.

Mr. NIELSEN: Of course, Mr. Chairman, I think most of us are concerned with the institution, if they are not already in existence, of adequate safeguards in respect of any information of any military significance whatever that is exchanged. I just leave that observation without any intention of pursuing it further.

Mr. WOOLLIAMS: Mr. Chairman, I would like to follow that up. Who determines that?

Dr. VAN STEENBURGH: If the material has any security rating whatsoever, from "confidential" up, it is not exchanged.

Mr. WOOLLIAMS: But who determines whether it has any security rating; that is what I am asking?

Dr. VAN STEENBURGH: In the scientific fields in Canada certain areas of scientific research are considered to be "open". Other areas are sensitive areas and are not in the "open" category.

Mr. WOOLLIAMS: Yes; but that is the question. Who determines whether it is "open" or the other category where it is not "open"? Who makes that decision?

Dr. VAN STEENBURGH: In the fields, for instance, of astronomy and geology, or any like professional field, the head of the department would have that authority. That would be the deputy minister. If the studies impinge in any way upon the military, then the military would set the classification.

Mr. WOOLLIAMS: But it is the deputy minister who would say whether it is impinging or not, or whether it is military or not?

Dr. VAN STEENBURGH: That is right.

Mr. WOOLLIAMS: Somebody has to make that decision; that is what I am after.

Dr. VAN STEENBURGH: He makes that decision; it is his responsibility.

Mr. NIELSEN: In the field of seismology, Dr. Beals, has the study of that subject made any significant contribution with regard to space travel?

Dr. BEALS: Not to my knowledge.

Mr. NIELSEN: In the field of astronomical characteristics of other planets in the solar system?

Dr. BEALS: No; again I would have to say, not to my knowledge.

Mr. NIELSEN: Would you say that in this field Canadian scientists are equipped, as to quality and quantity, with the necessary facilities in order

that they are on a level, both in their studies and otherwise, with scientists engaged in this field in other parts of the world?

Dr. BEALS: The head of our seismology division feels at present that his staff is not as large as it should be, and we are endeavouring to build up the staff. But it is not just a question of money entirely; it is partly a question of finding the right kind of staff.

Mr. NIELSEN: In the Dominion Observatory and all branches that come within your direction, what rate of expansion has been allowed, in so far as over-all expansion is concerned? Would I be correct in saying that it is about two and a half, or three per cent?

Dr. BEALS: I should say that in staff that would be about right. I think we were allowed an expansion comparable with that of the rest of the department, but it is difficult for me to answer that question positively.

The CHAIRMAN: How many years are you going back, Mr. Nielsen? Is this just for the last year, or is it a general trend?

Mr. NIELSEN: One must go back a few years, Mr. Chairman, to give accuracy to a statement.

The CHAIRMAN: You are establishing the trend?

Mr. NIELSEN: Yes, Mr. Chairman.

Dr. BEALS: Say, since 1950?

Mr. NIELSEN: Yes.

Dr. BEALS: As I say, our staff here at Ottawa has increased 35 per cent since 1950.

Mr. NIELSEN: That is an absolute increase?

Dr. BEALS: In numbers.

Mr. NIELSEN: What would be the annual increase?

Dr. BEALS: Two or three a year.

Mr. NIELSEN: Two or three per cent a year?

Dr. BEALS: Two or three persons a year.

Mr. NIELSEN: That would be much less than two per cent, would it not?

The CHAIRMAN: Are you discussing the increase in scientific staff?

Mr. NIELSEN: Yes, Mr. Chairman. My question with regard to the increase on staff is—would it be correct to say that in scientific personnel you have increased, on an annual basis, less than two per cent?

Dr. BEALS: I would have to do a little arithmetic to answer that with certainty, but I think that it possibly is a little more than that.

Dr. BOYER: Mr. Chairman, perhaps I can give a few figures for the record. If you would like to compare the year 1954-55 with the year 1959-60, the continuing positions, that is, excluding the summer positions—were 90 in 1954-55 and 111 in 1959-60.

Mr. NIELSEN: I would still like an answer to the question I asked, Mr. Chairman, and perhaps it could be put on the record at the next meeting. I want to know what the increase has been, in terms of a percentage, over the last 10 years, let us say, in scientific personnel at the Dominion Observatory.

Incidentally, if it is not asked by the other members of the committee, I intend to ask the same question with regard to scientific personnel when we revert to the main items respecting other branches of the department.

Dr. Beals, would I be right in saying that this percentage would most likely be of the order of two and a half to three per cent and is far behind what I believe to be an estimated 10 per cent increase per annum demand on the services of the branch of the Dominion Observatory?

I am trying to show that the demand on your services is greater than you can cope wtih.

Dr. BEALS: Yes.

The CHAIRMAN: The witness has not established a 10 per cent demand, has he?

Mr. NIELSEN: I have used this as a figure in my opinion, Mr. Chairman. I am trying to establish the point that the demand is greater than the Dominion Observatory can cope with.

Dr. BEALS: Yes, I think that is true in a general way. I think that would apply to almost any scientific branch of government.

Mr. NIELSEN: Mr. Chairman, perhaps I should let some other member of the committee ask questions. I seem to be asking them all myself.

The CHAIRMAN: Yes.

Mr. AIKEN: Dr. Beals, there is one matter to which I should like to draw your attention—it is relating to public visits to the observatory.

I had occasion last fall to accompany a group of teachers to the observatory on a pre-arranged tour. We had no complaint whatever about the scientific ability of the staff; but the criticism that I heard when we left was that the explanation of what the observatory was doing was quite inadequate for these visitors to understand what was going on. They were taken on a visit in connection with the—I would suppose it was the magnetic survey—and they went in and could observe that there was some very technical work being carried out. But even these people, who were teachers, were absolutely unable to understand why these tests were going on, what their significance was, and so forth.

I thought this would be a good place to bring it up and ask you if these public relations could be improved, particularly preliminary explanations, on tours. Some of the teachers told me afterwards that they could understand how a small child felt when he started school; he just did not know anything about what was going on. I wonder if you would like to comment on that phase?

It is really not part of your scientific work, I understand. But if these tours are to be allowed, I think they could probably be made more interesting by giving a preliminary explanation regarding what the people were going to see when they got there.

Dr. BEALS: I am very interested in your comment. It is a very hard question to answer. I think it is true that we do find difficulty in making an acceptable presentation of some of our research work. I think all scientists have that difficulty.

We are caught between two things. We do not want—especially if we have a group such as yours, consisting of teachers—to insult their intelligence by being too simple. On the other hand, we do not want to make ourselves unintelligible by being too obscure. The people who do this have to be scientists themselves. It is impossible to have the same one all the time, and some are very much more gifted than others in making things clear. It is probable you were unfortunate in the particular people who were assigned to look after that particular group. I will certainly draw your comments to the attention of the observatory staff and ask them, when people come, to make every effort to see they get adequate information.

Mr. AIKEN: There was no criticism about the quality of what was being done. The main criticism that seemed to follow was that there was not a sufficient introductory explanation. They started right into the magnetic work

without saying, for instance, that certain things related to discovering mines or minerals in Canada, or explaining what the over-all significance of the work was.

Mr. SLOGAN: Dr. Beals, I should like to ask you a couple of questions. On several occasions during your remarks you mentioned the instruments that were being used. The one that I would like to ask you about is the magnetometer. I believe the magnetometer at present in use in the department is sensitive to 10 gammas. Is that true?

Dr. BEALS: Yes, but they usually cannot get 10 gammas out of it. This type of equipment can be made much more sensitive, but there is not much point in doing so because during a survey other errors enter in which have nothing to do with the accuracy of the equipment itself.

Mr. SLOGAN: Why is it they require a survey to the accuracy of 10 gammas which, I think, is quite accurate?

Dr. BEALS: Well, I think it is this—were you referring to airborne or ground surveys?

Mr. SLOGAN: Airborne in this instance.

Dr. BEALS: When we make an instrument we try to make it as accurate as we can. I would not say in this survey, or the one over the Pacific, that we got 10 gammas. That is not due to the inaccuracy of the instruments but rather to the magnetic field of the aircraft, the geographical location and so on. These have a great deal to do with it. But when a scientist makes an instrument for measuring certain things, he makes it as accurate as he can.

Mr. SLOGAN: Would an instrument with the sensitivity of 10 gammas give you certain indications of oil-bearing areas under the earth which an instrument of less sensitivity would not?

Dr. BEALS: This is a little out of our field, and I should not go into it too deeply; but it is true that the more accurate your instrument, the clearer indication you are going to obtain from magnetic materials in the earth's crust.

Mr. SLOGAN: In plotting the contours of a survey such as a magnetometer survey to a sensitivity of 10 gammas on the map, would that not require more work than an instrument with a sensitivity of 50 gammas?

Dr. BEALS: Yes, I believe that is so.

Mr. SLOGAN: How much more information would you get from a map that was plotted with an instrument that had a sensitivity of 10 gammas than one which was plotted to 50 or 100? Would there be any significance, taking in the margin of error?

Dr. BEALS: I do not think I should answer that question because it relates to other kinds of observations than the ones we are giving. I think this question would relate to the total force surveys of the kind made by commercial geophysical companies or the geological surveys or various provincial authorities. I do not think I should try to answer it.

Mr. SLOGAN: Are the magnetometer surveys, especially the airborne ones, which are undertaken by the department, undertaken by government planes or are they let out on contracts to private companies?

Dr. BEALS: In regard to the surveys we have undertaken in the Dominion Observatory, we had the help of the air force for several years, but during the past two or three years we have hired commercial aircraft for the purpose.

Mr. SLOGAN: What was the reason for reverting to commercial aircraft rather than using air force aircraft?

Dr. BEALS: I think there were two reasons: one was the difficulty that the Air Force had in sparing an aircraft for the purpose; and another was perhaps a change in policy of the Air Force vis-á-vis commercial companies. A few years ago there was a change in policy and other government agencies were encouraged not to ask the air force for certain services but rather to hire them elsewhere.

Mr. SLOGAN: How many commercial companies have been employed in this magnetic survey?

Dr. BEALS: Two different ones.

Mr. SLOGAN: Could you tell me who they were?

Dr. BEALS: The first one was Spartan Air Services; and the one which did the Pacific flights and these flights over British Columbia that we have been discussing today was the Hunting group.

Mr. SLOGAN: When you tender these contracts, do they go out on tender or are certain companies invited to bid on them? Are they limited to certain companies? What is the general policy?

The CHAIRMAN: That was explained at a former meeting, Mr. Slogan. I believe it is in No. 3 printing of our proceedings.

Dr. BOYER: In answer to the member's last question, we do ask tenders. However, first of all we have to ascertain which company has special planes, particularly for this aeromagnetometer survey, where we would need a plane with certain non-magnetic properties. They would have to be fitted especially for the job, and in this way it would boil down to a few companies that would be in a position to supply these planes. We receive prices from the companies that are able to provide planes for this service.

Mr. NIELSEN: I have one or two further questions. With regard to accommodation, Dr. Beals, do you feel that the Dominion Observatory, in all its operations, is at the present time housed in accommodation which you feel to be satisfactory?

Dr. BEALS: We are somewhat crowded at the present time. Although the accommodation is satisfactory, we are crowded. However, we have plans in the future which we hope will relieve that situation.

Mr. NIELSEN: You feel that additional buildings are required in order to enable you efficiently to carry on the work of the Dominion Observatories? Is that correct?

Dr. BEALS: Yes.

Mr. NIELSEN: How long has this need for increased accommodation existed?

Dr. BEALS: Well, we had a new building about three years ago which we thought would pretty well relieve our congestion in Ottawa, but we found almost immediately that we were still overcrowded. I should say we have suffered since 1946 from a condition of overcrowding. I am unable to speak in regard to the time before that because I was not in Ottawa. I understand however that the situation with regard to crowding existed long before 1946.

Mr. NIELSEN: Has the Dominion Observatory since 1946 made requests for increased accommodation?

Dr. BEALS: Yes.

Mr. NIELSEN: Have these requests been consistent since 1946 over the next ten years?

Dr. BEALS: Yes, I think so.

Mr. COATES: You stated, Doctor Beals, that three years ago you obtained accommodation which you thought would be satisfactory but which you find now is not. Was this a new building?

Dr. BEALS: Yes, this was a new building which was built on the observatory grounds. It was a geophysical laboratory.

Mr. COATES: Who planned this building?

Dr. BEALS: The staff of the observatory.

Mr. COATES: When you planned it, were you taking a long-range approach to it?

Dr. BEALS: It is obvious our plans were made not looking far enough into the future. We would have to admit we did not ask for as large a building as we should have.

Mr. NIELSEN: I think I would be correct then in saying, in view of your statement that there has been an absolute expansion of 35 per cent in personnel since 1950, that there has not been a like expansion in accommodation.

Dr. BEALS: Well, when I say we are crowded now, I should modify that by pointing out we are in a very, very much better position than we were in the late 1940's.

Mr. NIELSEN: This has been the result of a new building?

Dr. BEALS: Yes.

Mr. NIELSEN: When was that built?

Dr. BEALS: It was finished about three years ago.

Mr. NIELSEN: Would it be possible to extend the facilities of this present building and build on to the building you have at the present time?

Dr. BEALS: We have asked for an additional floor in this biulding, which we hope we will have in the near future. In addition, there is another building which we hope will be vacated in the vicinity in the next two or three years; we hope to occupy that building also.

Mr. NIELSEN: There is a need for additional accommodation now—is that correct?

Dr. BEALS: Yes.

Mr. NIELSEN: Has any provision been made for it in these estimates?

Dr. BEALS: Yes, provision has been made for an additional floor on the present building.

Mr. NIELSEN: I wonder if I could have that checked. Is that correct?

Dr. BOYER: Mr. Chairman, I do not think the amount of money for the additional storey to that building appears in our estimates for next year. It is presently under consideration. There is some doubt as to whether we can expand on the present site of the observatory; and until that question is resolved, and the question of the green belt—the occupying of certain areas in the green belt for diversification of some of the additional facilities of government building—we cannot proceed. The question is presently being studied.

Mr. NIELSEN: It is being planned?

The CHAIRMAN: Will you answer this question, Dr. Beals: in your organization, do you have more than you should have of scientific personnel, let us say, in one office?

Dr. BEALS: In some cases, yes.

Mr. NIELSEN: How many people with doctors' degrees are in one office in your department?

Dr. BEALS: I do not know whether it is a case of more than one being in one office; I do not think so.

Mr. NIELSEN: How about stenographic assistance, and other assistance of a non-scientific or technical nature; do you consider that your needs are being satisfied in this regard?

Dr. BEALS: I think as far as clerical and stenographic assistance, yes. I think our needs have been well looked after. It is possible that we are a little short of technicians.

Mr. NIELSEN: Do you find a recruitment difficulty because the scientific personnel coming under your jurisdiction are not being paid a sufficient and competitive salary?

Dr. BEALS: I am rather pleased to have the opportunity to answer that question, because there is one point in that connection I would like to bring out. It is this: we are not in my opinion able to pay our top scientists as much as we should. That is a very important point.

The CHAIRMAN: Do you mean in competition with industry?

Dr. BEALS: Not only in competition with industry, but in competition with other branches of government.

Mr. COATES: Did I understand you to say that the salaries of your scientists are lower than the salaries offered to scientists in other departments of government?

Dr. BEALS: Well, that is what we think. Of course it is always difficult to say for certain what the level is for scientists. If we say our top men are not getting enough compared with top men in other branches, it could be claimed, of course, the others have greater responsibility or have larger numbers of men under them—and so on. But our opinion is—and it is a very firm opinion and, I think, a very important matter—that we are not paying our top scientists enough to retain the best ones, or to attract the best university graduates.

The CHAIRMAN: Are you keeping them?

Dr. BEALS: We have been pretty lucky in keeping them, yes. However, in making these statements I am thinking of the future and we are trying to attract scientists of high enough calibre to make our scientific efforts really worth while.

The CHAIRMAN: I think that statement should go on the record.

Mr. COATES: In this regard, Dr. Beals, you mentioned something about scientists in other departments of government, and you said they might have more men under them and, as a result, receive a higher salary. Does the Civil Service Commission determine the salary paid to a man by his scientific ability or his administrative ability?

Dr. BEALS: I am afraid I cannot answer for the Civil Service Commission.

The CHAIRMAN: Mr. Coates, that would be a decision of the Civil Service Commission. You are asking the witness to give a decision that should come from the Civil Service Commission. However, I do think it is an interesting question.

Mr. COATES: It is a problem, because in my opinion we want scientists for their scientific and not for their administrative ability.

The CHAIRMAN: I think, Mr. Coates, there is a combination in some cases.

Mr. AIKEN: Are they coming out of the universities with the required qualifications, or is some of the difficulty in the fact that they are not starting into courses which would lead to qualifications that you could use?

Dr. BEALS: There is always that difficulty to some extent in a highly technical branch of science.

Mr. AIKEN: What particular courses at the university would graduates require to come into your department?

Dr. BEALS: Courses in physics, mathematics, geophysics and astronomy.

Mr. WOOLLIAMS: I have a prepared question which I would like to direct to you. I would like to know what the top scientists in the department do earn?

The CHAIRMAN: It is in the estimates. I think it would be in the interests of the public as well as this committee to have that information, and I am glad to see this question opened up. Maybe you could relate from the estimates, Dr. Beals, what some of your top scientists receive, or perhaps the deputy minister could give that information.

Dr. BEALS: By the "top scientists" I mean our division heads; and of course it will be understood by the committee that the salaries which the division heads receive naturally affect the salaries of those immediately under them.

The CHAIRMAN: Yes. I think, Mr. Woolliams, since you reopened the first item, you can ask the head of each department what their scientists receive. I think you are arriving at the core of a very important matter. Would you like to have the answer now or on the committee's request for each department? I imagine, since you have expressed an interest in a subject which faces all departments of government, that you would probably want the salaries paid not only to the top men but to the heads of divisions, is that correct?

Some hon. MEMBERS: Agreed.

Mr. NIELSEN: We would like it for all branches.

The CHAIRMAN: Yes. I think someone should pursue the idea when you have Dr. Beals here. I think he should be asked if he has any recommendations to make. Let us be frank about it.

Mr. NIELSEN: Mr. Chairman, I would like to ask one further question, first. Would I be correct in asserting that your difficulty in retaining and attracting new staff does not exist in connection with top levels of scientists like yourself, or your division heads, but rather in that group of scientists existing under that level but above the level of other personnel in the department?

Dr. BEALS: Well, at the moment that appears to be true. Of course, you can never tell when a good man will get an offer. Here is a case: we had a man who had developed a very fine piece of equipment. We felt that he was headed eventually for the headship of the division. Well, the Air Force Cambridge group heard of this new equipment and offered him a salary of $4,000 more than we were able to give him.

Mr. NIELSEN: And he left the department?

Dr. BEALS: Yes, although we had planned a higher position for him in the future.

Mr. NIELSEN: Would it be correct to say we could have kept that man if we could have paid him more? It is obvious, I think.

Dr. BEALS: Well, whether we could have kept him, even supposing that our division head position was on par with those of the larger branches in the department, and we had been able to pay him that salary, I cannot be certain we would have kept him. However, our chances would have been better.

The CHAIRMAN: Mr. Nielsen, you have just brought up an important point. Is there a pattern which would permit that particular man to get that $4,000?

Dr. BEALS: I do not think so.

Mr. NIELSEN: Are you prepared now to give this committee your recommendations as to methods and means of overcoming this apparent shortcoming in the salary structure of the department, or would you like to give some thought to it and bring it before the committee when we revert to the main item?

Dr. BEALS: That is the sort of thing I would like to discuss with my superiors, before putting forward a plan.

The CHAIRMAN: That is all right, Dr. Beals. Are there any other questions?

Mr. NIELSEN: Before these items are passed, may I express the profound appreciation of the members of this committee for the manner in which Dr. Beals has satisfied the questions of the committee members, and to compliment him upon being so frank with us.

The CHAIRMAN: I think, Mr. Nielsen, you have expressed the wishes of every member of the committee.

Items 205 to 208 inclusive agreed to.

The CHAIRMAN: Gentlemen, we have to vacate this room. We called this meeting early, as most of you know, because there is to be a meeting of another committee immediately following, at 11 o'clock.

Mr. NIELSEN: Before adjourning, Mr. Chairman, I move, seconded by Mr. Coates, that the map which has been distributed to members, and which was published in the New York *Times*, concerning the intensified Soviet exploration in the Arctic be published in the proceedings of the meeting.

Motion agreed to.

The CHAIRMAN: What is the wish of the committee regarding item 210? We have that item and 209 to dispose of before we proceed to the estimates of the Dominion Board.

Mr. NIELSEN: I still have a number of questions I should like to ask on item 210.

The CHAIRMAN: Do you want the meeting to be held tomorrow, or would you rather have it on Monday or Tuesday?

Mr. NIELSEN: I am agreeable to having it tomorrow, if other members are agreed.

The CHAIRMAN: On Tuesday you will have a witness in called from the west to testify regarding the operations of the Dominion Coal Board—we must accommodate him. I know all the members of the committee do not go home on the week-ends, and, if it is agreeable, perhaps we could have a meeting tomorrow.

Mr. COATES: If we did, we would have to have it at nine o'clock!

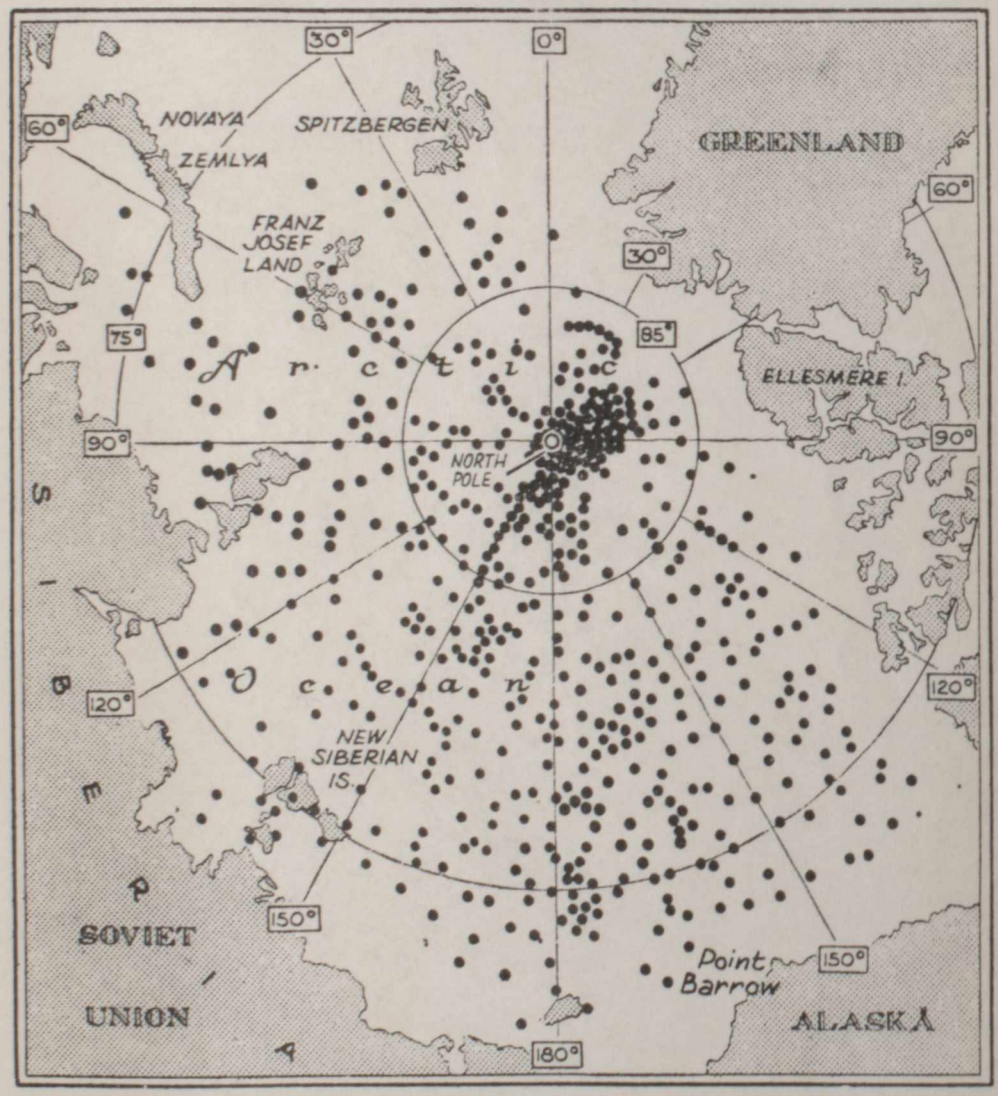
The CHAIRMAN: Yes. Would you rather have it on Monday?

Mr. MACRAE: Monday would be fine.

The CHAIRMAN: Is that the opinion of the committee?

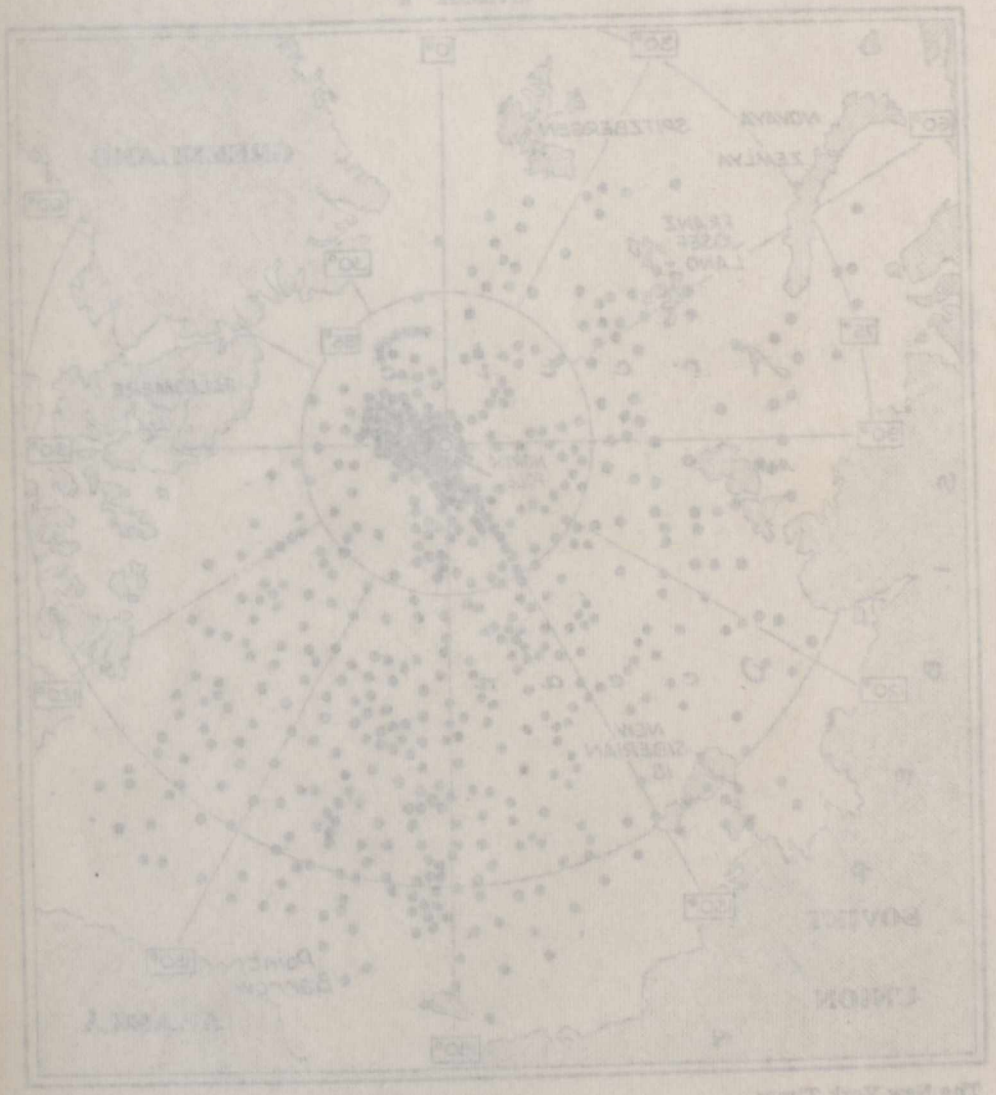
Agreed to.

The CHAIRMAN: The meeting will be called for ten o'clock on Monday.



The New York Times March 16, 1958

Intensified Soviet exploration in the Arctic is shown by the number of research parties landed by air (dots on map).



HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAR 24 1959
LIBRARY OF PARLIAMENT

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 8

MONDAY, MARCH 16, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Mr. H. A. S. West, Secretary, Interdepartmental Committee on Air Surveys; Mr. K. M. Pack, Chief Administrative Officer; and Mr. Lloyd C. McDonald, Personnel Division.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20839-7—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, March 16, 1959.
(9)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Cadieu, Dumas, Godin, Gundlock, Kindt, Korchinski, MacInnis, MacRae, Martin (*Timmins*), McFarlane, Murphy, Nielsen, Robichaud, Simpson, Slogan, Stearns and Woolliams—(19).

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director-General of Scientific Services; Mr. H. A. S. West, Secretary, Interdepartmental Committee on Air Surveys; Mr. K. M. Pack, Chief Administrative Officer; Mr. Lloyd C. McDonald, Personnel Division; and Mr. G. H. Murray, Chief, Editorial and Information Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Mines and Technical Surveys.

Item 209, concerning the Interdepartmental Committee on Air Surveys, was called. Dr. Boyer explained the functions of the said committee and answered questions thereon, as did Mr. West. Other officials answered questions specifically directed to them. The said item was approved.

The Committee reverted to Item 210, further consideration of which had been deferred on March 5, 1959. Following further questioning of Dr. van Steenburgh and certain other officials, item 210 was approved.

At 12.02 o'clock p.m. the Committee adjourned until 10.00 o'clock a.m. on Tuesday, March 17, 1959.

Eric H. Jones,
Clerk of the Committee.

20839-7—1½

EVIDENCE

MONDAY, March 16, 1959.
10 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. This morning we are on item 209, which you will find at page 42 in your estimates book.

The item just before that, the $11,500,000 one, under the Emergency Gold Mining Assistance Act, is a statutory one and is not referred to us.

Item 209. Purchases of air photography and the expenses of the Interdepartmental Committee on Air Surveys .....$ 1,900,000

The CHAIRMAN: Are there any comments on item 209? Is there anyone here from the department to speak to this item and answer questions about it? This item for $1,900,000 is the same as it was for the year before. I now invite questions. I am glad to see you here this morning, Mr. Martin. This is the first appearance we have had from a C.C.F. member.

Mr. MARTIN (*Timmins*): No, Mr. Chairman, I think this is the second time.

Mr. SLOGAN: I would like to ask a question. I am reading a press release that states: "The Canadian government should consider setting the price for gold at between 40 and 45 ..."

The CHAIRMAN: We are not on the item for the Gold Mining Assistance Act. That is a statutory item, and we do not discuss it in the committee. Let us go on from there; that is the usual procedure. I think we did that last year, did we not?

Mr. DUMAS: Yes.

The CHAIRMAN: Let us proceed with item 209. I hope you have questions to ask.

Mr. GUNDLOCK: May we have a brief resume of what that air photography consists?

Dr. Marc BOYER (*Deputy Minister of Mines and Technical Surveys*): There is an interdepartmental committee on air surveys. It is headed by the deputy minister of mines—myself—and it comprises departments which have need for aerial photography: the Departments of Northern Affairs, National Defence, and a few others. The Committee handles the money voted by parliament for aerial photography. All needs are taken care of in this vote in the estimates of the Department of Mines and Technical Surveys.

We contract with private firms to take aerial photographs in Canada so as to get complete coverage of the country.

In some cases it might extend to more than aerial photography. There is the recording of elevations of the ground by what is called air profile recording; that is, flying an aeroplane at a maintained level and, through an instrument which sends a beam, measuring the distance of the aeroplane from the earth, and recording the profile of the ground. These data are of great assistance in northern countries in getting information that can be plotted on aeronautical charts.

Mr. KORCHINSKI: In what areas is aerial photography to be carried on this year?

Dr. BOYER: Mr. West, secretary of the interdepartmental committee on air surveys, will answer your question.

Mr. H. A. S. WEST (*Secretary, Interdepartmental committee on air surveys*): This map indicates the only areas in Canada that have not an initial photographic coverage. We have areas here in these two islands, and there are still some Arctic islands to do, which are contracted for, and which we hope to attempt this summer.

This photography down through here in the Yukon is new photography which was requested by various departments. This one is for the Department of Northern Affairs; forestry and water resources—these are for local mapping. This one is for agriculture, and of course, there are a lot of requests from along the St. Lawrence and through this part of the country for revision purposes, and also from Nova Scotia for revision, and some additional photography in the Northumberland straits for study of the proposed causeway.

Mr. STEARNS: Does the department call for tenders for this work?

Dr. BOYER: Yes, but sometimes because of the extent of the work and in order not to give the whole program to one company which might be the lowest tender of all, there are certain allocations made of the work.

Mr. STEARNS: According to localities; in other words, local contracts would be given for work done in Quebec, for instance, along the river?

Dr. BOYER: There are tenders asked for all areas—every single contract, every small job; but in certain years when the coverage of the whole of Canada was quite low, much remained to be photographed, the contracts were quite sizeable. We used to call for tenders for certain areas, or groups of areas and try to allocate them among the main companies at the least expense to the government.

Mr. KORCHINSKI: You have no vertical coverage on that map. Is that an area which we hope to have covered this year?

Dr. BOYER: The nothern islands is a project started last year. It involves about six million dollars, covered much more than the western islands, which are still shown on the map as being unphotographed. This is a continuing contract covering this year and possibly a year or two to come.

I believe the rest of the areas shown on the map are contracts which will be let this year, with the exception of the delivering of aerial photographs. In Ungava, east of Ungava bay, one may expect a two-or-three-year contract, because the weather there is not very good for aerial photography. However, with good weather the work could be completed in one year.

Mr. KORCHINSKI: Would that mean at the time of a two or three year contract, that the whole area of Canada would be covered?

Dr. BOYER: Yes.

Mr. DUMAS: Was that originally a three year contract or a five year contract?

Dr. BOYER: Which one?

Mr. DUMAS: This contract for the northern islands.

Dr. BOYER: It was a six-year contract.

Mr. NIELSEN: Would it relate to the necessity of getting the whole aerial reconnaissance work done, would you say, ten to fifteen years ago or earlier?

Dr. BOYER: Not ten years ago, I do not think. Some trimetrogon aerial photography exists covering all these islands. It took care of some of the needs both for mapping and for exploration; but there was not enough for use in the detailed mapping of the area. Also for further exploration, you would have to photograph the area vertically.

Mr. NIELSEN: When was the need first realized for the extensive nature of the program you have undertaken in the past few years?

Dr. BOYER: Not more than a few years ago; and at that time there was still not more than three or four more years work to do in the vertical photographing of the mainland. At that time the work to be done on that part of the mainland of Canada which was not yet vertically photographed was to complete what was most needed in the lower latitudes. This had to be done before we could attempt any work in the Arctic.

Mr. NIELSEN: Would it be correct to say that you could not direct your attention to the Arctic because of the pressure of the immediate need for mapping in the south?

Dr. BOYER: I would say so. Four or five years ago, if efforts had been made to double or triple the usual annual expenditure of about one million or one and one half million, there would have been a strong tendency for the companies to build up their equipment and to fly more aircraft in order to do the work. They would have been able to do this work within two or three years, with more aircraft, but they would then have found themselves with very little work to do at the end of that time, and with excessive equipment on their hands.

The problem was to lay out a programme which would work in a uniform way, so as not to have too much inflation and an excessive buiding up of the facilities of the companies doing the work, and so as not to leave them, after the work was done, with a drop to a three or four hundred thousand dollars worth of program.

Mr. NIELSEN: If the facilities of the department, including the necessary funds, had been made available ten to fifteen years ago, would this program not have been completed?

Dr. BOYER: I would say yes. But ten or fifteen years ago the air force did this photography.

Mr. STEARNS: The air force does not participate in your aerial photography now?

Dr. BOYER: No. Some time around 1951 the air force dropped out of the aerial photography program because of other commitments. That was when the large companies such as Photographic Surveys, Spartan Air Services and others built up their facilities to do the work.

Mr. KORCHINSKI: With respect to the mapping you have for the 1959 work, in this area, here, was it done at the request of any provincial government? If so, what priority would there be among the provinces? Which area would get priority over another?

Mr. WEST: That is what the interdepartmental committee is set up to determine. I ask the departments for their needs, some time in August, for the following year; and in October I present this program to the committee. They review it at the time, along with representatives from all the different departments. The requests that we receive are from several agencies, and the federal agencies may have received requests from the provinces.

Mr. SLOGAN: What is the reason the area in Manitoba was undertaken? Is the federal government planning any works in that area?

Mr. WEST: I understand it is an agricultural study. Apparently the wishes of the Department of Agriculture are not for complete coverage of the area but for progressive coverage, possibly over four or five years, to study changes and developments. So, for the Department of Agriculture, we are re-flying quite a few areas. Also, the scale of photography for mapping is not suitable for agricultural studies. They have to get a larger scale at lower altitude.

Mr. SLOGAN: Is that work being undertaken for the future, having regard to flooding or the creation of watersheds in that area?

Mr. WEST: I cannot say definitely.

Mr. KORCHINSKI: Can you explain why that particular area of Saskatchewan was chosen for that work?

Mr. WEST: No, I cannot.

Mr. DUMAS: In the provinces where work will be carried on during 1959, it is mostly in areas which have been photographed before, and which are being re-photographed now for some purpose?

Mr. WEST: That is right.

Dr. BOYER: I would say that the photographs have been taken in most of the area in northern Canada, including the northern halves of the provinces. At an altitude of somewhere between 30,000 and 40,000 feet. In doing this one gets more coverage per photograph and at a lesser cost for the assembly of the photographs for the mapping job. Then if there are any developments, calling, for example for detailed geological surveys, the areas concerned are re-photographed at a lower altitude.

Mr. DUMAS: What is the scale of these photographs at 30,000 feet?

Mr. WEST: A mile to the inch.

Mr. NIELSEN: Have the maps been completed from all those aerial reconnaissances?

Dr. BOYER: No.

Mr. NIELSEN: How many maps are you behind?

Dr. BOYER: I cannot say offhand how many maps are not completed. There is quite an area of Canada still to be completed on the 4-mile and 8-mile scales. Quite an amount of the mapping has been compiled in manuscript form from the aerial photographs but has not been issued in the form of final maps.

Mr. NIELSEN: How many?

Dr. BOYER: Possibly 400 to 500 maps.

Mr. NIELSEN: Why have they not been completed?

Dr. BOYER: Because we lack the facilities in the map compilation and reproduction division to keep pace with the field work of the topographic survey division.

Mr. NIELSEN: How long have you been lacking these facilities?

Dr. BOYER: The discrepancy between the topographic preparation of the map and final compilation and printing has been building up in the last five or six years more than we could have expected. This has been due in great measure to improvements in techniques in the field work, used in establishing the control needed for the aerial photographs in order to produce the maps. This has created a large backlog in our map compilation and reproduction diversion.

Mr. STEARNS: There would be no point in increasing this aerial photography work until you catch up?

Dr. BOYER: Aerial photographs serve many purposes in exploration and geological mapping and many other purposes in addition to the production of topographic maps. So there is a need to maintain aerial photography coverage of all of Canada, even if we do not have topographical maps to issue.

Mr. NIELSEN: The need lies in your ability to produce maps?

Dr. BOYER: Yes.

Mr. KINDT: I note in the northern half of Canada there is no work in the cross-hatch area. Is there any priority going to be given to the work you are doing to correct that situation? I believe the "no vertical cover" means you have not had any aerial maps made of that area.

Dr. BOYER: To what area do you refer?

Mr. KINDT: The cross-hatch in the north.

Dr. BOYER: It is part of a contract let last year for a six-year program of mapping all the Arctic islands. It remains as "no vertical coverage", but it is under contract for photography.

Mr. KINDT: Do you think in the light of developments in those islands in the north that six years is too long a period to extend that vertical area mapping.

Dr. BOYER: At the time the contract was let we were near terminating the high altitude aerial photography program in Canada. If this had been condensed into a two-or-three-year period the companies doing the work would have had to build up an increased establishment in aircraft, cameras and other facilities to do the job.

The idea was to project the work over a number of years so as not to cause a buildup of excess facilities.

Mr. NIELSEN: Why do you say you are near the termination of this program?

Dr. BOYER: Because at the time the contract was let for the northern work, there were still only a few areas in Canada,—for instance the one in Ungava,—which remained to be done.

Mr. NIELSEN: Priority work?

Dr. BOYER: Yes.

Mr. KINDT: I should like to follow through on the thought I raised before. It takes a considerable amount of time to analyze these aerial photographic maps after the photographs have been taken.

Supposing we allow a reasonable length of time for that, say two or three years, and six years as the duration of the present contracts; in view of the urgency in the development of those northern areas, can we afford to wait eight years before those maps will be available to industry and to people who wish to move into that area and prepare certain developments.

The CHAIRMAN: You are referring to what has been happening in the last year or so?

Mr. KINDT: Yes.

Dr. BOYER: When the program was started, and tenders were asked the area concerned included more than twice that shown on the map in the northern islands. It was agreed that if the companies could produce the maps at an earlier date we would review the situation at that time. So the six-year program is subject to change.

Last year, the first they were in the field, they succeeded in covering one half of the photography of the six-year program. Two of the companies have completed about fifty per cent of their respective areas. It has been finally decided we will purchase what is available and the companies may terminate the work that remains of the western and northern Arctic islands in a period of two years. We are not forcing them to take six years to do the job. If they can complete it before that, we might review the situation.

Mr. KINDT: It just occurs to me that the decision of the department was made a number of years ago and things have moved forward since that time; we have a vastly different situation facing us today in comparison with what

we had at that time. I suggest in all seriousness that the sovereignty of that area is involved, and also its economic development. It is being held up by the work of a few companies who are doing aerial photography work.

I am wondering if there is not some way in which the department could step up this work by renegotiating these contracts, or by other methods, to have that development consummated and the aerial photography maps available in the shortest time possible?

Dr. BOYER: This can be explored.

Mr. STEARNS: Is there any possibility that the R.C.A.F. might feel like re-entering this field of aerial photography now?

Dr. BOYER: It does not seem so.

Mr. SLOGAN: It seems to me it is not the company which is holding up the work, but rather the plan of the department to do this over a period of six years. Did they spread it over six years because they did not have sufficient funds to undertake the work far more rapidly than they planned?

Dr. BOYER: They had funds. They had the equipment,—aircraft, cameras, and all the staff needed.

At the time the contracts were let, we had been working at them since 1956. The weather is something that neither we nor the companies that do the aerial photography work can predict. They might sit in the northern country and do very little photography for a whole summer, or they might accomplish a lot in one good day of photography.

If they are taking photographs at thirty or forty thousand feet altitude it might look like a clear sky from the ground, but it might not be so at the height at which they are photographing. They might do an enormous amount in one day.

We cannot force contracts on the companies and say "you shall deliver in two years". We can write the contract, on the suggestion which has been made, for a shorter period, with a clause providing for extension of the contract. We had been doing that quite consistently for former contracts in lower latitudes where it was a two-year contract. At the end of the two years if they had not completed the contract due to the weather, we extended it for another year.

Mr. KINDT: Might it not be possible to rearrange the schedule of aerial photography work, leaving until a later time those areas which are less strategic and concentrate on the ones which are likely to be most strategic in the immediate future.

Dr. BOYER: I do not think that by removing any contracts at lower latitudes it would assist in having a quicker job done in the northern areas.

The planes used for photography in the Arctic archipelago are special planes equipped to fly at thirty or forty thousand feet. There are only three companies at present who have planes of this type.

Mr. KINDT: Are these planes equipped with multiple projections? That is the most recent type of aerial photography. I am wondering if these companies doing the photographic work up there have available to them this more modern, more accurate, and less overlapping type of projection known as multiple projection?

Dr. VAN STEENBURGH: This type of photography, as I understand it, was recently developed in Europe. Actually, it is a combination of cameras some of which are placed in the vertical position and others in the oblique position. The cameras are synchronized so that when a picture is taken they cover a much greater area than the vertical photograph itself.

It should be pointed out that the tri-metric photographs which were taken in the Arctic are oblique photographs. From those photographs we have a fairly complete set of quite usable maps. Those are the maps we are using now in developing our work in the north.

I doubt very much, except in the field of accuracy, whether the vertical will add too much to this coverage. We have fairly good maps of the north at present.

Mr. AIKEN: May I ask a number of specific questions in relation to the northern islands. How many contracts are presently outstanding in connection with that work, and how many companies are involved?

Dr. BOYER: Three companies.

Mr. AIKEN: Approximately how many aircraft are involved?

Mr. WEST: Eight.

Mr. AIKEN: Approximately how long in the year can these aircraft operate?

Mr. WEST: They go up in July and stay through to September. Our best obtainable records indicate they get four or five good photographic days in a year. Last year they had an exceptional year. That is why they completed about half the job.

There is another hazard. If the good weather is localized it is advantageous to put many aircraft into it in order to finish it up within the time available, but it is also very hazardous flying because they are all flying at the same height. They do not like to put more than one aircraft at a time into a confined area.

Mr. AIKEN: Do I understand that only a few days in a year are really suitable for photography in this section?

Dr. VAN STEENBURG: It should be realized that the western half of the Arctic archipelago is very low-lying. The weather up until the middle of June or thereabouts, in that area, is fairly good. Before that time the snow coverage is heavy. For aerial photography we want the least possible amount of snow cover. Therefore, the optimum time to photograph is when you have a low snow cover.

Unfortunately, in June in that area the ice begins to soften. Leads take place offshore and in the channels. This develops in conjunction with the warm air from the sea which is heavy cloud banks. From the middle of June on, most of the summer season is interrupted, as far as photography is concerned, by heavy cloud coverage.

Mr. AIKEN: Thank you very much.

Mr. KINDT: Following through on my question concerning equipment: what has been said about the time element available to do aerial photography work, points up the fact that the department, the companies, or whoever is doing the job, should have the most modern and most efficient type of equipment in order to get the job done in a hurry. They should not fiddle around for days and weeks, but rather go to it and get the job done.

I raised the same question of aerial photography work in the hearings last year. I had hoped the department would have some answer on this new and more modern type of air photography work, so I criticize the department for not having some answer here at this time. I think at least they should be investigating what the costs are of this material, whether or not it could be made available and whether or not it could be brought into play in order to get this aerial photography work done, without extending it on for another six years to extend this aerial photography work to take another six years seems stupid.

Dr. BOYER: Mr. Chairman, the only restriction to this is that the coverage cannot be achieved in any systematic manner. The companies search for weather while they are doing the work and, therefore, fly certain areas where the weather is good, leaving gaps. There has to be uniformity and this can only be done by using the same type of cameras in order to have the same type of photographs when subsequently filling the gaps.

Therefore, there is an objection in changing from one type of a camera to another in that you would have different types of photographs which may not be suitable for use in topographic mapping.

However, I can assure you, Mr. Kindt, that research and studies are continually being made, with the assistance of the National Research Council, on these new cameras, and their adaptation to photography in Canada.

Mr. KINDT: Dr. Boyer, on this question of not being able to synchronize one type of equipment with another, my experience with aerial photography work has been fairly extensive and I know there is always a considerable overlap between one picture and another. They have to be synchronized, anyway. I cannot see where the argument comes up that in order to bring about efficiency it would not be possible to change from one type of equipment to another.

Dr. BOYER: I assure the member we will look further into this matter. However, I understand that until now it has not been possible to change from one type of camera to another when we are doing work in an area where work has been started.

Mr. WEST: The oblique or convergent photography approach certainly gives wider coverage, but oblique photography creates dead ground. That is the experience we encountered in using the old "tri-met". In fact, there are one or two small islands showing up now in vertical photography which were not visible in the early tri-met. The vertical coverage is essential to obtain all the details.

Mr. KINDT: Is it not a question of altitude as well as the degree of angle?

Mr. WEST: Yes, that is correct; but we are flying now at 35,000 feet, and when they get a break in the weather they are operational for long periods and have to have a crew working with oxygen It is the general feeling that they, in a sense, reach the maximum so far as photographic height is concerned.

The CHAIRMAN: Are there any further questions?

Mr. WOOLLIAMS: If an emergency existed now, could this work be done much more quickly than it is being done at the present ime, or more quickly than it is estimated it will be done?

Mr. WEST: It goes right back to the weather.

Mr. WOOLLIAMS: Take all those things such as weather into consideration and answer the question. I am wondering.

Mr. WEST: I would say no. I think it would be very hazardous to put more aircraft in during the restricted period of photographic weather.

Mr. NIELSEN: I wish to go on record as disagreeing with that. It is not that hazardous for aircraft to fly in the same area at the same height for this particular type of work. I myself have flown aircraft for this purpose and I have, therefore, some basis for making that statement.

I wonder if the deputy minister agrees with the answer given by Mr. West. I think it is important to the committee to have as good an idea on this as possible, since the final report is coming out soon and we want to know where we are going.

Dr. BOYER: I believe that now, with the kind of contract let to the companies to do the work—that is, the fixed price contract of so much per square mile—there is quite an incentive for the companies to do the job as quickly as possible, so as to have the work done and the monies coming to them.

There is no restriction on the companies doing all the work in one year, if they can do it. It is the spread of the payments that is on a six-year basis. There is a strong incentive for the company to do the work as quickly as possible, instead of spreading it over a longer period and increasing the costs.

Mr. NIELSEN: I think Dr. Boyer has answered the question.

Mr. WOOLLIAMS: I am quite satisfied. The answer is obvious from this statement.

Mr. KINDT: It appears it is the spread of payments and appropriation available to meet those payments which is the nub of the difficulty. If that is where the difficulty lies, it is up to this committee to make recommendations as a result of this.

The CHAIRMAN: You mean to accelerate payments?

Mr. KINDT: Yes, and get action immediately.

Mr. AIKEN: I have been wondering if there is any tax matter involved in this, as far as the companies are concerned? I mean in respect of spreading their income over six years.

Mr. K. M. PACK (*Chief Administrative Officer, Department of Mines and Technical Surveys*): I will go back to the early days of the contract. In 1956, when it became definite that we wished to do the Arctic area, there was a general meeting of all government representatives to establish what we wanted done in the Arctic. When that was established, we then called in the senior members of the industry, sat down with them, gave them the broad outline of our requirements and obtained as much information as they could give us as to how to do this job, and the length of time required to do it.

On the basis of their advice, plus what we thought would be a reasonable amount of money for each year, we established that this should be a six-year program. At that time the companies had not operated in the Arctic and did not know very much about it. Although they thought they might be able to do it in a little less than six years, they did not want to be committed to do that.

After obtaining their advice on the whole thing we called for and obtained tenders. I am omitting the detailed steps. We obtained contracts with the three companies on the basis that they could take six years to do this work, or could take three if they wished. At that time it appeared that our budgetary position was such that it might take six years to pay for it.

The companies were, I think I can say, quite happy with that arrangement, because it gave them the flexibility to go up and do as much photography as possible, based on weather conditions and on their own potential, and at the same time they had an assurance they had six years in which to do it. They went up last year and managed to do fifty per cent of the contract.

Mr. WOOLLIAMS: You mean that fifty per cent of the contract is completed?

Mr. PACK: Speaking generally, but not for each company. Generally speaking, fifty per cent is completed. It was considered as to whether or not we should hold the companies to the six-year plan or whether in view of the success which they had had we should take a more realistic approach.

As a result, we have now amended the contracts officially. It is our hope that the government will see fit to provide us with a rather large supple-

mentary estimate by the end of this month which will completely reimburse the three companies concerned for the value of all the photography they have done up until last October.

As things stand at the moment, if parliament does grant that supplementary estimate, we will have paid off by the end of this month fifty per cent of the contract. The companies still have six years in which to complete it, if operationally it takes that long. On the other hand, if their progress in the next three years is near to matching that of this year they will be completely paid off in four years.

I cannot say this definitely, but I would think if the companies have another successful year in 1959, we would re-examine the financial situation with a view perhaps to accelerating payments further. I cannot say that will be done until we know the progress this year.

We are not asking the companies to finance the government of Canada. I could go on and explain further how we are financing them. The companies did not know, nor did we, what they would run into in the first year of the Arctic work. To be on the safe side for them, as well as for us, we thought six years was a good guess.

Mr. AIKEN: I am still wondering if there is a tax problem involved? For example, would it be better for the companies to spread their payments over a six-year period, and whether or not that might have the effect of slowing down the completion of the work?

Mr. PACK: I might be able to answer part of that in this way: when the companies had such unusual success in 1958, they were quite happy to be reimbursed for this extra amount. I cannot, of course, deal with the companies' business, but I do know one company asked for some adjustment and when we offered it to a second company they were very happy to take the extra $1 million. I assume the tax position is not too important to them.

Mr. AIKEN: How much total money is involved in these contracts over the six-year period?

Mr. PACK: $6,300,000, starting approximately at two million, and photographing two million and six; and aerial surveys, photographic, nine hundred thousand.

Mr. WOOLLIAMS: I took it that your opinion as to the situation with regard to this work was that it could be done soon? Does this seem so, from the evidence given this morning?

Mr. PACK: I cannot comment on it. But I know from discussions with the industry representatives there was a general feeling that we might require six years to pay for it. On the other hand, they might require very close to that to fly it. I do not know what they are going to do now, but I am quite sure that any of us from the survey office have a greater degree of hope that it may be done in four years or even three. Speaking broadly, the thought is that they went up in 1958 and got as much done as they could and will do the same in 1959 and then use 1960 for the clean-up year, for the gap lines, and the spotting referred to earlier.

Mr. WOOLLIAMS: In the negotiations was any consideration given to the question of urgency as having a strong bearing on the question of the contract? Was that element considered?

Mr. PACK: I find it hard to answer, as to how long it would take for the companies to fly it, plus our ability to pay for it. I do not know that the question of urgency was relevant at that time. The companies have indicated their urgency by going up and doing 50 per cent in one year, and hoping that they may do, maybe, 40 per cent this year.

The CHAIRMAN: Since the contract was negotiated we have had a speeding up.

Dr. BOYER: There is also the fact that we already have oblique photographic coverage of the islands. However, the vertical photography is better for more detailed work.

Mr. KORCHINSKI: What type of aircraft is being used?

Mr. WEST: The Hunting group are using B17's; Spartan are using Mosquitos; and Aero are using P.38's. They are the only three companies that go in to that altitude. The others are limited to a ceiling of about 20,000.

Mr. KORCHINSKI: How many known companies—perhaps I should say how many contracts or how many bids did you receive for contracts?

Mr. WEST: Just the three, on that particular job.

Mr. KINDT: In view of the costs stipulated in these contracts, I wonder if there is any escape clause which the government might use when re-negotiating, using up to date equipment and getting the job done and vice versa? The cost looks absolutely exorbitant to me.

Mr. PACK: The average square mile rate is $12. That is the cost for the one contract, which we did not consider too much out of line with what we have had to pay for areas to the south where weather conditions are much improved, and not what you run into in the northern Arctic.

Mr. KINDT: Was there any reason why the R.C.A.F. could not have done this job?

Dr. VAN STEENBURGH: Several years ago the R.C.A.F. because of their commitments in Korea and, other priority work, felt that they should withdraw from this work.

Mr. WOOLLIAMS: Would six or eight like that make a difference?

Dr. VAN STEENBURGH: I doubt if it is within the ability of this department to explain the decisions of the Defence Department. It was their decision, that they wished to withdraw from this field, and they did so. In view of this we took other steps.

The CHAIRMAN: Are we through with item 209?

Mr. GUNDLOCK: May I go back to my question concerning the purchase of air photography? It sounds to me as though you were to purchase something that was already available. Is that simply wording applicable to changes in contracts which are made, actually buying something from somewhere else, or are you actually having it done on your own behalf?

Dr. BOYER: I think this is general wording. It can also allow for the purchasing of aerial photographs which have been taken for somebody else, such as a provincial government. Generally, however, it is we who call the shot, we who contract for this or that area.

Mr. KORCHINSKI: In view of that, is the department in possession of any of these figures? Suppose a request is made by a provincial government, would you sell to them, or is this information given to them gratis?

Mr. WEST: The prints are available today at reduced cost. If they wish to have some special work done, they can get a loan of the negatives. The negatives are stored with the R.C.A.F. at Rockcliffe where they have the proper facilities to keep them, at the proper temperature and humidity and so on; but they are available to everyone.

We maintain an air photo library in which we keep one copy of all prints that have been taken for the federal government and where the customer may come and examine them, and place his order.

Mr. KORCHINSKI: Does that mean that any private company or private individual may have this information?

Mr. WEST: Yes.

Mr. KINDT: This contract was consummated in 1956. Is that right?

Mr. PACK: Officially 1957.

Mr. KINDT: I cannot see where any demands upon the air force in Korea would have anything to do with obtaining R.C.A.F. cooperation in this aerial photographic work.

Dr. VAN STEENBURGH: The R.C.A.F. withdrew from this field during the period of the Korean crisis. I do not know if the question has arisen concerning the air force going back into this field again. They will not consider it unless the policy of the air force changes. It is not the prerogative of this department to indicate to the Department of National Defence what they should do. If the government feels that the R.C.A.F. should undertake this work again, then it is a government decision; it is not a decision of this department. We have nothing to do with that.

For instance, we have another field in which we need the help of the R.C.A.F. even more than we do in the photography field, and that is in flying our airborne magnetometers. Because the R.C.A.F. has the proper planes with the proper magnetic profile. But they indicated to us that the commitments of the R.C.A.F. were such that even for that important job they could not provide planes.

That was within the last two years, and we contracted for planes to do that work.

Mr. KINDT: Your statement is a little strange, and it brings out another point of difference between these departments. It seems to me, in all fairness, that this, involving the spending of public money, and since we have the R.C.A.F., they in turn could make available enough equipment to do this aerial photography work and get the job done.

Mr. DUMAS: You had better tell that to Mr. Pearkes!

The CHAIRMAN: I think, Mr. Kindt, that we are getting beyond the sphere of jurisdiction of a certain department; we are getting into the realm of policy in connection with the Department of National Defence. If you wanted further evidence with which to pursue your questioning, you would have to get someone here from the Department of National Defence.

Dr. BOYER: I think we can say that it would cost as much for the air force to do it as it now costs us dealing with private firms.

Mr. KINDT: On what do you base that opinion?

Dr. BOYER: On the fact that if the air force were to do the work they would have to set up a squadron with a special task assignment to do the job. When you do it in that style, you have to add all auxiliary services, that is, the clerical and technical staff, and so on.

Mr. KINDT: I agree with you if you set up the air force you would be in difficulties.

The CHAIRMAN: Members of the committee are concerned about the urgency of the northern work. Are there any other questions, or shall we pass item 209?

Mr. KORCHINSKI: At what points do these companies fly to do aerial photography in the west?

Mr. WEST: One company is operating out of Cape Parry; another is operating due south of Resolute;and there is also another doing the eastern section, working from Frobisher and Resolute, and they are also using Thule.

Mr. KORCHINSKI: You have good information with regard to the weather in that area?

Mr. WEST: In addition to the meteorological service, they have set up their own meteorological system. They "dump" people throughout the area with radios and they get weather reports.

Item agreed to.

Item 210 Polar Continental Shelf Project ..... $ 567,849

Mr. SLOGAN: I have a few questions on this matter. A very interesting item appeared in the Financial Post for March 14, 1959 entitled "We know too little about our own seas". It is by Leonard Bertin. I shall be quoting from this article during my questioning. One statement I would like to quote is this:

> We know far too little about our northern islands and channels, far too little about the Arctic basin and the oceans on our eastern and western seaboards.

May I ask Dr. van Steenburgh if he is in agreement with that?

Dr. VAN STEENBURGH: Entirely so.

Mr. SLOGAN:

> What's more, it is difficult to see how we can make good the deficiency. There is an absolute dearth of the men who form the key to the picture, oceanographers.

Do you agree?

Dr. VAN STEENBURGH: At the present time this department is vitally interested in recruiting oceanographers. We made a survey of all universities two months ago without finding suitable candidates.

We have just recently completed a survey of our own department to ascertain if there are any men with suitable background of physics and mathematics, chemistry, geography and geology, or any other academic background on which we could build post-graduate work in oceanography.

We found several candidates in the department who show promise. We are now approaching the universities to see if it would be possible for them to take these men as students in oceanography. If this is suitable to the universities, we would expect to send them away under assisted research grants for advanced training. At the present time few oceanographers are being trained in Canada.

Mr. WOOLLIAMS: What about the United States?

Dr. VAN STEENBURGH: The United States is in a deficient position as well regarding oceanographers; and I might point out that the salaries paid oceanographers in the United States are considerably higher than comparable salaries in Canada. So there is very little hope of our attracting them from the States.

Mr. SLOGAN: In view of the government's great problem in finding people to be oceanographers, have you discussed this matter with the Civil Service Commission?

Dr. VAN STEENBURGH: That is right. We have discussed this matter with the Civil Service Commission and we expect to have their cooperation in getting jobs for such people; but it is a slow business. It takes three years after a bachelor's degree to train an oceanographer. The program takes some five years to initiate. So at the present time we have just "too little too late".

Mr. SLOGAN: It states in this article that there would be some uncertainty about these positions because some Canadians might feel that after this initial work in oceanography was over, there might not be anything for them to do. What future would an oceanographer have after this exploratory work was completed?

Dr. VAN STEENBURGH: Just recently the National Research Council and the National Academy of Science in the United States formed a committee to explore the fields of science which they felt were being somewhat ignored, and in which more research was needed.

That committee came up with three areas which they felt should be accentuated. One was meteorology, another nuclear physics, and the third was oceanography.

They then recommended to the American government that within the next ten years the United States government should spend $651.5 million in building up oceanographic work in the United States, the reason being that there is not a great deal known about the oceans. We know a great deal about the land, and we know quite a bit about the upper atmosphere, but we know very little about the oceans.

Mr. SLOGAN: How many oceanographers are there in this department at the present time?

Dr. VAN STEENBURGH: We have two at the present time.

Mr. SLOGAN: Do you know if there are any other departments which have any oceanographers?

Dr. van STEENBURGH: The Fisheries Research Board. They maintain two oceanographic stations. The Pacific group is at Nanaimo, B.C., and the Atlantic group is at St. Andrews, N.S., and they carry on oceanographic expeditions on each coast every year.

You will realize that the interests of the fisheries research board lie in fisheries, and that they extend their facilities to physical oceanography when the facilities can be made available. It is the broad field of physical oceanography and submarine geology that has been neglected in Canada up to the present time.

Mr. SLOGAN: How many oceanographers would the fisheries branch have on their staff? Would you know that?

Dr. VAN STEENBURGH: I cannot tell you except in round figures. I think that they would probably have ten oceanographers on the west coast, and perhaps twelve on the east coast.

Mr. NIELSEN: When you say that this matter has been hopelessly neglected, has this neglect not continued over many many years?

Dr. van STEENBURGH: What I meant was that it has been hopelessly neglected since it became recognized that oceanography is a very important science.

Mr. NIELSEN: And when was this?

Dr. VAN STEENBURGH: After the war.

Mr. SLOGAN: Is private industry doing anything along this line?

Dr. VAN STEENBURGH: Nothing. The only exception in Canada is the University of British Columbia where they have an institute of oceanography which is located in temporary buildings, and which has a few graduate students who have to do their work in basement cubicles. It is a most discouraging situation.

The field of oceanography has been under intensive study in Canada over the last year and a half. We anticipate that the National Research Council under its grants to universities, will give substantial help to the University of British Columbia Institute of Oceanography this year. We also hope that the National Research Council will give financial help to Dalhousie University to begin building up a group in oceanography at that institution.

Mr. SLOGAN: Do you know of any private enterprise in the United States which is training oceanographers on their own staffs?

Dr. VAN STEENBURGH: There are several private associations in the United States which have oceanographers. For instance, the tuna association on the west coast have a number; and other fishery group associations interested in fisheries, have oceanographers. But most of the oceanographers in the United States work for the government.

Mr. SLOGAN: You said that it had been recommended to the government of the United States that they spend $651.5 million on oceanography. I notice that this item in our own estimate is for $567,849, and that as recently as last year, it was only $78,450. How much money do you feel would be needed to catch up in this matter and to institute an appropriate program in Canada?

Dr. VAN STEENBURGH: This $78,450 to which you refer for last year and this item of $567,849 for this year has to do with the polar continental shelf, in which only a small section has to do with oceanography.

Mr. NIELSEN: Perhaps your answer would be more illustrative if you described what ratio this had to the work? How long would it take, at your present rate of progress now, to build up adequate oceanography?

Dr. VAN STEENBURGH: To meet the requirements in physical oceanography on the east coast alone, we feel we would need 25 supervisory oceanographers with supporting staffs. We hope we can reach this objective by 1962, but that hope is subject to a great many conditions and requires a tremendous effort on the part of our personnel group, and an intensive training period.

Mr. DUMAS: You mentioned before that two oceanographers are attached to this department. In which department are they located?

Dr. VAN STEENBURGH: At the present time they are in the polar continental shelf project which reports directly to me. For administrative purposes the polar continental shelf project is housed in the Canadian Hydrographic Serice, but the administrative organization, when we get our oceanographic program going, is something else again. They should not be reporting to me. We may have to set up a division of oceanography.

Mr. DUMAS: You say that they are part of the staff of the Polar Continental Shelf Project. Can you be more specific to the committee and state which officers they are, as listed on page 282 of the estimates? Are they the two scientific officers there?

Dr. VAN STEENBURGH: To be precise, I would have to get "personnel" to answer your question, because I do not know at what level they are being paid. I think that one is a scientific officer grade one and the other is a technical officer.

Mr. NIELSEN: Could you tell the committee whether there is any indication that the Soviets are further ahead in the field of oceanography than Canada or the United States, and if so what significance does it have, commercially, scientifically, and militarily?

Dr. VAN STEENBURGH: In the first place I think it is fair to say that the most intense program in oceanography carried out by any country outside the west is being pursued by the U.S.S.R.

The CHAIRMAN: Up in that area?

Dr. VAN STEENBURGH: In the Arctic area.

The CHAIRMAN: Do you get the benefit of their papers?

Dr. VAN STEENBURGH: We get the benefit of their papers but only when they are placed in open scientific journals.

The CHAIRMAN: Do you get the benefit from any other country? Is there an exchange?

Dr. VAN STEENBURGH: In all the other large countries we have free access to the information.

Mr. NIELSEN: As a scientist and as a director of the scientific surveys of this department, what significance has this Soviet lead in respect to these three factors, science, commerce, and military?

Dr. VAN STEENBURGH: Scientifically they are much in advance. From the military standpoint, I think it should be pointed out that the oceanography as well as the hydrography of the Arctic basin is of prime importance to our security.

When we speak economically, it should be realized that the polar continental shelf added one seventh to the extent of Canada as far as the development of minerals and other resources are concerned.

The CHAIRMAN: You mean in that area?

Dr. VAN STEENBURGH: That is right; so at the present time we need a great increase in activity to begin to produce the minimum requirements in the three fields mentioned—science, defence, and commerce.

Mr. SLOGAN: Because of the great interest which the oil companies and others have shown in the continental shelf, do you feel that exploration should be accelerated? Do you know if these companies employ their own oceanographers?

Dr. VAN STEENBURGH: At the present time, since most of the exploration of the islands has been on land, geologists are more important to these oil companies than oceanographers.

In the gulf of Mexico, oceanography and oil exploration are normally interwoven, and the companies actually use oceanographic information in developing the resources of the shelf of the gulf of Mexico. The same is true of the western coast of the United States.

Mr. SLOGAN: Various Russian surveys have taken place in the Arctic apart from their work in oceanography. I think I read somewhere, that they did oceanographic work when they were doing other surveys in the Arctic.

Dr. VAN STEENBURGH: In all their work in the Arctic, detailed information on oceanography was included; they took oceanographic information at all the stations.

Mr. SLOGAN: Is it essential to the navigation of submarines in that area, as we have heard, to have detailed knowledge or information in the field of oceanography?

Dr. VAN STEENBURGH: It is essential. Hydrographic work gives us a profile of the ocean bottom; and oceanography adds to it such information as water temperatures, water movements, salinity, currents, and all those factors which are important to the wider requirements of undersea navigation.

Mr. WOOLLIAMS: There are two or three areas I have in mind: first of all, we have not the trained men because we have not been spending enough money. How much do the American professional men earn in this regard, compared to ours? You said that salaries were greater in the United States than here. Have you any idea what their salaries would be?

Dr. VAN STEENBURGH: It is difficult to be precise, but Mr. McDonald of our personnel division is with us today and he has just recently come back from Washington where he looked into the salaries in the two large United States Government organizations doing oceanography. Perhaps he can answer your question.

Mr. LLOYD C. MCDONALD (*Personnel division, Department of Mines and Technical Surveys*): As to Ph.D's, they recruited one Ph.D. in the United States coast and geodetic survey, and the salary they paid him last year was $11,090.

Mr. WOOLLIAMS: What would be the comparable salary of an individual working for the Canadian government?

Mr. MCDONALD: We have such positions at senior one and senior two levels; and the senior two would receive $9,420 as the maximum salary.

Mr. SLOGAN: Before the second world war the fisheries research board was the only research organization in Canada studying oceanography. Then a joint committee was formed with representatives from the fisheries research branch, the Royal Canadian Navy, and the National Research Council, and it was joined later by members from the Defence Research Board and the Hydrographic Survey.

In fact, some oceanographers went into our Arctic on United States icebreakers. Do you feel that the urgency of this work of exploration in the Arctic is so great that it would warrant taking oceanographers away from the Fisheries Research Branch and bringing them into this department in order to accelerate the work in the Arctic, since the use of the term "inadequacy" in oceanography?

Dr. VAN STEENBURGH: At the present time the requirements in the Department of National Defence alone on the east and west coast exceed the facilities that the Fisheries Research Board have. I am sure that if it were possible to suggest a transfer of staff from the east and west coasts to the Arctic, you would find violent opposition from the defence department, who need information for defence purposes, and from the fisheries research people who do oceanography primarily to assist the fishing industry.

Mr. SLOGAN: I understand that at the present time, with our detection systems to detect submarines, that they have a range of only a few thousand yards; therefore, there is need to do a great deal of research work in soundings in the Arctic, and this must come under your department. Do you not feel at the present, with the knowledge that the U.S.S.R. has of our Arctic that they could very well navigate submarines into our Arctic and launch missiles at us without our ever being able to detect them?

Dr. VAN STEENBURGH: Before I answer your main question, I should point out that to have adequate acoustic detection under sea requires very detailed oceanographic studies, and requires a knowledge of the temperature of water at various levels, plus salinity, at those levels, because the sound waves in the sea do not travel in a straight line; they are affected by the various physical conditions of the ocean.

We need to build up our oceanographic information so that we can actually interpret our acoustic information.

At the present time in the Arctic we have no basic scientific information on which to develop an acceptable acoustical system of detection.

Mr. SLOGAN: Has any official representation been made through the Department of External Affairs, to your knowledge, or through your department, to the Soviet Union for an exchange of information which they have about our own Arctic, other than that which everybody else can read in the newspapers, and so forth?

Dr. VAN STEENBURGH: Yes. Those approaches have been made by the National Research Council and the Defence Research Board. It is those two organizations upon which we depend for the large bulk of our scientific information of the north secured from the Russians.

Mr. SLOGAN: To your knowledge, have any of our scientific bodies crossed the pole and done oceanographic work in the Arctic above the Soviet Union?

Dr. VAN STEENBURGH: To the best of my knowledge, except for some soundings taken by Stefansson during the last war and subsequent work done

by the Defence Research Board off our Arctic continental shelves, which is very minor in character, there have been no Canadian expeditions into the Arctic ocean.

Mr. NIELSEN: What equipment has the department in the way of small craft and large ships to conduct this work at the present time?

Dr. VAN STEENBURGH: I feel I should qualify my statement by making other observations. In the hydrographic service we have what we call a tides and currents section, and that really is oceanography. That section has done a number of studies of the east and west coast of Canada. We have one small ship on the west coast which is used for this purpose. We have no ship on the east coast which we own, but last year we did charter a ship to work in the Northumberland straits on tides and currents in connection with information for the possible construction of a causeway. That is the extent of our oceanographic facilities at the present time.

We hope to soon contract for a modern up-to-date oceanographic ship which will be commissioned, we hope, by 1961.

It is the intention of this department to approach the treasury board for funds for two smaller ships, one of which will be used for oceanography. These ships are always constructed with the possibility in mind of working off our coasts in the lower latitudes and then moving into the north as the ice melts.

Mr. SLOGAN: It is obvious even with ships there is a great deal of oceanographic information which could be obtained only by a submarine such as the Nautilus of the United States. Has any request been made of the United States to allow us to send a joint scientific expedition in one of their atomic submarines to the Arctic to obtain this information?

Dr. VAN STEENBURGH: Actually, the submarines do not turn up very much oceanographic information. They have equipment for taking soundings up to the surface and from the submarine to the ocean floor, but other than that they do not provide a large amount of oceanographic information.

On the other hand, oceanographic information is vital to the operation and manoeuvering of their craft, so that the Americans are very anxious to co-ordinate, so far as possible, their submarine exploration in the Arctic with our research work off the shelf.

Mr. SLOGAN: But would not the submarine be able to navigate into an area where a ship would not be able to go?

Dr. VAN STEENBURGH: They would have to surface before they could actually take oceanographic data.

Mr. SLOGAN: There are breaks in the polar ice cap where a submarine could surface?

Dr. VAN STEENBURGH: Yes.

Mr. SLOGAN: And which otherwise would be inaccessible by ship?

Dr. VAN STEENBURGH: That is correct.

Mr. KINDT: One has only to look at the map of Canada to see that our country is bordered on three sides by water and continental shelves. The amount of oceanography work which lies ahead in relation to the amount which has already been accomplished is so tremendous that something ought to be done forthwith to speed up this work.

In all fairness, we cannot expect your department to get ahead with this extremely important work, strategic as it may be, unless more funds and more personnel are made available. I have had some experience in geology, although not as a specialist in that field, and on the question of personnel I believe if the salaries were stepped up in oceanography there would be more

geologists who would attend the oceanography classes that are necessary and specialized training. In a very, very short time they would become qualified to do the type of work which you have in mind.

Dr. VAN STEENBURGH: We are actually exploring that field. The man who heads our polar continental shelf project this year is Dr. Root, who is a geologist. We are now in the process of trying to get three or four geologists in advanced training for submarine geology study on the shelves.

It may be of interest to this committee to show this very recent map of the oceanographic stations which, up to the present, have been established in our Arctic. You can see that there are few stations beyond Baffin Island, and even south of this there are but few stations.

The only way that oceanography has been possible in the Arctic islands to date has been by the operation of the C.G.S. *Labrador* when it was a naval ship. I should point out to this committee in the last year since the *Labrador* was transferred to the Department of Transport, it has not been available for any oceanographic work.

Mr. SLOGAN: Looking at that map, I notice that most of the stations are on the east coast. As I recall the map put out by the Soviet Union, most of their studies were on the west coast. Do you not think there is a great necessity for accelerating our work on the west coast?

Dr. VAN STEENBURGH: We want to accelerate our work everywhere. It is just a matter of staff, facilities and funds. The oceanographic group is anxious to be able to get into the Arctic.

The CHAIRMAN: Would you specify the area.

Dr. VAN STEENBURGH: In the Beaufort sea. There just is not sufficient staff or facilities.

Mr. WOOLLIAMS: If you had the money the other thing would follow. You can get them from the United States for a certain price.

Dr. VAN STEENBURGH: I think what we need at the present time is a sympathetic attitude toward developing this work so that we can recruit staff at the rate capable men become available. We hope to have trained staff when our new ships are available.

Mr. WOOLLIAMS: You might run into the problem which we have in respect of all university-trained personnel, that if the annual salary is not increased you would no sooner have them trained than you lose them.

Dr. VAN STEENBURGH: Fortunately for Canada, there is quite a percentage of the students who will actually remain in Canada regardless of the salary.

Mr. KINDT: There again, in order to encourage them to go into that field, you have to have continuity of work and something on the horizon which will attract them. Up until now, anyone who might consider oceonography has had to consider that there have been very, very few jobs and low salaries. If you want to attract more university-trained persons into this field, you must attract them from the two points of view, salary and continuity of employment.

Dr. VAN STEENBURGH: That is correct.

Mr. KINDT: As to your point of a sympathetic attitude on the part of everyone towards that type of work, I certainly think that within the last year or so that feeling on the part of the public is developing. I find even in the area from which I come that different persons are speaking about the north country now, and are speaking of the potentiality of it, which was something about which a few years ago nothing was ever said. So I do not think the department needs to worry about the country having a sympathetic attitude towards stepping up this important work.

Dr. VAN STEENBURGH: That is very encouraging.

Mr. DUMAS: Will you please show on the map where this 1959 exploration will take place.

Dr. VAN STEENBURGH: The difficulty with the map I have in front of me is that it is not as accurate as the other one. However, Isacksen is the headquarters of the expedition and it will extend to Meighen island in one direction and to Borden island in the other direction then out to the edge of the continental shelf.

Mr. DUMAS: What distances?

Dr. VAN STEENBURGH: About 100 to 150 miles in either direction from Isacksen. The whole project in 1959 will cover some 300 miles in width and some 150 miles out to sea.

Mr. DUMAS: How many personnel will you have there?

Dr. VAN STEENBURGH: The personnel will change somewhat throughout the season, but the number of continuing personnel will run from 12 to 15 this year. We expect to have over 40 on the project next year. 1959 is a reconnaissance year. 1960 is a full-blown scientific expedition and would include something over 40 persons.

Mr. DUMAS: How long will they be there in 1959?

Dr. VAN STEENBURGH: We cannot be sure at this time. I presume they are at Isacksen now. They were to leave Resolute on March 12. We hope they will be able to work through the month of June. The planes will start off with ordinary wheels as landing gear and, if it is possible in June to change to floats and find landing places, we can extend the season. However, we will not know until after this year.

Mr. NIELSEN: Would you say that over the past twenty years Canada has shouldered her responsibility in polar research?

Dr. VAN STEENBURGH: I do not quite know how to answer that question. I might answer it in this way: that Canada has not shown great interest in polar research until the last several years. There was a considerable interest in the polar region during the first great war, from 1913 to 1918, in connection with establishing the sovereignty of the islands.

Stefansson had an expedition, which was gone some five years in the Arctic islands, and claimed in the name of Her Majesty many of the islands in this area to establish Canadian sovereignty. From that point until just within the last several years there has not been much interest in the north, except in the establishment of police stations and administration areas.

Mr. NIELSEN: In your press release regarding this continental shelf project, it mentions:

> Primarily, the expeditions are Canada's answer to the nations interested in the polar basin that it intends to shoulder its own research responsibilities in the basin.

May I ask what other nations are interested in the polar basin and what is meant in this press release by " . . . the expeditions are Canada's answer to the nations interested in the polar basin . . . "? An answer to what nations and an answer to what?

Dr. VAN STEENBURGH: In the first place, as has been pointed out in this committee several times, the U.S.S.R. is extremely interested in the Arctic basin. But also for many reasons the United States is interested in our Arctic and sends, various research expeditions to the area.

Up until just recently Canada, except for one or two small research groups—one being the D.R.B. research group at Hazen lake in 1957-1958—had not shown too much scientific interest in the north. It began to appear that, since these islands were under Canadian sovereignty and were part of our

resources, we should in our own right learn more of the Canadian Arctic. The answer is the polar continental shelf expedition which is being developed as a long-term approach to the problem.

Mr. NIELSEN: Why have we not, to your knowledge, undertaken this work on our continental shelves prior to this late date?

Dr. VAN STEENBURGH: I thought a good deal about that question, and I really believe it is because of the pressures of the many commitments which we have in the lower, more settled parts of Canada, plus the fact that we had to develop, within the money that was available, the most pressing commitments.

Mr. NIELSEN: Would I be correct in saying that the department has been living from cisis to crisis in respect of conducting its work in the more settled areas of Canada and that this has impeded the polar research work?

Dr. VAN STEENBURGH: I think it would be safe to say in no year are we able to meet all the requests made on us. The work we do today is sorted out on the basis of urgency, and up until the last two or three years, the urgency seemed to be further south than the Arctic islands.

Mr. NIELSEN: How long, to your knowledge, has the department been aware of the importance of the Arctic in so far as the important contribution—that is the scientific contribution—is concerned which can be made, not necessarily a military contribution, in Arctic development?

Dr. VAN STEENBURGH: I think this committee should realize from what I have said here that we have been interested in the north to the extent of our resources. We have been interested in aerial photography, in mapping the area and doing reconnaissance geology.

Mr. DUMAS: I think you should say the Arctic and not the north.

Mr. NIELSEN: I will say the north for you, Dr. van Steenburgh.

Dr. VAN STEENBURGH: In addition to that, since 1950 we have had geologists in the Arctic islands every year. Sometimes we have had three parties in the Arctic islands, and in 1955 we mounted expedition Franklin; it was a large expedition involving 11 geologists and 10 geology students.

About half the land area of the Queen Elizabeth Islands was mapped. Ever since that time we have two or more geological parties in the Arctic islands each year.

Mr. NIELSEN: Would it be correct to say that the pace of events in the last two years has really catapulted the Arctic into prominence?

Dr. VAN STEENBURGH: Yes. That is the real basis for the interest in the Arctic at the present time.

Mr. NIELSEN: Before this committee closes off the investigation of the polar continental shelf project, I would like to thank Dr. van Steenburgh for his very frank answers and for his great assistance to the committee in enabling it to realize the importance of these Arctic areas.

I might say that I think Dr. van Steenburgh's answers have pointed up that we have finally realized the importance of this area to Canada as a nation. I think we also realize that the Russians are substantially ahead in these studies and that there is an urgent need, scientifically, militarily and commercially that this program of polar research be accelerated in every possible fashion.

Personnel is a problem; equipment is a problem; funds are a problem. I think that the committee's examination today, and at past meetings, has indicated these problems in no uncertain terms. Thank you, Dr. van Steenburgh on behalf of the committee.

The CHAIRMAN: I think you have expressed the opinion of all the members.

Mr. KORCHINSKI: Because of the great importance of the studies, militarily, could it be suggested that some of the studies should be conducted in conjunction with the United States because of their importance militarily? Would it be possible that we could work out a scheme with the United States to speed up the study in the north?

Dr. VAN STEENBURGH: Almost every time the United States sends a seaborne expedition into that area we have Canadian scientists aboard. But we do not have Canadians aboard the submarines. The submarines are exploring the Arctic basin and it has not been felt up to this time that Canadians should be aboard. If Canadians were aboard, I do not quite know what they would contribute, except that these submarines are pointing up new interests to navigation, they are not contributing much to the actual scientific information of the area.

We want to get groups up there who can stay on a station and take data that can be correlated with readings taken over a large area so that an oceanographic pattern can be developed. It is difficult to do so on a submarine.

Mr. KORCHINSKI: I am thinking specifically in terms of what may happen in the future. We will no doubt have our own group working in there. The United States will be interested in our information. Because of their interest in our information, I am thinking we might interest the United States in helping us out by allowing us to have a few oceanographers, or perhaps some of the materials they may have, in order that the study may be carried out.

Mr. KINDT: Mr. Chairman, I think that we are a grown up nation. In a small project of this kind, as it may seem in the minds of some who are frustrated with the problem of obtaining enough funds to carry it on, I feel that Canada is the one to make that study, put the money and the personnel into it, train our own scientists, stand on our own feet, and do it forthwith without relying on the United States or on any other nation. That country belongs to us and it is up to us to develop it.

Mr. KORCHINSKI: I believe Mr. Kindt is referring to what I was saying. I want to point out that I realize we should depend on ourselves, but if it will speed it up it might be wise to work with the United States. I do not like to depend on the United States, but—

Dr. VAN STEENBURGH: We are aware of all the United States expeditions which go into the north. To the best of my knowledge, they invite Canadians to go along. However, one of the difficulties regarding United States expeditions is that we have not had the staff to assign to them.

I must point out that the Americans are most generous in providing us with all the information which they obtain in report form. The committee should realize that, as far as United States scientists who have worked on expeditions in Canada are concerned, the cooperation has been open and most cordial.

Mr. AIKEN: I would also like to agree with what Mr. Kindt said. I would not like to leave the impression anywhere that we are promoting a joint exploration with the United States. I think, as Mr. Kindt said, we should continue ourselves, with no assistance, to provide more funds from the Canadian government for this work.

Mr. SLOGAN: I, too, would like to add my thanks to Dr. van Steenburgh for his frankness in answering our questions. Certainly, we will go away with a greater appreciation of the significance of the north and the need for greater development there.

I think to some extent we can carry these ideas into the house and perhaps do something to assist in alleviating the needs of this branch.

In this same press release which was quoted from previously by Mr. Nielsen, in discussing the work of the Soviet Union in the polar basin, you mentioned in the mapping of the topography by the Soviet Union in the Arctic ocean they have found a major new mountain range that runs right to the edge of the Canadian Arctic islands and have reported an undersea volcano. Could you show us where that is and whether or not it holds any significance, as far as the new shelf theory goes, in respect of establishing our sovereignty to any islands which might exist?

Dr. VAN STEENBURGH: It will be difficult to explain in words. This new mountain range extends from the area of the new Siberian islands, almost right under the pole, to the northeast end of Ellesmere island. It is this heavy line area which you see on the map.

Item agreed to.

The CHAIRMAN: I might suggest to the members of the committee that the article referred to this morning from the *Financial Post* is an exceptionally well-written article. It is in the issue of March 14 of that publication.

Tomorrow's meeting is scheduled for 10 o'clock in room 238-S. First, we will have a brief statement from the Minister and then a statement from Mr. Uren, the Chairman of the Dominion Coal Board. Then we will have a witness, Mr. D. B. Young, who will follow.

Mr. DUMAS: May I ask where this witness is from?

The CHAIRMAN: He is the manager of the Coleman Collieries Limited of Coleman, Alberta.

Mr. NIELSEN: Would it be possible for Dr. van Steenburgh, without causing him any inconvenience, to attend these hearings with the coal board. I am thinking particularly of the iron ore production in Canada.

Dr. VAN STEENBURGH: Mr. Nielsen, I am sure there are other more capable persons in the department.

Mr. COMTOIS: Dr. Convey,—we will have officials from the department here.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament
1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 9

TUESDAY, MARCH 17, 1959

RECEIVED
MAR 25 1959
Library of Parliament

Estimates 1959-60 of the Dominion Coal Board

WITNESSES:

Mr. David B. Young, Manager, Coleman Collieries Limited, of Coleman, Alberta; Mr. W. E. Uren, Chairman, and Mr. C. L. O'Brian, Assistant to the Chairman, of the Dominion Coal Board.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20868-6—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, March 17, 1959

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Granger, Gundlock, Hardie, Korchinski, Kindt, Leduc, MacRae, Martel, McFarlane, McGregor, McQuillan, Murphy, Nielsen, Payne, Roberge, Robichaud, Simpson, Slogan, Stearns and Woolliams —(21).

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Mr. W. K. Buck, Chief, Mineral Resources Division; Mr. T. H. Janes, Mineral Resources Division; Dr. K. W. Downes, Chief, Mineral Dressing and Process Metallurgy Division; and Dr. J. H. Walsh, of the same division: *of the Dominion Coal Board:* Messrs. W. E. Uren, Chairman; C. L. O'Brian, Assistant to the Chairman; D. A. Edgar, Financial Officer; and G. W. McCracken, Administrative Officer: and Mr. David B. Young, Manager, Coleman Collieries Limited, of Coleman, Alberta.

The Committee commenced its consideration of the 1959-60 estimates of the Dominion Coal Board.

The Chairman stated that as it was expected that an announcement would be made in the House later this day it seemed appropriate that statements by the Honourable Mr. Comtois and the Chairman of the Dominion Coal Board on the operations of the Dominion Coal Board be deferred. The Committee agreed with the Chairman's suggestion; and that Mr. David B. Young first be examined.

On Items 210 to 213, concerning the Dominion Coal Board, Mr. Young was called.

Mr. Young spoke on the problems of the coal industry in western Canada and on the Canadian mission to Japan in 1958 to seek a market in that country for Canadian coal, of which he had been a member. Mr. Young and Mr. Uren answered questions thereon. Mr. Young was retired.

At 11.55 o'clock a.m. the Committee adjourned until 11.00 o'clock on Thursday, March 19, 1959.

Eric H. Jones,
Clerk of the Committee.

20868-6—1½

EVIDENCE

TUESDAY, March 17, 1959.
10 a.m.

The CHAIRMAN: Gentlemen, it is a minute after ten; we will get started. We are going to deal with the estimates of the Dominion Coal Board. The particulars are set out at page 42 of the estimates.

This morning we have with us the minister; Mr. W. E. Uren, chairman of the Dominion Coal Board; Mr. C. L. O'Brian, assistant to the chairman; Mr. D. A. Edgar, his financial officer; and Mr. G. W. McCracken, his administrative officer.

This morning, gentlemen, we have also with us Mr. D. B. Young, manager of the Coleman Collieries Limited, Coleman, Alberta. Mr. Young went to Japan on the coal mission. He is called at the request of Mr. Kindt and is prepared to give evidence. As you know, in regular practice, we would have a statement from the minister upon which you could ask questions, and then later a statement by Mr. Uren, the chairman of the Dominion Coal Board. But as you heard yesterday, there will be a statement in the house today respecting the Nova Scotia coal situation. I think you will agree with me it would be far better if we heard the witness who came from Alberta at this time, and delay the statement of the minister and the chairman of the coal board until after the announcement in the house this afternoon. Is that agreed?

Agreed to.

The CHAIRMAN: Would you like at this time to hear from Mr. Young?

Some hon. MEMBERS: Yes.

The CHAIRMAN: Mr. Young, you might wish first to make a statement in regard to your mission, which would include your accomplishments, prospects and whatever you feel would be relevant for this committee to hear.

Mr. D. B. YOUNG (*Manager, Coleman Collieries Limited, Coleman, Alberta*): Mr. Chairman and gentlemen: I was invited here by our good friend Dr. Kindt to reveal some of the necessary information on which we could base our considerations for the improvement of the coal industry.

As you all know, our industry is in the throes of depression and the situation is becoming progressively worse. Over the past few years we have been struggling but we are fighting a rearguard action.

The CHAIRMAN: Mr. Young, are you confining your remarks to the western situation?

Mr. YOUNG: Yes, the Crowsnest pass area, where our production is down to about 20 per cent, or less, of what it used to be. This is telling the whole story in a very short sentence. Our employees are down in the same ratio. In our mine we used to have 1,250 employees; today we have 176.

Of course, the biggest setback, we have had out in our area has been the conversion of our railway locomotives from coal fuel to diesel oil. That business used to amount to 70 per cent of our production; today it amounts to about 15 per cent, and in succeeding years it will be less than that. Also, the presence of an oversupply of hydrocarbons in the west naturally has affected the coal industry; we have too many hydrocarbons in the one area. We have liquid, solid and gaseous, and we have neither the population nor the industry to consume or produce the power.

Of course, coal itself suffers through the selling of gas, particularly natural gas, at prices much lower than their proper market value. We hear people say that coal has priced itself out of the market. That statement is not correct. When we consider natural gas being sold at about 12 or 13 cents per million B.T.U.'s at the well head as against crude oil at 44 cents per million B.T.U.'s—at about a quarter of the value—you can sense immediately that coal is in a very difficult position. This is due to what we in the coal industry call unfair competition from the gas industry. Of course, we in that industry feel that a position of this kind is not good for Canada, and that this depressed price of natural gas eventually and in a short time will ruin the competitive fuel industry including coal. It will, of course, become quite evident, as it appears now, that gas companies cannot maintain that very, very low price on gas; and once the competition is removed the price of gas will go up to levels which should prove economical, to the natural gas companies.

As I have said, we have found ourselves in a very desperate position during the past few years as far as coal sales is concerned, and we are now reaching the point where something will have to be done, if the nucleus of the industry is to be protected. From where I sit, the one important decision that must be made—and it must be made by the government of this country—is whether the coal industry as such is considered a national asset. Is it an asset to Canada? If it is, then how much are we prepared to pay for it? If it is not, then let us write it off and forget about it. As far as we are concerned, it is as simple as that. However, should we sit back and let the industry go, I am afraid there will be a day coming when Canada will be sorry, because the potential fuel reserves in oil or gas are infinitely small compared with the potential reserves in coal.

The day is fast approaching when the demand for coal or solid fuels will far exceed anything we have seen in the past. That situation can be treated by an ever-continuing demand for more power, due to continued expansion of our western economy which, in turn, will of course force up the price of petroleum products, natural gas, crude oil and propane. A combination of these three features will bring coal back into the picture much faster than a lot of people realize or think at the moment. So on that basis, gentlemen, we in the coal industry feel that appropriate steps should be taken by the Dominion Government at least to preserve a nucleus of the industry, something which could be expanded very quickly if and when required in the near or distant future.

This is something else which we have tried: we have moved western coal outside of our provincial markets to national markets; and now we are moving out of national markets into international markets.

As you probably know, we made a mission to Japan last November. This mission had the blessing and the support of the federal government, for which we were very appreciative. They opened the road for us over there and made our job a much simpler one than if we had been left to our own resources. The Canadian consulate in Tokyo under the leadership of Mr. Bull and the trade commissioner, Mr. Mutter, with his assistants, proved very important to our delegation. They arranged our complete itinerary in all of Japan so that we could see the steel mills, steel companies and trading companies. In that way we could see how much coal was used, how it was used and where it came from. Our trip to Japan was very educational and informative. It did expose to us the possibility of a market for our coking coal, as long as our ceiling price was right.

That is the basis of the whole story. The Japanese had tested our coal in various small tonnages. The advice we received in Japan is that our coal could be useful there as long as the price was right. The right price to a Japanese and the right price to us, as Canadians, are two different things; and

at the moment we are quite far apart in regard to prices. I do not see very much hope of our getting together on this matter. They have stated the maximum price they wish to pay for this coal, and we have stated our lowest possible price; and I do not see where we can move very much further from the position we have taken.

Mr. Uren, a gentleman with whom I have dealt very closely for many years and from whom I have had sincere cooperation in the past 10 or 12 years, was fully alive to our situation in Japan. When we arrived back in Canada, we were in the position that the Japanese required us to make a firm bid on the coal. In order to do that we had to receive advice regarding a firm subvention figure—no scaling amount, nothing up to a given figure, but a given figure. When Mr. Uren was approached on that question, he came back the same day and said yes; we could not expect any better service than that—not even from the federal government. But even with that figure we are still somewhat apart from the Japanese as far as price is concerned.

I am sure this body will want to ask more questions about the Japanese business, and that they are just as anxious as we are to conclude this business. Right at the moment the Japanese are importing from 3½ million to 4 million tons of coking coal which comes from the United States, Australia, Viet Nam and many other places—and a bit from Canada. However, by 1962 or 1963 they expect to import around 9 million tons of coking coal. That factor makes it very important to us to get in on this business on the ground floor. In this way we could probably grow with it, as long as we can remain competitive in price and quality.

At the price quoted now—and this is information you gentlemen should have—we can deliver coal in Japan for about $2.50 a ton less than the American price. Our coal is considered a lighter coking coal than the United States coal, being about the same quality as the Australian coal. The Australian price is around $1, $1.10 or $1.15 a ton lower than ours. Russia's price is about the same as that of Australia. The one big factor in the Russian price is that they are not taking money but rather steel and steel products from Japan. This is an attractive situation for the Japanese; there is no money at all involved. They are taking the coal and the Russians are taking steel and steel products. Then, too, Australia was taking part payment in ships built in Japan.

Gentlemen, I think you should give this question of Japanese business considerable thought, because it could be a nucleus from which to build Canada's coal industry, and an addition Canada might be quite proud to have. At the moment it appears superfluous, but there is a day coming when it is going to be required, and that day should be prepared for now.

There is another potential market for coking coal, and that is the United States. This is something which has been retarded for the last year by the so-called depression we have been experiencing. There have been some considerable shipments going down there from our area, but it has been suspended at the moment due to steel mills not operating at their rated capacity. However, their capacity is increasing and very soon they hope to be in a position to take some of our coal.

The old traditional markets we had, such as the railways, are fast disappearing. Even the small market we had in Ontario is also very rapidly disappearing. With the advent of natural gas into this area, our coal business is becoming much more difficult. The coal board itself is making a continual study of the coal market; and I may say due to the influx of gas that the market for coal is fluid. By that I mean that an area using coal this month may be on gas next month. We cannot say what the market is going to be three months from now. However, the dominion coal board are making a continual study of that phase of the operation; and Mr. O'Brian, who has made a very

extensive study of this has, I am sure, information that could be supplied to coal operators in the west. He would have information in regard to market possibilities and the areas in which western coal possibly could be used.

I will say nothing further at this time, gentlemen. I think that covers the three main points. I have given you a resume of our position so that you may understand our position from here on.

Mr. KINDT: Mr. Chairman, first of all I should like to say how glad we are to have Mr. Young with us. He is an industrialist who has lived with the coal problem in western Canada for many years. He was on the mission to Japan, and I think, above all, he is one of the best qualified men in the coal industry of western Canada.

I might add at this point that he is here today following a joint request. We felt it was not practicable to bring witnesses down from each of the ridings in Alberta where coal is produced, so I would like to have it on the record that his choice, and his coming, was jointly decided by Mr. Woolliams of Bow River, Mr. McFarlane of Kootenay East, Mr. Gundlock of Lethbridge, and myself.

Mr. Young touched on the Japanese coal market. I think a great deal of our discussion here today will hinge around the question of markets for western coal, because that is the crux of the situation with respect to coal.

Could Mr. Young tell us just a little more of the details surrounding his trip to Japan, his contacts with certain industrial users of coal, and what were some of the price considerations which those in the Japanese market require of Canadians?

Mr. YOUNG: Mr. Chairman, the trip to Japan was made as a result of several test shipments of our coal from the Crowsnest pass area to Japan for testing purposes, with a view to its being used in making coke. We have been working on that project for three years.

Mr. KINDT: Is all our coal blended with Japanese coal?

Mr. YOUNG: Yes. The Japanese have coking coal, but it is considered to be light. Therefore the more good coking coal they can import to Japan, the more of their own coking coal can be used.

Several of these shipments were sent to Japan, and we have had a lot of correspondence and tests made. In the meantime the Japanese industrialists had made two trips to our country to examine our mines.

As a matter of courtesy first, and secondly in order to see what the Japanese steel industry amounted to, and what their coal consumption would be, we deemed it advisable to make a trip to Japan ourselves in order to look into this thing and see what could be done.

Mr. WOOLLIAMS: Would you mind putting on the record the number of people who went with you on that Japanese commission? I have just returned from Japan on a similar mission, a private one, for a private concern. I am interested, because I spent some time with Mr. Mutter of the Canadian Embassy, who is the economic attaché in Japan. Would you name the personnel who went on that Japanese mission.

Mr. YOUNG: The personnel consisted of Mr. "Ed." Burroughs, a coking expert of the Fuels Division; Mr. William Whittaker, managing director of western coal operators association and a member of the dominion coal board.

Mr. WOOLLIAMS: Who was that?

Mr. YOUNG: Mr. W. C. Whittaker; and Mr. Thomas Ewart, president of the Crowsnest Pass Coal Company; also Mr. William Wilson, vice-president and general manager of Canmore Coal, of Canmore, Alberta; Mr. Brusset, vice-president of West Canadian Collieries; Mr. "Bill" Blackstock, who is an engineer, Manix Company Limited; Mr. "Ted" Simpson, who was general manager of Canadian Collieries; and myself.

Mr. McGREGOR: Can you tell us what the Japanese government would be prepared to pay for coal at the pithead in western Canada?

Mr. YOUNG: They do not ask for prices at the pithead. They ask for a price loaded and trimmed on the vessel at seaport, at Vancouver.

Mr. McGREGOR: The only way we could understand it would be to know what they would pay for it at the pithead, and what Canada can produce coal for.

Mr. YOUNG: It is easy to work back from the loading price. The Japanese can pay for that ocean shipping in yen, so they do not want a price laid down in Japan. They want a price loaded on the boat in Vancouver.

Mr. UREN: They provide their own vessels; they will not allow anybody to charter one.

Mr. YOUNG: The price has to be in United States funds. The Japanese do not deal in Canadian funds, so the price they quote is in United States funds for the long ton.

Mr. WOOLLIAMS: That works out to about 360 yen to the United States dollar.

Mr. YOUNG: Yes, but that does not make any difference, because if they exceed it in Canadian funds, they would simply put up more yen.

Mr. WOOLLIAMS: Can you give us a rough figure on that last question?

Mr. YOUNG: I will give the whole list of prices so you will know what the relative position is.

American coal costs the Japanese about $20 a ton laid down in Japan; that is, $20 a long ton, for United States coal.

The Australian price is $10.08 loaded on the boat at Melbourne, Australia, per long ton, loaded and trimmed, in United States funds.

Mr. LEDUC: That first figure was for coal landed in Japan?

Mr. YOUNG: That is right. But the price is about $12 per ton loaded at Mobile, Alabama or at Newport News.

Mr. WOOLLIAMS: Would you say that the American coal got $12 and the Australian coal got $10 and the difference would be due to the better quality of the Australian coal?

Mr. YOUNG: American coal is classified as a heavier coking coal than Canadian. But both Australian and Canadian coal is quite satisfactory to the Japanese.

Mr. WOOLLIAMS: Comparatively speaking, because it is heavier coal, would you say it was cheaper at $12 from a heat value point of view than the other coal at $10? When talking about competitive fuels, you are talking about B.T.U.'s of heat.

Mr. YOUNG: That is right; but in this coal the B.T.U. is not the complete answer; the coking qualities come first.

Mr. WOOLLIAMS: Would you say that the coking quality of American coal is higher than that of the Canadian or Australian and therefore at $12 it would be cheaper?

Mr. YOUNG: You read it as stronger, not as higher; however, that is a different question. The Japanese have expressed to us—as probably they have expressed to you as well—that they felt they were paying too much for American coal.

Mr. WOOLLIAMS: One of the things I would like to ask you about is this: a big complaint they had was that as the treasury of the United States will buy their industrial steel products—and our dumping regulations are rather severe—they feel that if they had to, they would buy a lot more American or Australian coal, because in that case dumping duty regulations are not so severe.

Mr. YOUNG: I want to bring that out in a moment; I was dealing with the price and quality of coal.

Mr. WOOLLIAMS: Very well, please deal with the price first.

Mr. YOUNG: Once they get the Australians signed up for a contract, let us say for 270,000 tons at $10.08 per ton, they turn around and say to us: we will give you an order for 100,000 tons at $10 per ton loaded and trimmed on the boat at Vancouver—that is for long tons, in United States funds.

Mr. KINDT: There was an attempt on the part of the Japanese to play the Australians off against the Canadians?

Mr. YOUNG: It looked that way to us, because when we visited Japan first, we attempted to negotiate with the Japanese steel mills, but we could not get down to the question of price. We wondered why this was, but we found out that the Australians were to come a week after, and that they were going to negotiate with them.

After we had done all we could, we moved off the scene and left it to them. We were in Hong Kong on our way home when we got word to go back to Japan immediately. Then we found that the Japanese were having a little trouble in their negotiations with the Australians, and they were using the Canadians as a threat. But they finally got the position cleaned up, and they got the Australians signed up; and then they turned around and used that on the Canadians. They are experts at "playing two ends against the middle".

Mr. COMTOIS: They are good traders.

Mr. YOUNG: Yes. I cannot blame them for that; however that is the position at the moment. And as it stands right now, the difference between the Japanese price offered and our price tendered is $1.02, loaded and trimmed on the boat at Vancouver. And when I say our tender, I refer to my company, and it is no secret; I do not have to worry about that. My competitors know what our bid was, because I told them both.

Mr. PAYNE: The price you are quoting is loaded and trimmed at Vancouver?

Mr. YOUNG: Yes. That is the price on the completion of the bulk loading facilities at the end of June of this year.

Mr. GUNDLOCK: That difference in the price of $1.02 loaded and trimmed at Vancouver—is that the same difference when compared to your price at the pithead?

Mr. YOUNG: No. Our pithead price is better because the Australian mines are only 25 miles from the sea, while we are 717 miles from the sea; so our pithead price is actually lower than the Australian price.

Mr. GUNDLOCK: Is there the same difference with respect to the Australian price?

Mr. UREN: It has to go back to the pithead, because that is the realization that the operator gets for his product; so everything is priced at the pithead price, and whatever extras there are, they go on top of that price.

Mr. KINDT: The $4 subvention is put on top of that?

Mr. YOUNG: Our offer—our price, is $11.02.

Mr. MCGREGOR: That is at Vancouver?

Mr. YOUNG: That is right.

Mr. MCGREGOR: What would it cost you to produce that coal?

Mr. YOUNG: $7 per short ton at the mine.

Mr. UREN: That is $7 for the 2,000 pound ton at the pithead; and that is $11.02 per 2,240 pounds trimmed on board the vessel at Vancouver.

Mr. MCGREGOR: You can make it a lot plainer if you want to.

Mr. YOUNG: $7 per short ton means $7.84 per long ton.

Mr. McGREGOR: I do not know anything about coal.

Mr. YOUNG: A long ton is 2,240 pounds. That is how you export coal. It is sold by the long ton, but we do our business by short ton.

Mr. McGREGOR: Perhaps you might explain it this way: you say it costs $11.02 to lay it down at Vancouver. Can you explain how that $11.02 is made up?

Mr. YOUNG: Our coal is $7 per short ton, and $7.84 per long ton. The freight is $5.33 per short ton, or $5.97 per long ton. You add that in.

For loading and trimming the cost is $1.37 per long ton in Canadian funds. That adds up to $15.18. Also, we are awarded a subvention of $4 per short ton, or $4.48 per long ton, so you subtract $4.48 from that, and it comes out to $10.70. Now, that is in Canadian funds.

We have to change over to United States funds because that is how we are paid. So you add three per cent to that, which is 32 cents, which makes it come to $11.02. That should be clear.

Mr. McGREGOR: You are right.

Mr. YOUNG: I do not think you can get it explained any clearer than that.

Mr. WOOLLIAMS: I do not think any of us realized how the $11.02 was arrived at, but now we know.

Mr. YOUNG: There you are. Is that plain enough for everybody? Does everybody understand what it is? There is nothing to it. It does not require any mathematical genius to figure it out.

Mr. WOOLLIAMS: Would you mind answering my question relative to the details of the Australian, the United States, and the Canadian situation with reference to our dumping regulations, and what their attitude is when they are dealing with our country? Are our regulations more severe than those of Australia, and is that why they were given the bigger order?

Mr. YOUNG: No, not in that way. They thought Canada should buy a little more material from Japan but they did not accuse our country of acting unfairly.

The CHAIRMAN: Did they specify the materials?

Mr. YOUNG: Well, steel and steel products.

Mr. WOOLLIAMS: Were you dealing with men not representing the government—that is, private concerns?

Mr. YOUNG: Both.

Mr. WOOLLIAMS: Did you deal with a company by the name of Mitsui Bussan and Company Limited?

Mr. YOUNG: Yes.

Mr. WOOLLIAMS: And Daiichi Bussan Kaisha Limited?

Mr. YOUNG: Yes, we dealt with the steel companies. First of all there was Nakayama, Nippon Kokan, Fuji Iron and Steel, Yawatta Iron and Steel, and Kawasaka Steel Company.

Mr. ROBICHAUD: Could Mr. Young advise us as to the quantity of Australian coal imported by Japan per year?

Mr. YOUNG: Last year it was 175,000 tons and this year 273,000 tons.

Mr. ROBICHAUD: If we take it on the figures you have just given us, establishing a price of $11.02 landed at Vancouver, and if you had an additional subsidy of $1.06 per long ton you could compete with the Australian coal.

Mr. YOUNG: Yes.

Mr. ROBICHAUD: If we can meet the price we can get the business?

Mr. YOUNG: Yes.

Mr. ROBICHAUD: How does the quality of your coal compare with that of Australia? There is not only the price to be considered; you also have to consider the quality of the coal, the number of B.T.U.'s per ton.

Mr. YOUNG: Actually on a cleaned basis there is very little difference between Australian coal and our own. That is, on a washed basis.

Mr. ROBICHAUD: Are you prepared to state that, if you could deliver coal at Vancouver at the price of $11.02 a ton, less $1.06 additional subsidy, you could compete with Australian coal and could obtain orders from Japan?

Mr. YOUNG: Quite definitely. I have an order in my pocket right now.

Mr. WOOLLIAMS: Could you get more orders?

Mr. YOUNG: Yes, but I would like you to remember that the Australians did not start off in their business with the Japanese with large scale orders; they started with small orders and let the Japanese work on their coal. In this way they became accustomed to its peculiarities. This year the order is almost double that of last year. That is about the same way that our business would go. For this year our business would be about 100,000 tons. We have orders for that amount now.

Mr. ROBICHAUD: Provided you can meet their price?

Mr. YOUNG: Yes.

Mr. UREN: Mr. Young, there is one more subject you had better mention.

Mr. YOUNG: Regarding the 100,000 tons, we want them to use that by November of this year to enable us to sit down and negotiate with the Japanese in December with regard to next year, or the next five years. However, we have to finish this complete testing on this 100,000 tons.

Mr. ROBICHAUD: How much did you sell them last year?

Mr. YOUNG: Over two thousand tons.

Mr. KINDT: In addition to that there were 40,000 tons from Canmore?

Mr. YOUNG: That is not the same coal or for the same purpose.

Mr. MCQUILLAN: Is your figure of 100,000 tons the total potential order from Canada?

Mr. YOUNG: For this year, yes.

Mr. MCQUILLAN: That is the potential order from Canada?

Mr. YOUNG: That is the order we have right now.

Mr. ROBICHAUD: Is it from your own firm or is it the total order from Canada?

Mr. YOUNG: Yes, from three firms in the Crowsnest pass area.

Mr. WOOLLIAMS: Mr. Chairman, I would like to have a question clarified a little further. I am not sure that we received a definite answer to it. It was mentioned that if the subvention was increased by $1.06, $1.02, or $1, more or less, would you then be able to compete with Australia and the United States? Also, in your opinion, could you obtain orders for more coal from Canada?

Mr. YOUNG: In my opinion, yes. However they would not be obtained this year. 100,000 tons is all that will be obtained this year.

Mr. WOOLLIAMS: Yes, but we are looking toward the future.

Mr. YOUNG: So are we.

Mr. WOOLLIAMS: If the subvention in the future is increased by $1.04 or $1.06, you say it would assist us in meeting the competition which Canadian coal is now meeting in Japan?

Mr. YOUNG: Yes.

The CHAIRMAN: Is that the Japanese final bid?

Mr. YOUNG: They said that it is firm until March 31st of this year.

Mr. McQUILLAN: As you know, we are exporting considerable quantities of iron ore from British Columbia to Japan?

Mr. YOUNG: Yes.

Mr. McQUILLAN: Do you give any consideration to the fact that they are receiving iron ore from us?

Mr. YOUNG: No, they do not give it any consideration. They figure they are paying for it, the same as they would from other countries.

Mr. WOOLLIAMS: Would they not save $1.50 or $2 a ton if the loading platform facilities at Vancouver were finished, and that way the coal could be loaded at Vancouver rather than at Seattle?

Mr. YOUNG: The price we are speaking of now is based on the completion of the bulk loading facilities at Vancouver.

Mr. WOOLLIAMS: That price would be if it was loaded at Vanceuver?

Mr. YOUNG: I already said that. Past shipments have been made from Seattle, and to go down there it is another $1 or $1.10 higher per ton than at Vancouver.

Mr. WOOLLIAMS: If we were able to sell 100,000 tons by loading through Seattle, when we load through Vancouver we will be able to sell at a price $2 lower.

Mr. PAYNE: These prices are established with the facilities in operation at Vancouver; they are based on the idea of facilities being available there in June?

Mr. YOUNG: Yes.

Mr. SIMPSON: Are those facilities available now?

Mr. YOUNG: Mr. Phillips estimates that bulk loading facilities will be complete by the end of June or the first week in July. I received this information by way of correspondence with Mr. Phillips.

Mr. STEARNS: In order to survive, how many thousands of tons per year do your three companies have to produce?

Mr. YOUNG: More than one.

Mr. STEARNS: How many?

Mr. YOUNG: We could quite nicely handle a couple of million tons.

Mr. STEARNS: In order to survive, what would be the minimum?

Mr. YOUNG: We are a long way down; another million tons and we could scrape along.

Mr. STEARNS: Another million?

Mr. YOUNG: Right now, we are doing nothing.

Mr. PAYNE: I have a question relative to this Japanese proposal and with regard to your hope of establishing an increase from year to year. Is that contingent upon an increased import of finished steel or other products from Japan; or with no strings attached?

Mr. YOUNG: No. We shy away from a situation of that kind because we have no authority to speak for the federal government. We stay away from it.

Mr. PAYNE: In what form are the Australians accepting payment?

Mr. YOUNG: Part payment was made by having ships built in Japan and turned over to them.

Mr. PAYNE: What about the other competitive suppliers to the Japanese market?

Mr. YOUNG: The Russians were accepting steel and steel products. The Americans would do business in cash, but there are trading facilities there.

Mr. KINDT: In other words, the Japanese did approach the mission in regard to bringing steel and other commodities into the coal picture?

Mr. YOUNG: No. We would not entertain any thoughts along that line; we had no authority to discuss matters of this kind.

Mr. UREN: It was understood at a meeting in Ottawa between our coal board, the Department of Trade and Commerce and the ambassador from Japan that the mission was an exploratory one, and limited exclusively to coal. Therefore, the Japanese did not bring it up. It may have been discussed privately.

Mr. YOUNG: It was discussed privately.

Mr. KINDT: I have one other question in connection with that. In your opinion, does that place the Canadian coal trade at a disadvantage in regard to entering the Japanese market? Should consideration be given to that or should it be kept directly on a coal basis? You mentioned that the Australians and the United States are going into it to a certain extent because they have a close financial relationship with Japan. To what extent are we in a position to give consideration along this line?

Mr. YOUNG: I should not answer your question, Mr. Kindt. The answer is here in Ottawa, and the question should not be asked of me.

Mr. UREN: I will give you the answer from the concensus of a joint mission that went over there. In the first place I do not take exception, but I am very doubtful that an order for 100,000 tons of coal at this time could be accepted. The orders might be extended by the joint steel companies but I am not too sure that their minister of International Trade and Industry would release the funds. It is one thing to get the order; but the next step is to get the allocation of funds. When this situation arose I knew they were not too far apart in regard to prices. I went to Mr. Whittaker, the chairman of the mission, and he gave me to understand that he had called together all the coal operators, because I said if necessary, I was quite prepared to go to the government and request an increase on the $4 subvention. They refused it and said, "no", we do not want you to do that; we want to continue our negotiations with the Japanese and would like to have further tests made—some Australian coal tested in Canada by the Fuels Division of the Department of Mines and Technical Surveys.

Mr. Burrough, who went on the mission, was quite explicit in what he would like to do. We arranged through the chairman of the coal board in Australia for shipments of the types of coal produced for the Japanese on a short-term and long-term basis, to come to Canada to be tested. We are of the opinion that our coking coals are a little more firm, and better than the Australian coals. The only way this could be proven is by actual tests. Selected tonnages of Australian coal are en route and should arrive in Ottawa next month, to be tested by the fuels division. The bills of lading were received a few days ago.

As you can see there is more to it than the fact that we might give them another $1 or $1.06; and, as I said, the concensus was that we desire business for the next four or five years.

Take the 100,000 tons; they tried to renege on it and drop it down to 60,000 tons. They tried to include 40,000 tons from Canmore, but I refused the idea. They did not want to ship anything until later in the year. The shipments would have to be accelerated so the tests could progress in a big way rather than a small way. This would enable the operators to sit down with the Japanese in October or November and close for another year or, for five years. I advised them to shy away from full five years because one government could not commit another government on subventions for the payment of money, even should they be returned to power.

It was my belief, and remains my belief, that they would put in their tenders and continue their negotiations; and we would hurry as we could with the testing. However, they do not want to break down the $4 maximum at this time.

Mr. WOOLLIAMS: Would you elaborate in regard to your reference to Canmore? You dealt with Bill Wilson, and he is one of my constituents.

Mr. UREN: I think "Bill" is going to get an order for 40,000 tons of coal for delivery this year. He is shipping it in small quantities now, in small vessels, and we have complained about that because it is very costly for Wilson to operate on a "hit-and-miss" basis, say, shipping 5,000 tons today and 5,000 tons three weeks or six months from today. I have not received an up-to-date progress report on that, but it looks as though he is satisfied, and that they are satisfied. As far as they are concerned with their use of the coal in Japan, they are more than satisfied; they are delighted and want it.

Mr. PAYNE: There is one other subject on which I would like an expression of opinion. Assuming the potential markets develop in Japan in quantity and over a period of four years, how stable is your labour market? In the event these exports could be established by virtue of increased subventions, how stable is the labour market in the Crowsnest area, assuming these mines become operative? Are we going to run into a labour contract which will put up the demands for subvention?

Mr. YOUNG: The stability of our labour situation in the Crowsnest Pass is very much in common with that across Canada.

Mr. WOOLLIAMS: While we are on that subject, and although I know there are different grades and types of labour in the coal mine, could you furnish the average wages for the average miner in Canmore or Crowsnest Pass?

Mr. YOUNG: I have some figures in my hand. Our contract miner's, average wage last year was $27.26 per man per shift.

Mr. WOOLLIAMS: I know we are dealing with a subject which is familiar to you; how long is a shift?

Mr. YOUNG: Eight hours. Our contract miners last year worked 151 days at an average daily wage of $27.26; that was for eight hours work.

Mr. UREN: It was $27.26 for eight hours.

Mr. YOUNG: And our other employees adveraged a total of $3,043 in the year, which works out to $16.50 a shift.

The CHAIRMAN: Do you want to pursue your question further, Mr. Payne?

Mr. PAYNE: No.

Mr. ROBICHAUD: If an increase of subventions were granted allowing additional export coal to go to Japan, what would Canada's position be in relation to her present international trade agreement under GATT?

Mr. UREN: We have cleared with External Affairs and with Trade and Commerce, and as long as we do not enter the United States or any of its territorial possessions we are all right.

Mr. KINDT: If there are no further questions on this subject—

Mr. MCGREGOR: Can you tell us this: when you give us a price of $10 for coal, is there any subsidy paid by Canada in that $10?

Mr. YOUNG: Yes. That is the price arrived at after providing the $4 subvention which is paid by Canada.

Mr. MCGREGOR: The Canadian government would pay $4?

Mr. YOUNG: Yes.

Mr. ROBICHAUD: What would our position be, in relation to the United States if we were given increased subventions which would automatically reduce or affect the export of coal from the United States to Japan?

Mr. UREN: Since they have not contested it so far, I see no reason why they would contest it if larger orders came from Japan. You must remember that contract miners, and the force working for "Dave" Young and other coal operators in the area, are members of John L. Lewis' union—and that John L. Lewis is just as anxious to have full employment of his miners in Canada as he is in the United States.

Moreover, the quantity we could sell over there would be so small compared to the total requirements of the country that I am sure no legislation would be brought down, or there would be no serious objection raised.

You can always get an objection from a border state senator or congressman, more particularly since they export coal from Utah. But I do not think they would get a very welcome hearing in Washington on it.

We would certainly make a four year contract for the sale of it if we had an opportunity to do so.

Mr. WOOLLIAMS: You said that the coal from Canmore was used for a different purpose than the coal from the Crowsnest Pass area.

Mr. UREN: All the Canmore coal that has been sold over there at the present time has gone into gas plants, although some of it has been tested at some of the steel plants. We know it is good coal and has fair coking qualities.

Mr. WOOLLIAMS: That is an anthracite type of coal, is it not?

Mr. UREN: Yes.

Mr. WOOLLIAMS: Has there been as great a demand for anthracite coal from Canmore as there has been for the coal in the Crowsnest Pass?

Mr. UREN: No, their markets are far more restricted than the markets for the coking coals, because coking coal can be used for steaming purposes and so on, whereas the Canmore coal is somewhat limited as to its use because of its shorter flame and low volatility.

Mr. MCGREGOR: What other export possibilities might there be? You have been talking about the Japanese market, but what others have you in view?

Mr. UREN: None of any promise.

Mr. STEARNS: If a million tons of your coal were exported, could you tell us what that might represent in man-hours?

Mr. YOUNG: Just divide that figure by about four.

Mr. STEARNS: Do you not mean multiply it by four?

Mr. YOUNG: No, divide it by four, and that will give you the man-shifts necessary to produce that coal.

Mr. STEARNS: In other words, 250,000 man-hours?

Mr. YOUNG: 250,000 man-hours at an average of $18 per day, as between the contract miners and the contract labour. That will give you a good idea of how much money would be contributed to the economy of the area.

Even this coal sold to Japan would contribute approximately $425,000 to the economy, and you can double that figure by the contributions made indirectly by industry; you can just about double it; it would be very close to $1 million.

Mr. MCGREGOR: Mr. Young stated at the beginning that coal would come back. Does he mean there would be more coal used in the future than there is at the present time?

Mr. YOUNG: Yes.

Mr. MCGREGOR: How do you arrive at that?

Mr. YOUNG: Just look back for a few years and see the rise of power consumption in Canada and the expansion of our economy, having regard to the increase in our population and the demand for petroleum products as we see it today.

The supply of petroleum products, whether it be crude oil or gas, is not inexhaustible; and due to demand, the price of our petroleum products can only go one way, and that is up.

Due to the increased demand for power, and due to the increased expansion of our economy and of our general population, and having regard to the price of petroleum products, all these, or a combination of them, will bring coal back into the picture much faster than a lot of people think.

Mr. MCGREGOR: Would it bring coal back without the payment of a subsidy?

Mr. UREN: No.

Mr. MCGREGOR: I understand how any man may make a statement that something will be used more and more, provided the government is going to pay the shot.

Mr. UREN: Now you are getting into a general discussion. We are not standing still as far as western coal is concerned in the hope of getting 100,000 tons shipped to Japan, or 500,000 or even one million tons.

We are also working closely all the time with the power people in the belief that hydropower is passing out of the picture, except in a very few areas.

With the expansion by the Ontario Hydro Commission at the head of the lakes, and with the expansion of power that is absolutely necessary, and which is a decided view throughout western Canada, we are working with the Calgary power company, and we have been working with them over the past two or three years.

We are so close to what we hope is some conclusion that at our next meeting of the board, on April 10 and 11, this subject is going to be quite fully taken up with respect to the expansion of power. And, who knows—we may recommend to the government that they have a power assistance act that covers the west as well as a power assistance act which covers the maritime provinces.

Again, our experience has proven—but that is for another department—that as far as the use of coal is concerned, we are not only actively studying but actively trying to make arrangements with the power companies whereby future thermal stations as far as possible will be coal users. That is what we are endeavouring to do, as regards the western coal industry. I cannot give you a better picture today than I gave you last year, when it was a pretty gloomy one; but they are still breathing.

What we want to do is to continue to keep them breathing, and that includes certain mines. We know it takes a long time to get them working, until some of these things break; because we are all of the opinion, as are the best economists in the world, including those in Canada, that coal must come back into its own some day.

Mr. KINDT: I would like to add a few more words and enter as evidence the thinking of the Power Commission of Alberta in 1955, as given in their submission made to the Gordon Royal Commission, which you may find in the Alberta brief.

In that brief they stated that in 1955 three per cent of the power in Alberta was produced from coal, that by 1980 there would be five times as much electrical energy produced, and at that time they estimated 45 per cent of it would be produced from coal.

That is from an industrial source, the power commission of Alberta. It ties in with what Mr. Uren said, and it points up the importance of coal, as well as the importance of keeping the coal industry operating to at least some degree of working capacity.

To come back to one other point, and that leads into the next subject I have in mind: that is, thermo-electric power and the market for coal in western Canada. I wonder if Mr. Young could throw any light on potential thermo-electric power development, and its possibilities in relation to the East Kootenay and Libby dam project, which is now being considered. Would you care to comment on that Mr. Young.

Mr. YOUNG: That is a question which should be answered by a power expert. I do not profess to occupy that position. However, since I live out in that part of the country, we do learn something about the power situation. Right at the moment, speaking as of now, there is no power shortage. In fact, we have a surplus of power in our general area.

But if there are no new power plants built, or no new additions to the present plants, I would say that in three, four or five years there could be a power shortage and I say that quite frankly.

A thermo power plant has been mentioned as one of the ways out for the coal industry in southern Alberta. That may be one of the answers if proper steps could be taken by the government and by power companies out there to restrict their proposed plant expansion at Kananaskis, Wabanum and Medicine Hat: curtail these proposed extensions for the next few years and build a plant in the Crownest Pass, making it a thermo power plant. That could be one of the answers. But the details would have to be worked out far beyond anything I am saying at the moment. Nevertheless it is a basis for thought.

We have the coal right there, and it is very cheap for power purposes. We have the water, and we have already the existing lines.

Mr. KINDT: In other words, the potential is there for thermo-electric development, and it depends on the market for the power.

Mr. YOUNG: That is correct.

Mr. KINDT: Your estimate would indicate that probably within three or four years that demand would be there?

Mr. YOUNG: That could be right.

Mr. KINDT: If industrial development takes the course that is anticipated?

Mr. YOUNG: That is right.

Mr. KINDT: That points up the thought expressed by Mr. Uren, that the board would consider an act to include western Canada. I come from that area and I welcome Mr. Uren's statement. I would urge its progress with all dispatch.

Mr. UREN: There is a reservation—the coal board is just a post office or a paying agency. The people who will put in the act are the Department of Northern Affairs and National Resources. Normally we work together.

What we are trying to figure out is something which we might take to the Department of Northern Affairs and National Resources and say that we believe a similar act, or somewhat similar assistance might be acceptable. I do not say we would want exactly the same act; that would be up to them. But we are trying to find uses for coal, and I think it is our duty, if we see a potential use for coal, to bring it to the attention of the responsible department, to see what they have to say about it.

Mr. PAYNE: What steps has the board undertaken, not so much in relation to this restricted area, but rather to the sale of power from coal sources

within the immediate area of southern Alberta, and its export to the United States where there is a known shortage running far to the south.

Mr. UREN: The board staff consists of 19 people. Therefore, we do not make any cost studies. Such studies are being exhaustively made by people with whom we are in touch all the time. Those areas have been gone over with a fine-tooth comb.

Mr. PAYNE: What does the cost factor apear to be?

Mr. UREN: Perhaps Mr. O'Brian could answer your question.

Mr. C. L. O'BRIAN (*Assistant to the chairman of the Dominion Coal Board*): There is no exact information on it.

Mr. UREN: I am sure that the Calgary power company can give it to you, as well as some other people who are in the field.

Mr. PAYNE: Mr. Chairman, I feel that is information this committee might well have. It is well known that even with the whole potential of the Columbia river development, the areas to the south are potential areas for electric power, and that they may have a power problem which will affect them two ways: first, through the lack of power, and secondly, the water resources requirement which would arise.

Mr. UREN: That is one of the big problems—to supply the required water resources. There are many places where they can get coal, but there are only a few places where they can have adequate water resources.

I do not think you gentlemen will get the answer to that problem until a government organization, or somebody else, or the national energy board, takes that over.

Mr. PAYNE: Whom do you suggest as a witness to bring us some facts in that connection?

The CHAIRMAN: I think that would come under the next department assigned to us.

Mr. UREN: The Calgary power commission has a man.

The CHAIRMAN: We shall give that consideration.

Mr. KINDT: Would it be possible to have the president of Calgary Power at our next meeting? He is just down in Montreal. Would it be possible at some future time to have him give evidence on the point which has been raised?

The CHAIRMAN: We shall give this study. I am sure we can get the evidence.

Mr. GUNDLOCK: I have a question. Mr. Young has experience with Alberta coal. I wonder if he could make a statement or offer an opinion as to whether there is Alberta coal which he thinks could or should be competitive in the Ontario market.

Mr. KINDT: Before we get into that subject, might I ask Mr. Uren one other question? On page 68 of the Coal Boards report there is to be found a copy of the Act to Provide Assistance in Respect to Electric Power Developments in the Atlantic Provinces. At our last hearings, a year ago, it was stated that that particular act also applied to the western provinces. Is that true?

Mr. UREN: No.

Mr. KINDT: The Minister of Northern Affairs, I understood, said that if there was a thermo-electric power project the west had, or which they wished to have considered or implemented, the laws were on the statute books for doing it.

Mr. UREN: They said that they would give consideration to it, which probably is the incentive we have in the coal board to work on it actively. The act, I am sure, would come under the same department as the one affecting the Atlantic Provinces, but there is no room whatsoever in the Atlantic Provinces Power Development Act for the western areas, because it definitely states that the Atlantic Provinces means Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland.

I take it to mean that if the minister or the deputy minister of the department indicate that the west or any other part of Canada has a thermo power proposition to be put to the government, they would give it consideration. That was the key in the incentive we had in the Dominion Coal Board to work on it actively since that time, to see if we could bring it into being, but we would not administer it.

Mr. KINDT: I take it there is no act on the statute books which would permit the Minister of Northern Affairs and National Resources to implement the project regardless of the soundness of the thermo-electric project?

Mr. UREN: They would have to pass a new act.

The CHAIRMAN: Yes, it would need a new act.

Mr. KINDT: That is what I am getting at.

Mr. UREN: It would definitely need a new act.

Mr. KINDT: We were led to believe that if a satisfactory project were advanced, it could be implemented.

The CHAIRMAN: It could be implemented but by a new act, by an act of parliament.

Mr. KINDT: Not with presently existing statutes?

Mr. WOOLLIAMS: I think that is a legal point of view. I take the same point of view that it could apply if you had new legislation.

The CHAIRMAN: That is right. The act definitely states that it is to provide assistance in respect to electric power developments in the Atlantic Provinces.

Mr. ROBICHAUD: Mr. Uren a while ago discussed the possibilities of the future use of coal for thermo power. I wonder if he could tell us how serious is the threat of nuclear development upon the prospective or future use of coal for the production of electric energy in thermo power plants?

Mr. UREN: No, I am afraid I cannot, other than what I have learned from other people. If Dr. Convey were here he could tell you. I am not like Will Rogers; I do not read it in the newspapers, but I have talked with people who are supposed to know. Scientists are doing wonderful things and it does not take as long as it used to. But Dr. Convey, as recently as the last conversation I had with him, said it is a long way in the distance, plus the fact they do not know just exactly whose idea is going to be predominant as the nuclear power.

Mr. Buck, Chief, Mineral Resources Division of the mines branch is here, and he can probably answer your question.

The CHAIRMAN: That is a technical question and should be answered by a scientist.

Mr. COMTOIS: Mr. Buck and Mr. Janes from the Fuel Division are with us this morning.

Mr. ROBICHAUD: It all depends on what position you wish to take. Perhaps, if we wish to limit this meeting to a discussion with Mr. Young, we should wait until the next meeting to discuss this other matter.

Mr. KINDT: May I revert to the question raised by the hon. member from Lethbridge, Mr. Gundlock? Could Mr. Young give us a brief statement of the markets in Ontario for Alberta coal?

Mr. YOUNG: The question as to markets for Alberta coal in Ontario could be very well answered—in fact, much better answered—by Mr. O'Brian or Mr. Uren, because, as I said, the market position in Ontario is fluid with the introduction of gas and American coal, and their position is changing. We have shipped some coal in the past a considerable distance up north and west of North Bay—Abitibi, Kapuskasing, Smooth Rock Falls and around the Dome Mines area. There is some coal going into that area right now.

Mr. SIMPSON: Would that be for domestic use?

Mr. YOUNG: No, for industrial use. There are large pulp and paper mills at Kapuskasing, Smooth Rock Falls and Abitibi. At Dome Mines there is base metal and gold mining.

Mr. SIMPSON: From where do the paper mills get their coal?

Mr. UREN: They are getting gas.

Mr. YOUNG: As I said, the market position is fluid. You cannot say today what the market is going to be in three months time. I would say this as a suggestion to Mr. Uren and Mr. O'Brian. They must have an intimate knowledge of the coal consumption in Ontario, particularly northwest of North Bay. They must also know where that coal is coming from; and they know where we have a chance of becoming competitive in that area. I think that information should be made available to coal operators in the west. I have been through that territory several times myself; but what I found out last year does not necessary apply today, and it costs a considerable amount of money to travel all over that area. I travelled 145 miles in a taxicab one night when it was ten below zero and there was two feet of snow on the ground.

Mr. WOOLLIAMS: Reverting, Mr. Chairman, there are two or three questions in regard to the Japanese question I would like to ask. I may be recovering some of the ground. The mission which went over there dealt pretty fully with coking coal. Were there any discussions in regard to any other type of coal for any other projects?

Mr. YOUNG: With the exception of the gas coal from Canmore, the answer is no.

Mr. WOOLLIAMS: I take it you discussed it with the steel companies and with government officials in Japan.

Mr. YOUNG: Yes.

Mr. WOOLLIAMS: Are they buying any other type of coal from anywhere else?

Mr. YOUNG: Not if they do not have to. A part of the deal with the Russians was that they must take a certain percentage of steam coal; that is non-coking coal—bituminous coal for steam raising purposes. One thing the Russians insisted on was that they take a certain percentage of steam coal. They disliked that in Japan because they have their own.

Mr. WOOLLIAMS: You probably read the same article as I did. Six months ago the Financial Post had an article in reference to Russia, where they boasted they could deliver any type of coal they had anywhere in the world, including Canada, cheaper than it could be provided in this country or in the United States.

Mr. YOUNG: The whole matter there is government-controlled; ours is not.

Mr. WOOLLIAMS: I was asked some questions by officials of Mitsui Bussan and Company Limited in reference to steam coal in Canada, and what we thought the quality of our coal was.

Mr. YOUNG: The only information I received was from the coal report put out by the coal board. There is another possibility, and this is only a possibility at the moment. Depending upon the weather situation in Japan and the demand for power, they have imported a little steam coal for power generation. They expect in five years' time to be importing additional steam coal for that purpose. Right now they are importing a small portion, as conditions demand—just spot shipments.

Mr. WOOLLIAMS: I take it the mission was interested in developing a market, as you described it, for coking coal?

Mr. YOUNG: That was our first consideration.

Mr. WOOLLIAMS: And there was no real discussion on the other matter; it was mentioned but not fully explored.

Mr. YOUNG: Correct. We had considerable amount of information supplied to us by the trading companies in Japan, as to the tonnage of the various coals required, and the pacific purposes of each coal.

Mr. STEARNS: At no time were you ever asked by the Japanese, either the government or the steel people, to deal in barter by taking lumber products or textiles from Japan for our coal.

Mr. YOUNG: Not officially.

Mr. WOOLLIAMS: Were you approached unofficially? That was mentioned to me on several occasions when I discussed it with four or five firms you mentioned. They said if we could trade with you on other products, we would be willing to negotiate more coal deals.

Mr. YOUNG: These trading companies have no authority to talk about coal deals; they come from the steel companies, but we have had the same thing. We have had members of the trading companies talk to us in the hope Canada would purchase more Japanese goods.

Mr. UREN: It was the trading companies and not the officials who were designated to deal with us who brought this matter up. It was the trading companies who did the talking, and not the officials.

Mr. YOUNG: Many of these representatives from the trading companies are working on a commission basis. They are trying to sell and are compensated accordingly.

Mr. STEARNS: You know, sir any time a mission goes to Japan, the public of Canada immediately become suspicious, especially if you are a lumberman or in the textile business.

Mr. MCFARLANE: There has been a great deal said about thermal power. Could you advise how many thermo-power units it would take to keep a mine operating. We have heard a great deal about it and it is a point I would like to have cleared up.

Mr. YOUNG: It would be nice to have 100,000 kilowatts.

Mr. MCFARLANE: Would that keep a mine operating?

Mr. YOUNG: It would run about 1,000 tons a day.

The CHAIRMAN: Are there any other questions to be directed to Mr. Young?

Mr. KINDT: I have one other question, Mr. Chairman, I think Mr. Young just touched on it. In reading through the coal report and certain other reports, especially the O'Brian report of 1950, I find a chart in there showing the markets for coal in western Ontario and elsewhere in Canada. If the coal board can bring that information up to date to indicate where any coal is being sold in Canada, regardless of its sources and make that information available to the operators of western Canada so that they could compete and bid on that market, it would be a good thing. I think the coal board would be performing a service which would be appreciated by the operators in the west. I think in calling it to their attention they might put their

statistical staff to work and make that information available to the operators out there. Mr. Young, you and I discussed that matter the other night. Could you put your finger on the particular report and say a few words about it.

Mr. YOUNG: There is a report compiled by Mr. O'Brian. It is a report on the coal and energy in Canada since the war, and contains forecasts up to 1975. At the same time, he drew up a map, which is contained in his report, and shows where different tonnages are sold throughout western Canada. That is the report to which Dr. Kindt is referring, and it could be brought up to date.

Mr. KINDT: In this way the operators could be advised of where there is a market for coal, so they in turn could compete with United States coal, Nova Scotian coal or coal from any other source. I think it would be in the interests of those who are in those marketing areas to have as much competition as possible in supplying their needs for coal.

Mr. UREN: You surprise me, because that is published every month by the Department of Trade and Commerce Bureau of Statistics. We receive it. Mr. O'Brian keeps his chart up-to-date and we are in touch with the coal operators or their managing director almost daily. In fact, we are in touch with some of the operators. We see some very strange things as far as the sales and organizations of coal companies, whether they are in the west or in the east. I had occasion yesterday to find out that on a sizeable contract—and it is one well worth having, one of our contracts—we got one bid. It was for one of our big penitentiaries, and not a single one of them came from Drumheller. Yet, they were customarily the suppliers of the coal. I mention that as a side issue. The Dominion Bureau of Statistics and ourselves keep them informed of the markets, and what is going into those markets. As soon as we can get this year's sales campaign figures, we will bring it up to date again. What we are going to find out is that where we had coal last year we are going to have gas this year. Everybody is losing. All coal producers are losing.

Mr. KINDT: Thank you, Mr. Uren, for giving us this information, because if it is available and the operators are not using it and do not know about it, that answers the question.

Mr. STEARNS: Could I ask Mr. Young one more question? In the days when your company, and the other companies, did ship into northern Ontario, what, if any, subventions did you receive at that time?

Mr. YOUNG: Much lower than they are today. It was $2.50 in those days.

Mr. STEARNS: It was $2.50 per ton in Kapuskasing?

Mr. YOUNG: For a period of three years we shipped about 40,000 tons a year into that area, and it was the increase in freight rates that cut us off at that time. They advised us the moment the freight went up to a specific figure we would have to quit shipping. We lost another one in Abitibi, due to an increase in wages which was granted. Our coal went up in price and they told us not to ship.

Mr. STEARNS: In those days they did not have gas; where did the coal come from?

Mr. YOUNG: United States coal was brought in from United States ports, up the lakes to Michipicoten, and then it was taken by rail north to the C.N.R., and east to Kapuskasing.

Mr. STEARNS: How did they bring it in?

Mr. YOUNG: By boat from the United States up to Michipicoten, then it was taken by rail north to the C.N.R., and east to Kapuskasing.

Mr. KINDT: I am prepared to withhold any future questions until Mr. Uren comes back or until another sitting. These questions in connection with the

Dominion Coal Board would not concern Mr. Young; and if the members are through with their questions to Mr. Young, I should like to say—

The CHAIRMAN: Perhaps Mr. Young would answer that one particular question, or answer a question that you might choose to ask in regard to what Mr. Uren said just before he left the sitting, about only one tender being received from an area for a certain penitentiary, and it did not come from those local operators. Maybe you would like to ask Mr. Young about that.

Mr. WOOLLIAMS: I would like to ask that question; could you answer why Drumheller did not tender?

Mr. YOUNG: No, I cannot; but I know my company is bidding on a tender in Toronto, which is to be opened in Ottawa today. It involves about 23,000 tons of coal.

The CHAIRMAN: You can reserve that question until Mr. Uren comes before this committee again.

Mr. MCGREGOR: Why did you not bid on that? Have you not the particular type of coal?

Mr. YOUNG: It probably calls for a type of coal we do not mine.

The CHAIRMAN: Would you answer that question, Mr. O'Brian.

Mr. O'BRIAN: What was the question again?

Mr. WOOLLIAMS: Certain bids for tenders were put out by a certain penitentiary, and Mr. Uren said there was no tender from Drumheller and many other operators in Alberta in that regard.

Mr. O'BRIAN: The tenders were sent out for three-quarter-inch slack subbituminous coal. It is a standard of coal supplied to this penitentiary, which has been used for many years. The Department of Justice telephoned me and asked if I could give any reason why only one bid from all the producers of sub-bituminous coal in Alberta had been received. I said I could not give an answer, and that it was a surprise to me. I advised them to get in touch with the operators to see whether there had been some misconception in regard to the date of closing.

Mr. WOOLLIAMS: You are making it clear that this sub-bituminous coal could be coal that is mined in Drumheller.

Mr. O'BRIAN: Yes, they had the contract last year.

Mr. YOUNG: If the penitentiaries require a shipment through the summer months, it is difficult for the mine to produce that three-quarter-inch slack because they have no sale for sized coal at that time.

Mr. O'BRIAN: I think you will find there may have been a misconception in timing.

Mr. WOOLLIAMS: How many tons were involved?

Mr. O'BRIAN: I think it involved 7,000 tons, but I would not want to be tied down to that figure.

Mr. MCGREGOR: Is it the policy of the government to accept one bid?

Mr. O'BRIAN: No, that is why I was asked about it.

Mr. WOOLLIAMS: What penitentiary was that?

Mr. O'BRIAN: Prince Albert, Saskatchewan.

Mr. WOOLLIAMS: I knew it must be in Saskatchewan, as we have not one in Alberta.

Mr. KINDT: We have covered an extremely important point, and it led from my original question that somehow or other all these bids or demands for coal were not getting through to the operators, or that the operators were negligent in bidding, or there could be other reasons.

Mr. McGREGOR: Maybe they understand one another.

Mr. KINDT: There may be a number of things in the picture; and if there is any laxity in regard to bidding for government or any other business, I certainly feel that the answers to the questions which have been brought out here requires some explanation from the operators in Drumheller for not bidding on this penitentiary contract in Saskatchewan. If there is any other contract information which the department has on this particular subject, I think now would be the time to bring it forward, before closing this section of the discussion.

Mr. O'BRIAN: We have no further information. Incidentally, this came to me because the department chiefly concerned was so surprised. Ordinarily it would have gone through in the usual manner.

The CHAIRMAN: Is advertising done in the usual manner?

Mr. O'BRIAN: Yes. Larger firms who were asked to bid included four or five large producers of coal who would have been expected to bid. Beyond that, I cannot give you any further details.

The CHAIRMAN: In addition to the advertising, you asked certain firms to bid.

Mr. O'BRIAN: The department did. They sent out the invitations to tender.

The CHAIRMAN: Is that the usual practice on all bids?

Mr. O'BRIAN: You are asking me about purchasing by other departments and that is a subject I only hear about from time to time.

Mr. WOOLLIAMS: I wonder, Mr. Young, if you could tell us how many miners at Crowsnest Pass took work in the Drumheller area this year, and why that was done? Quite a few left Crowsnest Pass, and can you tell me why they came into Drumheller for work and obtained work?

Mr. YOUNG: We did not require them at Crowsnest pass.

Mr. WOOLLIAMS: Do you know how many came to Drumheller?

Mr. YOUNG: No. There was a possibility of obtaining a job there for the winter months and they came. However, I do not know how many took jobs there.

Mr. STEARNS: If you had this order in the summer months for 7,000 tons, would it not be economical for you to get that out even if you had to stockpile it?

Mr. YOUNG: No.

Mr. STEARNS: Is 7,000 tons not a large enough order to stockpile?

Mr. YOUNG: Stockpiling underground coal is not economical.

Mr. KINDT: You are not linking up that figure of 7,000 tons with the penitentiaries?

Mr. STEARNS: I think he said that.

Mr. KINDT: It should be pointed out that steam coal which is produced in the Crowsnest pass would not be suitable for the requirements.

Mr. STEARNS: I realize that. I was talking about mining practice. It would not pay to stockpile.

Mr. YOUNG: No, we cannot afford to stockpile underground produced coal.

Mr. Chairman, I would like to make one point clear at this time. Any reference I have made to prices or analysis has had only to do with my own company. I have no authority or desire to make any point of reference to my competitors or neighbours; they can speak for themselves. Any general statements I have made apply to the area; but I want to make that point clear and I want it noted on the record.

Mr. KINDT: Having concluded the evidence of Mr. Young, I want to say that we are all grateful to him for having come so far to give this evidence. He is to be congratulated upon being able to give that evidence off the cuff, without notes; and I am sure we are all grateful to you, Mr. Young, for having come here today.

The CHAIRMAN: Yes, I think without doubt, Mr. Young, Mr. Kindt has expressed the opinion of every member of this committee. We appreciate your coming here and the contribution you have made to this hearing.

The next meeting, gentleman—we will try to make these meetings convenient to most members and, if at any time anyone would like a meeting earlier or later, we will be glad to consider it. Would eleven o'clock on Thursday be convenient for the next meeting? The minister will not be able to be here until that time.

Mr. GUNDLOCK: I might say today we had two meetings at exactly the same time.

Mr. MCGREGOR: We have had two meetings every day, as far as I know.

The CHAIRMAN: Yes, I think as the session gets closer to the wind-up, you will have, maybe, three meetings a week. I think we will have to have more than two meetings a week in order to finish the estimates of Department of Northern Affairs and National Resources by the end of April or the middle of May.

Mr. GUNDLOCK: Could we not meet some time in the afternoon instead of having all these meetings in the morning?

The CHAIRMAN: Well, we could, if it is agreeable to the committee. However, I would like to hear from members of the Opposition in this regard. At these meetings the attendance of the Liberals has been good, but we have only had the C.C.F. representation here on one or two occasions. However, they may be busy on other committees, and we have to respect the wishes of the Opposition. We have the power to sit while the House is sitting. Yesterday Mr. Dumas was kind enough to suggest that even though he was taking part in the debate today, if I thought it was necessary to have a meeting, we could have one in view of this witness Mr. Young, being before us. Mr. Robichaud, would take this matter up? We want to accommodate you. I think maybe we could come to an agreement to have some of these sittings in the afternoon.

Mr. ROBICHAUD: It might be arranged on special occasions, but it would make it difficult for us in the Opposition, especially for those of us who have to serve on four or five committees. This week, I have three committees sitting and it makes it difficult to attend more than one meeting a day. There might be special occasions on which we could hold afternoon sittings, but these could be discussed at the time.

The CHAIRMAN: I think we all have to remember, as members of this committee that the estimates of this department will have probably twice the number of meetings that we had on it last year; and I am sure that, when we get into the estimates of the Department of Northern Affairs, we are going to have many more meetings than we had last year. We are not going to be able to finish before the House prorogues, unless we have more than two meetings a week. We will have to take that into consideration. The next meeting will be at 11 o'clock on Thursday.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 10

APR 7 1959
Library of Parliament

FRIDAY, MARCH 20, 1959

Estimates 1959-60 of the Dominion Coal Board.

WITNESSES:

Hon. Paul Comtois, Minister of Mines and Technical Surveys; and Messrs. W. E. Uren, Chairman, and C. L. O'Brian, Assistant to the Chairman, of the Dominion Coal Board.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20880-1—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

FRIDAY, March 20, 1959.
(11)

The Standing Committee on Mines, Forests and Waters met at 9.30 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Cadieu, Coates, Doucett, Dumas, Korchinski, MacRae, Martel, McFarlane, McQuillan, Muir (*Cape Breton North and Victoria*), Murphy, Robichaud, Simpson, Slogan, Stearns and Woolliams—(18).

In attendance: The Honourable Paul Comtois, Minister of Mines and Technical Surveys; and, *of the Dominion Coal Board:* Messrs. W. E. Uren, Chairman; C. L. O'Brian, Assistant to the Chairman; D. A. Edgar, Financial Officer; and G. W. McCracken, Administrative Officer.

The Committee resumed its consideration of the 1959-60 estimates of the Dominion Coal Board.

On Items 211 to 213, the Honourable Mr. Comtois made a statement on the functions and operations of the Dominion Coal Board, and, specifically, on the said four items of the estimates.

Mr. Uren, being called, gave an outline of the state of the coal industry in Canada, its domestic markets, and the possibility of a market in Japan for Canadian coal. Mr. Uren was questioned, Mr. O'Brian answering questions which were referred to him.

At 11.00 o'clock a.m., the bells having rung to summon Members to attend the opening of the House, the Committee adjourned to the call of the Chair after the Easter recess.

Eric H. Jones,
Clerk of the Committee.

20880-1—1½

EVIDENCE

FRIDAY, March 20, 1959.
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Today we are dealing with the estimates of the Dominion Coal Board, items 211 to 213 inclusive, at page 42 in the estimates.

DOMINION COAL BOARD

Item 211. Administration and investigations of the Dominion coal board..	$ 121,925
Item 212. Payments in connection with the movements of coal under conditions prescribed by the governor in council	$10,089,350
Item 213. Subventions in respect of eastern coal under agreements entered into pursuant to the Atlantic Provinces Power Development Act	$1,700,000
	$12,211,275

The CHAIRMAN: We have with us this morning the Minister of Mines and Technical Surveys and Mr. Uren, the chairman of the Dominion Coal Board. As was indicated some time ago, both gentlemen are going to deliver prepared statements. Those statements are now before you. With your permission, I will now call upon the minister to read his statement.

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): Mr. Chairman and gentlemen: You have become accustomed to seeing me here in recent weeks accompanied by my senior officials of the Department of Mines and Technical Surveys. Today I am here in a different capacity, accompanied by my appropriate officials, the chairman of the Dominion Coal Board and members of his staff.

I make a small point of the distinction between the coal board and the Department of Mines and Technical Surveys because I think it is not always understood that they are two separate departments of government which happen to have the same minister.

Having said that, I think I should also say that they are departments which work together in the closest co-operation and harmony. At certain stages of your hearing of coal board matters you will no doubt find that Dr. Convey and Mr. Ignatieff of the Department of Mines and Technical Surveys are called upon to answer various technical questions virtually as if they were members of the coal board staff. This is because the coal board, although empowered by the Dominion Coal Board Act to conduct research into such matters as the physical and chemical characteristics of coals, has not found it necessary to establish extensive facilities to do so. These facilities already existed in the Mines Branch and more especially in the Fuels Division of the Department of Mines and Technical Surveys. The coal board and the Mines Branch and the Fuels Division have worked together for many years without duplication and without an overlapping expenditure of public funds.

I would refer briefly to the estimates of the board presently before you for study.

Vote 211—$121,925

This vote provides for the salaries and other administrative expenses of the board and the staff of the board. I do not believe any comment from me is necessary other than to express my opinion that these costs are most moderate when weighed against the services rendered.

Vote 212—$10,089,350

This vote provides the assistance on the movement of Canadian coal to markets outside the producing areas. The policy of providing such assistance is one of long standing and needs no comment here. The level of assistance while primarily a matter of government policy has also been studied by a royal commission whose recommendations in their report in 1946 state as follows:

> assistance must bear a reasonable relationship to the cost per ton of imported coal that would otherwise be used.

While it is probable that a sound and profitable coal producing industry can only be based upon such a restriction, it has also been considered in the national interest to provide help well beyond the levels set out to meet extraordinary conditions.

The coal industry is presently in a depressed condition not only in Canada but also in the United States, in England and on the European continent. The recession in industry, combined with the increasing competition from other sources of energy, severely reduced consumption with consequent drops in output and in employment.

There has been a reduction in the production of coal in Canada from 13,189,155 tons in 1957 to 11,687,110 tons in 1958, or of 1,502,045 tons. This has been accompanied by a reduction in the imports of bituminous coal from 18,039,343 tons in 1957 to 11,831,203 in 1958, or by 6,208,140 tons. The combined reduction of 7,710,185 tons is a measure of the loss in markets.

Under these conditions, the assistance extended to sustain the movement of Canadian coal has increased by $1,509,100 from last year's estimates.

It is unfortunately true that even the provision of this amount of more than $10,000,000 will not restore the coal producing industry to the levels of output maintained some years ago. Therefore the government has decided, after prolonged and intensive study, that more assistance must be provided. I am sure you have heard with interest the announcement made by the Prime Minister and Premier Stanfield on the manner and conditions on which this aid will be given. There comes a point where the cost of assistance, as translated into man days of employment provided, becomes so high as to require long and exhaustive search for some constructive alternatives to relieve an unduly heavy burden on each and every Canadian taxpayer. I feel that the announcement which has just been made points the way not only to the means of dealing with the present situation but to the establishment in the future of a stable and healthy Nova Scotia coal industry.

In addition to these two votes, there is a statutory provision of $300,000 to equalize the cost of Canadian coal to that of U.S. coal in the manufacture of iron and steel. The amount payable in this instance is fixed by statute and the reduction from last year of $60,000 arises solely from our estimate of the year's consumption.

Vote 213—$1,700,000

Finally, in vote 213 for $1,700,000, there is the provision for subvention on eastern coal used for the production of electricity in the maritime provinces. This subvention is proving to be of considerable assistance to the coal industry and the benefits in the case of payments to the electric utilities are now being passed on to the consumers of electricity for industrial purposes in the form of lower rates.

Your committee, Mr. Chairman, will, I am sure, wish to obtain full and detailed information from Mr. Wilbur Uren, the chairman of the Dominion Coal Board, and from members of his staff who are here. I feel certain you will

not be disappointed with the thoroughness of their studies nor with the care and accuracy with which they have compiled their information.

The CHAIRMAN: Gentlemen, would you like to have a statement now by the chairman of the Dominion Coal Board?

Some hon. MEMBERS: Yes.

Mr. W. E. UREN (*Chairman, Dominion Coal Board*): Mr. Chairman, Mr. Minister and gentlemen: Since I placed some words on your record informally and "off the cuff" on Tuesday morning, the statement I had prepared may sound a bit stilted at this stage of the proceedings. But I think I had better read it to you anyhow. It contains some material which may help to lay a foundation for further questions and discussion.

First, I wish to thank you for myself and on behalf of the members and staff of the Dominion Coal Board for the opportunity of again coming before you and stating the facts of the coal situation as we see them.

I believe, and have said so to the members of the coal board, that the sessions of this committee last year made a valuable contribution in a difficult period in the history of the Canadian coal industry.

Aside from the fact that 35 members of the House of Commons emerged from your Mines, Forests and Waters Committee sessions as knowledgeable individuals in complex coal matters, the minutes of your proceedings must, I think, have provided a useful reference work on coal problems when wider information on these problems was of great importance. I know they were useful to myself and to members of my staff. They helped to keep before us the view-points and attitudes of the various coal producing regions of the country for which a considerable number of your membership acted as spokesmen.

I am here to give you an outline of the state of the coal industry and to answer your questions as completely and accurately as it is possible to do so. But I also feel I am here to be alert to every useful idea which you, as members of the committee, may express for the solution of these problems.

I am glad to see so many familiar faces at this session. I believe, Mr. Chairman, that some 27 or 28 of your members served on the same committee last year.

This degree of continuity in the committee membership will enable me to shorten my statement by skipping over background information about the coal board and coal subventions which a majority of your members have already heard.

You will recall, sir, that last July it was considered desirable that I place before the committee such matters as a description of the constitution and functions of the coal board itself. I gave, too, a short history of government concern with Canadian coal problems. The members of the committee may remember that these problems began in acute form the year before Confederation when the United States placed the then prohibitive duty of $1.25 per long ton on Nova Scotia coal. This occurred when Nova Scotia supplied the New England states and indeed most of the Atlantic seaboard with coal. I also gave a description of subvention policy as followed by all Canadian governments since the first funds were voted for this purpose in the 1924-25 fiscal year.

I mention this because the new members of the committee may wish to avail themselves of this background material, if they have not already done so. It is to be found in No. 16 of the Minutes of Proceedings and Evidence of this committee, covering the meetings of July 31, 1958.

The situation of the Canadian coal industry has not improved over the past year; in fact, it has definitely grown more serious. This deterioration has not been confined to Canadian coal, however, and imported coal has lost markets to an even greater degree. The general slowing up of the industrial

pulse, the rapid conversion of railway motive power from steam to diesel and the competition from other fuels have all combined to reduce the market for coal.

The Nova Scotia coal industry has been in serious trouble and, while I would hesitate to consider it as more grievous than that of the western coal industry, it has been more in the public eye. I believe it will be of interest to outline briefly what happened to the market for Nova Scotia coal, what steps were taken to meet the situation, and the problem that lies before us now.

The major part of the coal from the Nova Scotia mines is used for industrial purposes while a lesser part supplies the need for household fuel in the maritime provinces. A substantial portion was delivered to the railways for locomotive fuel but this outlet has now practically disappeared.

The major industrial consumers have been the steel works at Sydney and the pulp and paper mills in Quebec. There are, of course, other large consumers but each of these major users under ordinary circumstances consumes about one million tons per year. Other consumers in Quebec usually accept approximately another one million tons.

The movement of somewhat over two million tons of coal to the Quebec market is largely a water movement. The practice has been to go into the winter season with low stocks, to use the winter production to supply maritime requirements, to move by rail during the winter to the more accessible pulp mills in Quebec and to build up a stock at Sydney for summer movement. This stock under normal circumstances has often amounted to some 500,000 tons. Meanwhile, the supply on the docks on the St. Lawrence, which would build up during the preceding summer, would maintain deliveries during the winter to Quebec and Ontario customers and would, by spring, be depleted to a low level. The opening of navigation would reverse this condition of the stockpiles by moving coal from Sydney and reducing the stock there while building up supplies on the St. Lawrence docks.

You may remember that in the summer of 1957 there was publicity given to the drop in the market for aluminum. The smelting of this metal, as you know, requires a tremendous amount of electricity, and the great hydro electric installations in the Saguenay area have been constructed for that purpose. This loss of market promptly led to an oversupply of electricity and in August, 1957, this was quite serious. Under such conditions, the power companies will sell their surplus electricity at practically any price. This temporary surplus of power has occurred before and nearly all the pulp and paper mills north of the St. Lawrence have equipped themselves with electric boilers designed to produce steam directly from electric power. The mills, then, were offered this so-called secondary power at a very low rate and therefore stopped using coal during the late fall and winter months.

The effect of this loss of markets was to slow down the depletion of the coal stocks on the St. Lawrence docks and, secondly, to cut out the usual winter deliveries from the mines by rail to the more accessible mills.

In addition, the steel market fell off and the consumption by the Sydney steel mills was also reduced.

Looking back now, it may be held that output of coal should have been cut at once; but production was gaining at the mines, efficiency was improving, and it could be hoped that the drop in consumption of coal was only temporary. Production was, therefore, maintained during the winter months and, because of these abnormal conditions, the stockpiles in the spring of 1958 were far beyond normal.

The situation was a matter of concern to the coal board and to the government. In March, action was taken to widen the market for Nova Scotia coal by increasing the subvention in its movement into Ontario. This action has been of considerable help. We estimate that, when all the statistics have been compiled, it will be found that some 590,000 tons of Nova Scotia coal have

moved into Ontario in the fiscal year ending on the 31st of the present month. This is an increase of 482,000 tons over the previous year. Indeed, it is the only really large movement of Nova Scotia coal into Ontario since World War II.

Perhaps it should be additionally mentioned that this substantial movement of Nova Scotia coal into Ontario occurred when the Ontario coal market was undergoing its greatest contraction within memory.

The measures taken to assist Nova Scotia coal find markets in Ontario, effective as they were, could not do the impossible. The expected early upturn in industrial activity, with a restoration of steel, aluminum and pulp and paper production to previous levels, did not materialize. Electricity in the province of Quebec continued in surplus supply. In 1958 the supply of this secondary power to electric boilers in Quebec was the equivalent of 560,000 tons of coal. Consequently, stocks both at Sydney and on the St. Lawrence were not reduced. As navigation closed last November, the Sydney yards, instead of lying empty, were piled high with coal.

A mine that is not producing coal or that is producing at lower than its normal rate must still be maintained, and the cost of the overhead on a large colliery is high. Idle time at the mines was reflected in an increase in the pithead cost of the coal.

Nova Scotia coal was already a high cost coal. This further increase was obviously no help in finding markets for it. In the maritime area, where subventions do not apply, the increasing cost meant more severe competition from oil, while in the subvention area it meant increased subvention and greater sales difficulties.

I have outlined the situation at this length in an attempt to throw light on the problem facing us today.

It goes without saying that a determined effort will be made to move coal into Ontario this season because the normal market in Quebec is not yet available. But the movement of coal to abnormal extremes is costly. It is costly not only because of the distance but also because of the high pithead cost of the coal.

Many people think of subventions as a means of equalizing transportation costs. They take it for granted that it costs a great deal more to ship Nova Scotia coal the comparatively long distance from that province than it costs to ship United States coal the comparatively short distance from the American mines. But so far as the major markets are concerned, this is not correct. For example, transportation of a ton of coal by water to Montreal last year cost approximately $2.91 for Nova Scotia coal and $5.66 for American coal. Shipping by water and rail to Ottawa cost $6.15 for Nova Scotia coal and $6.58 for American coal.

The competition between Nova Scotia coal and American coal does not lie in the cost of transportation but in the pithead cost.

Nova Scotia coal has been costing $10.66 to produce. American coal of like quality costs at the pithead approximately $4.00 in United States dollars or $3.88 in Canadian exchange.

After transportation charges are paid and also a duty of 50 cents a ton, the American coal can be laid down on docks at Toronto, for example, or at other docks along Lake Ontario in the heart of the central industrial region of Canada, for less than $9.00 per ton. This is at least $1.50 a ton less than it costs to bring Canadian coal to the surface in Nova Scotia.

Subventions, based on transportation charges only, would obviously not sell much Nova Scotia coal in Ontario.

I have little doubt that coal subventions were originally conceived, many years ago, with the idea of compensating for nature's placement of our coal

resources distant from the areas where a majority of Canadians want to consume them. But a coal subvention has come to mean the amount of financial assistance necessary to make the Canadian coal competitive with imported coal at the point of consumption.

One way of stating the present Nova Scotia coal problem, as it currently exists, is in the form of a question: How do you move a large tonnage of this coal past its normal markets in Quebec into new areas of Ontario at a cost per ton that will be higher than ever before at a time when Ontario consumers have drastically reduced coal requirements?

In one of Nova Scotia's traditional markets, the Montreal area, the already contracted coal market is being further disrupted by the impact of quantities of residual and bunker "C" oil and now by the arrival of natural gas. Oil is now being offered to industrial firms along the St. Lawrence for 5¾ cents a gallon.

Meanwhile natural gas is becoming available not only throughout Ontario but in the Montreal region of Quebec at prices that are often far below the costs of delivering it. Let me give you only one example of one industrial plant. I am informed that a plant in the Montreal area has been offered natural gas on a two-year uninterruptible contract at a price that is almost exactly half the cost of supplying it. They call this "development" gas. If this one deal is completed, it will displace 300,000 tons of Nova Scotia coal. When a furnace is still equipped to burn coal it remains possible to supply Canadian coal, but when it is converted to oil or gas it is lost to any coal.

I think I have said enough to suggest that the market for coal, and for Nova Scotia coal in particular, is disturbed and restricted. As bad almost as the restriction is the amount of uncertainty arising out of the disturbance. It is not easy to sell coal when industrial consumers are waiting for the best fuel offers and trying to decide what to do about gas and oil.

Now let us turn for a moment to New Brunswick. There has been some fall-off in output from the Minto mines, but the New Brunswick industry is in a generally healthy if somewhat lean condition. The large consumers of this coal are the pulp and paper mills and the thermal electric plants of the New Brunswick Electric Power Commission. The completion of the Beechwood hydro electric project, combined with high water in the St. John River, produced a surplus of electricity. Normally the New Brunswick pulp mills generate a certain amount of electricity from coal for their own use, but when surplus hydro power became available they reduced their thermal electric power production. These factors led to a drop of some 250,000 tons in demand and production of coal in the Minto field. It is, however, expected that this situation will clear itself in the comparatively near future.

I was in communication by long distance telephone with the Minto field yesterday and I am happy to report that when the hon. Mr. Comtois was there in October—I am not sure of the exact time, but I know it was during the World Series—we saw stock piles of coal in exceess of 60,000 tons for one firm alone scattered all over the countryside.

They reported yesterday to me that there was not a surplus ton of Minto coal in any of the large operators' yards, and that they were accelerating their production to fill the present demand. Fortunately, the St. John River is not flowing much water.

Saskatchewan production and markets held up well during the year. Saskatchewan coal is facing serious gas competition and will lose markets this year in western Ontario as well as in Manitoba. The Brandon and Selkirk power plants, however, may make up for part of the loss and the plans of the Saskatchewan Power Commission call for increasing tonnages of coal for thermal electric stations. It is probable that this field will be able to maintain production at about the present level if not somewhat higher.

In Alberta, there are, as you know, two different types of coal supplying different markets. The domestic type coal, of which Drumheller and Lethbridge are good examples, is sold mostly for household heating. This domestic market is under heavy pressure from natural gas and oil in Manitoba and Saskatchewan where this coal used to sell in large tonnage. The weather has been favourable for coal marketing this year but even with the unusually cold winter, the production of this type of coal has not increased to any large extent. With the increasing availability of gas along the Trans-Canada pipe line, it does appear that there will be a continuing loss of markets in those areas where this type of coal had been the chief source of household heat. It is regrettable but there does not appear to be any area in which the sales of this coal could be expected to increase.

The mines producing bituminous coal in Alberta and in the Crowsnest area of British Columbia have lost their chief outlet, the railways. Some coal is still supplied for locomotive use but deliveries have been greatly reduced and will drop to zero before long. Natural gas is competing with this coal in the industrial market where the gas is offered at low prices to build up volume until better revenue can be obtained from domestic sales. The day will probably come when coal will again be cheaper than gas but this offers no comfort at the present time. Bituminous coal from this area finds a market in the United States in the form of both coal and coke but any expansion of this outlet is unlikely.

Finally, Crowsnest coal, as you heard on Tuesday from Mr. D. B. Young of the Coleman Collieries, has a possibility of building up an export market in Japan. I think it was a good thing that Mr. Young was able to come to Ottawa to give you a first-hand account not only of the Canadian Coal Mission to Japan but also of the coal situation in the Crowsnest area as a mine operator sees it.

I was assigned the agreeable task of organizing the coal mission to Japan, and I should like to express publicly at this time my thanks to the members for a useful service. I should also acknowledge our indebtedness to the Minister of Trade and Commerce, who authorized the mission, and to officials of his department and of the Department of External Affairs who helped to provide the excellent facilities, contacts and advice which the mission received. As Mr. Young mentioned, the aid given by the Canadian ambassador in Japan, Mr. Bull, and by the Canadian commercial counsellor, Mr. J. L. Mutter, and indeed by the entire staff at the Canadian embassy in Tokyo was of great assistance.

At the risk of going over again some of the ground covered when Mr. Young was here, I should like to summarize the Japanese export situation as we at the coal board see it, and perhaps add a detail or two not mentioned on Tuesday.

The interest of the Japanese lies in the supply of coals of special qualities for the manufacture of coke to be used in blast furnaces and foundaries. Japan produces some fifty million tons of coal, some of which does possess coking properties. The quality of the coke is, however, not suitable for metallurgical use and it is necessary to add other coals to upgrade the coke. The Japanese divide the coals into light coking, medium coking and heavy coking and mix the coals going to the coke ovens in such proportion as will give them a satisfactory product. Their own coal is classified as light coking and they naturally use as much as possible in the blend. Medium coking coals have been obtained from China, the Sakhalin Islands, Australia and the United States. The heavy coking coal comes almost entirely from the United States.

Canadian coal has been regarded by the Japanese as medium coking. As such it would be competitive in quality with a fairly wide variety of coals. The value of the Canadian coal in the blends used in the Japanese coke ovens can only be determined by testing, and it may be that the characteristics of the western bituminous coals will be such as to make their use economical to the Japanese. There is also the possibility that Canadian coals may be able to replace some of the heavy coking coal.

In the medium coking range, the Japanese have just concluded a five year contract with Australian producers for a considerable supply. The Australian mines are close to the shipping ports and transportation costs are, therefore, much lower than for Canadian coals. The Japanese take delivery of the coal at the shipping points and carry the coal to Japan in their own vessels. The mileage from Vancouver is very little less than from Port Kembla in Australia and the cost of ocean transportation is considered by the Japanese to be about the same. The competition to be met by Canadian coals is, therefore, the cost of the Australian coal on board vessels at Port Kembla which is approximately equivalent to $9 per net ton in United States funds.

It is not possible to predict the outcome of this effort to develop a new market but every possible avenue is being explored. Samples of the coals used in the Japanese ovens have been obtained and the experts of the Division of Fuels of the Department of Mines and Technical Surveys are investigating the qualities of the various blends. It is hoped that these tests will show the Canadian coals to possess improved blending properties.

The anthracitic coal of the Cascade area of Alberta has been found suitable for blending the feed to ovens producing foundry coke, where it replaces anthracite from Indo-China. A fairly large tonnage has been exported at a competitive price with the present subvention assistance. The chief handicap to an expansion of this movement is the supply of foreign exchange allotted by the Japanese financial authorities for purchases in the dollar area.

We, in the board, remain optimistic that an export market will be developed.

The new loading facility at Vancouver will be of considerable assistance in developing such a market and it is hoped that if a substantial movement can be assured, the railways will assist by publishing lower rates.

We mentioned on Tuesday the Atlantic Provinces Power Development Act, and there was some discussion as to whether similar legislation might be helpful as encouragement for the use of coal in thermal electric power plants in western Canada.

The purpose of the coal subvention assistance under the Atlantic Provinces Power Development Act was to lower the cost of power to industrial users in the maritime provinces and thus promote the development of new industry. There are two different classes of power producers, the electric utility companies, both public and private, producing power for sale, and industrial establishments producing power for their own use. It does appear that in the latter class, the lower cost of coal has been of value in retaining the market for coal as against oil competition.

The use of coal for this purpose, over the year, has suffered in New Brunswick from surplus hydro power but the amount of coal used has still been substantial.

For the calendar year 1958, present figures, which are subject to review, show that the coal used to produce power has been in Nova Scotia, 452,173 tons and in New Brunswick, 575,664 tons, a total of 1,027,837 tons. The annual report which will be presented by the Department of Northern Affairs and National Resources will contain full details and will correct the figures I have given.

The coal board has been studying and is continuing to study possibilities of extending assistance to the western provinces under an act somewhat similar to this.

I am happy to report that Geoffrey Gaherty, president of the Calgary Power Company, called me late last evening and said he, Professor Christie, who compiled the coal report for us some years ago from which the Atlantic provinces act stemmed, and his assistant "Harry" Thompson, are attending the coal board meeting on April 10 to discuss further details on the extended use of coal for thermal power stations in Alberta.

Before closing this statement, I believe there is one other point I should mention in order to put some of the things I have already said in more accurate perspective. It is sometimes forgotten that a hard hit sector of the Canadian coal business consists of the numerous Canadian firms, some of them established for several generations, which are engaged in the distribution and retailing of imported coals.

There is a widespread belief that the coal board has no other obligations than to recommend measures to assist the production and promote the consumption of coal of Canadian origin. In actual fact, our terms of reference require us to be concerned with the adequate supply of coal for national needs in practically all types and categories of consumption. Moreover, you may remember, the Dominion Coal Board Act contains some provisions dealing with fuel requirements in the event of an emergency.

We would be seriously dependent on an adequate supply of imported coal again if, for example, a third world war occurred, as we would also be very dependent on the production from our own mines. But we could have difficulty in distributing both the Canadian and the imported coal we would need in an emergency if the receiving docks and other facilities of the importers and distributors deteriorated seriously from lack of use.

I mention this point simply to point out that we can be caught between two fires, now and then, in our own terms of reference.

In conclusion, may I say that the announcement regarding Nova Scotia coal, just made by the Prime Minister and Premier Stanfield, will mean that this coal will be moving farther west into the territory where the maintenance of these docks and distributing facilities is important.

Incidentally, in the tying up of this fact, it is the conclusion of the Prime Minister and Premier Stanfield that while the dominion coal board is not a marketing board, nor are we staffed or equipped in the ordinary sense to undertake such work, however, in carrying out the wishes of the government to provide the further assistance that has been announced, the board will work in the closest co-operation with the producers of the coal, the United Mine Workers, the provincial government authorities and the operators of the existing dock facilities. Together we shall do our best to ensure that this additional movement of Nova Scotia coal is carried out with the least possible disturbance to the channels of normal trade and minimum cost to the governments.

May I add that on several occasions I have assisted the maritime and western coal industry in some of their negotiations with consumers in Canada. Without exception or reservation I have found that presidents of the companies in their directions to their vice presidents in charge of purchasing have bent over backwards to try to further the burning of Canadian coal. However, you must remember that the presidents of the various companies and their staffs are accountable to the shareholders of the companies and, therefore, they cannot go too far afield in making payments from their funds in excess of what they would have to pay for imported coal. We must also remember that we have made a very, very close study of where Canadian coals can be

used and why they cannot be used under certain boilers. To our amazement we found that of the importation and stockpile carryover of some 13 million tons of United States coal in 1958-59, only 4½ million of that 13 million tons could be supplied by Canadian coals, because of the difference in the chemical and physical composition of the coal.

Mr. Chairman, my statement has already grown too long. My staff and I are at your disposal for questions.

Mr. COATES: Before we commence to ask questions, I would like to express to the Minister of Mines and Technical Surveys and the chairman of the Dominion Coal Board my deepest gratitude for the very thorough investigations which were made into the problems of the Nova Scotia coal industry, and the extra subventions they have provided, which will give a greater amount of stability to the people and the economy of Nova Scotia.

Mr. DUMAS: For my part, I wish to say that this statement given by the chairman of the Dominion Coal Board is a masterpiece; it is really the best we ever had. I do not want to minimize the importance of the statement of the Minister of Mines and Technical Surveys, but his was quite short. Mr. Uren, we wish to thank you very much. You mentioned that the ultimate amount of Canadian coal that could displace American coal is about 4 million odd tons.

Mr. UREN: That is chiefly in the consuming areas of central Ontario, where the big consumption is.

Mr. DUMAS: Could you tell us how this amount of 700,000 tons which could be shipped from Nova Scotia to Ontario during the coming year was established; I suppose it is an approximate amount?

Mr. UREN: It is an approximate amount. In collaboration with the officials of the Dominion Coal Company, which included the chairman of the management committee, the vice-president of finance and the vice-president of sales, we broke down possible sales of coal right across Canada.

It is broken down into 2,200,000 tons in the maritime provinces; and 1,650,000 tons in Quebec, which left 850,000 tons to be sold in Ontario if we hope to maintain approximately 4,700,000 production. Or, if we leave out the production, let us say, if we hope to continue without any further idle time up to December 31, 1959. That idle time was based on 40 days, which was announced prior to February 1, 1959.

All the mines have not closed in February and March; therefore of the 40 days idle time as announced, aproximately 25 days will be used up at the end of this month, leaving 15 days to be scattered over the summer months.

By getting 850,000 tons into Ontario, that is the only way we can do it, because the markets in the maritimes and in Quebec have contracted to such an extent that that was the only possible way of forestalling any more idle time.

You asked where the 850,000 tons came from. Under the original estimate that we are talking about today, we figured it would have been possible to move 150,000 tons into Ontario. That 150,000 tons would have been in this area, but it could not have gone beyond Hawkesbury or Gatineau Point. So the 700,000 tons is the movement beyond Hawkesbury.

Mr. DUMAS: During 1958 were 590,000 tons moved from Nova Scotia to Ontario?

Mr. UREN: Yes.

Mr. DUMAS: Can you give us the names of the largest purchasers? I do not want complete details. Were there large purchasers of coal?

Mr. UREN: Yes; the government itself was the largest purchaser, probably. Then there was International Nickel, which was a large purchaser, and the pulp and paper companies.

Mr. DUMAS: How many tons did International Nickel buy in 1958?

Mr. UREN: I do not know if that is permissive.

The CHAIRMAN: I think you are straining it a little, Mr. Dumas.

Mr. DUMAS: Very well, I shall not insist, but we are very much interested in selling as much Nova Scotia coal as possible in Ontario.

Mr. UREN: They will sell more coal to the International Nickel Company in 1959-60 than they sold in 1958-59.

Mr. DUMAS: We are very happy. Now I wonder if the minister could tell us about the changes in the subvention announced by the Prime Minister? The order in council may not have been passed yet, and if so, the minister will not be able to tell us.

Mr. UREN: The minister cannot tell you because, although we have been studying it for a long time, the orders in council for Nova Scotia, and possibly for New Brunswick, may be delayed until after April 1.

If they are delayed until after April 1, we will be asking for a renewal of our last year's order in council so we would still be able to operate. The industry will be able to operate upon communication with the coal board on specific orders.

In order to get the maximum distribution at the lowest possible prices, and in view of our cost to the treasury, we would endeavour to change some of our methods of subvention. We have been working, for instance, on rail movements on a percentage basis. We may have to change that percentage basis to a ton mile basis.

Mr. DUMAS: The maximum is $4.50?

Mr. UREN: The maximum is not last year's $5.25, by any stretch of the imagination. The maximum for the movement of coal into Ontario from Nova Scotia will be $7.75.

The CHAIRMAN: I think you will recall the Prime Minister said that when he announced the order in council.

Mr. UREN: It was learned when the tolls were officially announced. We do not know how much of that $20 million we are going to get, the amount that the government has set aside for amelioration of the increased freight rates.

The bulk of this coal moves by water. Therefore every new charter rate, and every new tariff assists us in the determination of how this coal can be shipped.

We learned in some instances one or two ocean-going vessels can be used, which would reduce the necessity of transferring from ocean-going vessels to the dock at Montreal, or transferring from ocean-going vessels to self unloaders.

It costs from $1.20 to $1.25 if you put the coal over the dock at Windmill Point and tranship it; and it costs only 50 cents if you tranship the coal directly from the ocean-going vessel, to the self unloader on small bulk carriers.

So the orders in council are not only complex, but they really mean something, and they must be carefully studied. Therefore everyone must be patient until we get this in proper form.

Mr. MUIR (*Cape Breton North and Victoria*): That is the most important action that has been taken up to this point; and as the minister said, it is obvious that the details will come at a later date.

I would like to direct a question to Mr. Uren because of his remarks in his statement towards the end concerning the marketing policy, and his observation to Mr. Dumas, that he had met with various officials of the coal companies concerned.

It appears, although not spelled out in so many words, that within the past year or year and a half, and extending into the future, you have been and will continue to be rather actively concerned with the marketing of coal.

Mr. UREN: That is right.

Mr. DUMAS: And you have always been.

Mr. UREN: Well, not perhaps in an official way. But perhaps that is why I have certain knowledge as to how patriotic our industrial concerns are, and how anxious they are to assist in every way in our industry, which they know is in a very distressed state. Not only that, but I might add that one of the accounts we have been keeping for western coal over the past four or five years and even longer than that, did not purchase in Canada.

I had to go to Neenah, Wisconsin, to deal with the vice president in charge of purchases for this large pulp and paper company. They do all their purchasing from Neenah, Wisconsin, and wherever possible they stick to Canadian coal.

They have also bent over backwards going so far as to say that they have to have a certain type of coal, and are not averse to testing any coal that we want to send in, to see if they can use it.

I am not an intermediary on behalf of any one coal company. They all get a chance at it, but they must meet the specifications set out. One company has been able to satisfy them 100 per cent against the very high quality coal which they formerly imported from the United States. The quality of the coal supplied was so high that we did not have to go anywhere near the maximum of the subvention in order to have the coal used.

Mr. MCQUILLAN: I notice that in Mr. Uren's statement he deals with the coal industry as far west as the Crowsnest, but there is no mention of the coal industry west of that point.

There is only one coal mine operating in British Columbia now west of the Crowsnest, and that is on Vancouver Island. They are having difficulties, however, and I wonder if Mr. Uren would have any observations to make on the possible future of that mine.

Mr. UREN: To tell the truth, Mr. McQuillan, we probably spent more time in trying to assist that particular company to place their coal than we did elsewhere in the West. In the first place, I think one of the reasons this company has not been successful in placing a high tonnage of coal is that they are high-cost producers, and they cannot compete in the Ontario market.

Mr. MCQUILLAN: I realize that.

Mr. UREN: And we cannot direct people to use any particular coal. Moreover, if the coal is not suitable, as we said the other day in our discussion on subventions as this is almost exclusively a government matter, we cannot tell the purchasing department of the government that they should buy their coal here.

As I said, I think the minister along with his colleagues would be prepared to go as far as he could. Frankly, as to the characteristics we have to take the word of the highly qualified technicians. We do not doubt the word of the operator, but if I have a piece of goods to sell, then mine would be the best. That is natural. So, we are going to do everything possible to save that coal mine.

Mr. MCQUILLAN: That is the point I was trying to get at. Since it is the only coal mine on the Pacific coast, and since it has loading facilities of its own which would probably cost $2 million to replace, do you not think it would be in the national interest to do everything possible to keep that mine operating, because if it should be closed down, that would be the end of coal mining on the Pacific coast?

Mr. UREN: As far as their Union Bay facilities are concerned, and their possibility of getting into the export market, I have replied to Mr. Simpson, the vice president of the company, that for this year, just the same as the Crowsnest pass people, he is guaranteed the maximum of $4 per net ton in competing with Australian coal or other coals that are participating in the Japanese export business.

Mr. Simpson went to Japan with the mission. We do not know what kind of reception his coal will have. It is up to the Japanese to buy and the trading company to sell the coal. But he has just the same privileges. I do not know whether he has any advantage with his Union Bay wharf. I would not say there would be any.

Mr. C. L. O'BRIAN (*Assistant to the Chairman, Dominion Coal Board*): Transportation costs are lower, but on the other hand their mining costs are higher.

Mr. SLOGAN: You mentioned that most of the coal from Nova Scotia is shipped by water. Would the opening of the St. Lawrence seaway have any depressing effect on the central and western Ontario markets?

Mr. UREN: I wish we could say definitely one way or another. It appears that there are lower rates on the movement of United States coal into the province of Quebec, so far as we have been able to find out, but it is a little early in the operation of the seaway to make any definite statements.

I have not found anyone, even among our top economists in the government, who will come out with a flat statement. They all say what we believe: that there is to be some kind of pattern but that the pattern may take years to evolve. In the meantime it has been the stated policy of the government—I think it was stated by the hon. George Nowlan—that everything would be done to assist in the movement of maritime coal; and because no other coal has water transportation, naturally it comes down to the Dominion Coal Company to see that the St. Lawrence seaway will not in any way interfere with the movement of their product, if they can help it.

Mr. WOOLLIAMS: As there are some members on the committee who come from constituencies where there is coal, in order to keep things in chronological order, would it not be helpful if the members from the maritimes started the questioning and when they had covered their field, those of us who come from western Canada might ask some questions pertaining to us? We would then have everything in chronological order, and it would be helpful to us, should we have a discussion with the United Mineworkers or the bulk operators of the west.

I would like to see the maritimers go ahead with their questioning, and when they are finished we fellows from the west could follow up with our questions.

Mr. DUMAS: What about the people from the province of Quebec?

Mr. WOOLLIAMS: I meant to divide it into categories, and if there are coal mines in the province of Quebec and in Ontario, we should take them up in chronological order.

Mr. MUIR (*Cape Breton North and Victoria*): I think that is a good suggestion. I think you will recall that last year we arranged for one or two days on this subject.

The CHAIRMAN: Would you like to go ahead with Nova Scotia coal? You asked a question about it a few minutes ago. Would you like to extend that question. You indicated the problem which the coal board faces in the coal industry.

Mr. MUIR (*Cape Breton North and Victoria*): I would like to ask a question about the marketing end of it. When the coal board has been consulted,—and dealing again with Mr. Charles Appleton the chief of the sales division—have you had consultation with Mr. Appleton?

Mr. UREN: Yes, sometimes as often as four or five times a day.

Mr. MUIR (*Cape Breton North and Victoria*): How long has this been going on?

Mr. UREN: Ever since I have been there.

Mr. COATES: Rerring to the announcement by the government of the recent subvention, the chairman of the Dominion Coal Board stated that he could not give us any detailed information about it. I wonder if it would be fair to assume that one of the main reasons he cannot give this further detailed information is because of the fact he is endeavouring, in his investigation of the problem, to try to obtain more flexibility for the sale of coal in the provinces of Quebec and Ontario?

Mr. UREN: That is correct. We have been promised by the minister and a small commitee of the cabinet—I suppose I can tell the committee that it was the cabinet which sat in on this—and that they will permit us this year to be more flexible in our orders in council, because it is in the public interest to do so. But may I assure you that if there is any delay—and we hope there will not be—in the issue of the orders in council on the movement of Nova Scotia coal for 1959-60, it will not in any way hold up any sales.

Mr. COATES: I have had some personal experience since the announcement was made because, as I said, I had a telephone conversation very recently with a large sugar refiner who has been a substantial purchaser of Nova Scotia coal in the Montreal area, and who is now constructing a new factory in Toronto. He was very interested in buying Nova Scotia coal; and if what I heard on the telephone was correct, it would appear that under the new subvention this industry will now have a very good opportunity to purchase Nova Scotia coal.

Mr. UREN: I see no reason why something cannot be consummated, probably with less effort than many others with which we have had to deal. I do not even know the name of the man who phoned. I know the refinery, but I told him that if they were going to ship out sugar on ocean-going vessels, they certainly should be able to use those ocean-going vessels to bring in coal; and if they put in proper unloading facilities, which I imagine they would, it would mean at least a saving of $1.25, or 50 cents in transfer charges and a faster movement by the ocean-going vessels. This would be better than proceeding to Windmill point, making their transfers and so forth and having to turn around from there.

Mr. COATES: To a large degree then—and especially since you stated you have talked with the sales manager of DOSCO—it would appear that in many ways the Dominion Coal Board, in cooperation with the coal companies, is carrying out many of the requirements that would be placed on a marketing board.

Mr. UREN: I think it is too broad when you say the Dominion Coal Board, because I do not call the six other members of the Dominion Coal Board and ask them—

Mr. COATES: But you, as the chairman.

Mr. UREN: There are so many tricky things in this. For instance, the vice president in charge of sales may be very close to the point and he may be over the maximum a little bit; so efforts have to be made to get the consumer up a little bit, or the coal company down a little bit, in order to take the tonnage. They might end up badly and have to take a little less profit.

The CHAIRMAN: Mr. Coates, would you like to follow up your line of questioning?

Mr. COATES: I know how very important it is, when new industries are being established anywhere, to convince them they should put in coal-burning equipment, because if they do not do it in the beginning you have lost your coal sales for all time with that industry. I was wondering if careful consideration is carried out at all times with all new companies which are expanding in an area where we can presently sell coal, or whether you leave this up to the companies?

Mr. UREN: Well, as far as the industrial concerns are concerned, we leave it up to the company. We were never intended as a sales organization. If private enterprise were to continue to depend on the chairman of the coal board and his staff to sell their coal, and supply them with the money through public funds, where is there any incentive on the part of private enterprise to do their business?

Mr. COATES: With your many years of experience, have you found that the companies have taken every opportunity to see to it that these new companies, as they are established, are contacted immediately in an effort to provide them with Nova Scotia coal?

Mr. UREN: I think they have done a fairly good job. I made a statement once before a group of people that on the whole we did not seriously criticize their sales effort but rather the lack of proper liaison between the sales department in Montreal and the producing department in Nova Scotia. Particularly, it had more to do with their planning. A clear indication of that is that the producing end of the company knew, as far back as last April or May, what their sales pattern was and made no provision whatsoever to schedule the size of their coal in proportion or in accordance with their sales pattern. As a result, it left in the non-subvention area of Newfoundland and the maritime provinces a grievous shortage of coal when the company itself was screaming to high heaven for us to furnish markets for their coal.

Mr. MUIR: (*Cape Breton North and Victoria*): What are the possibilities of recovering the coal which you are talking about?

Mr. UREN: You will recover the Newfoundland market,—but not the maritime market—lost to oil until oil goes up to a price where the economy or the status of the purchaser can no longer afford it.

Mr. MUIR (*Cape Breton North and Victoria*): In your discussions with DOSCO, have they given any indication what efforts they will make to recover this in the future?

Mr. UREN: The same promise as they have given us over the past twelve years; it is always too little and too late.

Mr. MUIR (*Cape Breton North and Victoria*): In other words they do not keep their promises.

Mr. UREN: I would not make as broad a statement as that.

Mr. DUMAS: We were advised in regard to the number of tons of coal which were moved from Nova Scotia to Ontario. We have the report for 1957; but perhaps Mr. O'Brian could tell us how many tons of coal were moved from Nova Scotia into Quebec and the maritime provinces.

Mr. O'BRIAN: In 1958?

Mr. DUMAS: Yes.

Mr. UREN: Up until the end of the calendar year?

Mr. DUMAS: Yes.

Mr. UREN: Mr. O'Brian has those figures.

Mr. O'BRIAN: With respect to Quebec and Ontario, this will be the subvention coal. However, that is the total coal. The figures are: all rail to Quebec, 438,375 tons; all rail to Ontario, 69,336 tons; all water to Quebec, 1,802,427 tons. However, out of that water portion, 371,472 tons went on into Ontario.

Mr. DUMAS: Out of the 1,802,427?

Mr. O'BRIAN: Yes.

Mr. DUMAS: Could I now have the figures for the maritimes?

Mr. O'BRIAN: The maritimes, sir, are going to be a little more difficult because the dominion bureau of statistics do not publish the same statistics as early. If you like, I will arrange to obtain the exact figures for you.

Mr. DUMAS: Thank you. In the maritimes you include Newfoundland?

Mr. O'BRIAN: Yes.

Mr. DUMAS: Were there any other sales to other parts?

Mr. O'BRIAN: There were export sales to the United States and there would be sales to St. Pierre and Miquelon.

Mr. DUMAS: But they would be small?

Mr. O'BRIAN: I will get you the full details.

Mr. WOOLLIAMS: Would you mind telling us now the amount of the subventions paid to the maritime province and the amount paid to western Canada in 1958. I think probably it is in the report, but I would like to have it on the record.

Mr. UREN: Do you want it for the calendar year 1958, or 1957-58?

Mr. WOOLLIAMS: 1957-58.

Mr. UREN: It is there in the book.

Mr. WOOLLIAMS: How much is that?

Mr. UREN: It is in the coal board report.

Mr. O'BRIAN: According to page 36 of the Dominion Coal Board annual report for 1957-58, the amount of subvention paid on the movement of Nova Scotia coal was $6,526,659.82. That figure contains some accountable advances, and it is subject to revision.

On New Brunswick coal the payment was $120,664.39.

On Saskatchewan coal in 1957-58 the payment was $299,462.30.

On the movement of Alberta and British Columbia Crowsnest coal the payment was $1,280,135.80.

On the movement of British Columbia and Alberta coal for ships' stores and for export, the payment was $93,220.66.

Mr. WOOLLIAMS: There was some discussion in the coal report about costs. I wonder if Mr. Uren might have this information. Perhaps it is a little technical, but would he know the average wage paid to coalminers in the maritimes as compared with the average wage paid to coalminers in the Crowsnest Pass?

Mr. O'BRIAN: I will bring you the firm figures at the next meeting. All I have now are approximate figures as follows: the average weekly wage in Alberta as reported by the Department of Labour is approximately $68 a week.

Mr. WOOLLIAMS: And what about the maritimes?

Mr. O'BRIAN: In the maritimes, in Nova Scotia, it is $65 a week. I shall confirm this statement at the next meeting.

The CHAIRMAN: Would that be for the same number of hours?

Mr. O'BRIAN: The Department of Labour does not report that. They merely give the average weekly wage. They do not go into the question of the number of hours of labour.

Mr. WOOLLIAMS: What did Mr. Young mean when he said that it averaged $27 a day?

Mr. UREN: That is the contract the men are under contract.

Mr. WOOLLIAMS: Oh, well in that case, these figures are not of much assistance to us, because there is going to be a group under contract and others who are not.

Mr. UREN: It is the only thing the Department of Labour puts out.

Mr. WOOLLIAMS: It does not show a true comparison. I am thinking about the costs. If our wages are higher in western Canada and if we endeavour to compete with maritime coalminers, we would like to know the comparative costs, because sometime at a Union Mine Workers meeting they may ask me that question, or I may be asked by the coal operators.

The CHAIRMAN: Would you like to have the contract explained, Mr. Woolliams?

Mr. WOOLLIAMS: I think it would be a good thing.

Mr. MUIR (*Cape Breton North and Victoria*): If the costs were too high, would you suggest that it be cut? I hardly think that would be a proper answer. How many years have you beeen chairman of the coal board?

Mr. UREN: Eleven and one half years.

Mr. DUMAS: He is still a young man.

Mr. UREN: I have been the chairman ever since the coal board was formed, in October, 1947.

Mr. MUIR (*Cape Breton North and Victoria*): You have been chairman for that whole period? Therefore you would know the full story in regard to the coal situation. The three greatest threats facing the maritimes—everyone knows it—were dieselization of the railway—the Canadian National Railways—gas and oil; and the Seaway.

Before these national projects were initiated, did this committee give much discussion to and study of this situation: as to the probable effect they would have on the future of the coal industry in the maritimes?

Mr. UREN: What committee are you referring to?

Mr. MUIR (*Cape Breton North and Victoria*): I mean this Mines and Forests and Waters committee.

The CHAIRMAN: Do you mean this committee?

Mr. UREN: This is the second year it has met to discuss these things.

The CHAIRMAN: Yes; this committee has been set up for some twenty years, but this is only the second year it has met for many years.

Mr. DUMAS: Perhaps you mean: did the committee of the whole discuss these matters in the House of Commons on the estimates?

Mr. UREN: Yes; we have made all kinds of recommendations to the government.

Mr. MUIR (*Cape Breton North and Victoria*): This committee has not acted in previous years

Mr. UREN: I do not know what they did before this, but I do know that last year was the first time I came before this committee. However, I did appear before some committee several years ago.

Mr. O'BRIAN: That was a Senate committee investigating total expenditures.

The CHAIRMAN: This is the second active year of this committee in twenty-two years.

Mr. DUMAS: The estimates of the Department of Mines and Technical Surveys were never before referred to this committee.

Mr. MUIR (*Cape Breton North and Victoria*): This is a very important question. I find it strange that it was never discussed.

Did you and the coal board along with the government give any study to the future disastrous effects of these national projects?

Mr. UREN: The study has been continuous since the time the coal board was formed. From time to time we have made recommendations to the government.

Mr. MUIR (*Cape Breton North and Victoria*): With a view to overcoming the effects?

Mr. UREN: Yes, to overcome the effects of the inroad of the other forms of fuel which we knew were going to stifle the coal industry if something was not done, such as the dieselization of the railways, the importation of residual oils, and the distribution of residual oils from the refineries in the country which import crude oil. As far as the west is concerned, we knew we could not get any response from the government with respect to competition between two forms of energy produced in our own country.

Mr. SLOGAN: May I ask a supplementary question? In view of the proposed development and the feasibility of developing thermo-power electric generating stations using atomic power, could you tell us within how many years that would be feasible? You mentioned the Selkirk power project in Manitoba, that it probably would not be completed for another year, and that they would be using coal until then. I wonder about the following years, and whether it would be converted to the use of atomic power.

Mr. UREN: I would say in a considerable length of time, and not in a very few years. It does not mean that it might not be a threat, but I am not qualified to answer. Dr. Convey will be present at our next meeting, and he could give you an answer.

If you want to refresh yourself on what the considered view has been, you will find what he said—and I do not think he will change his opinion very much—in number 16 of the Minutes of Proceedings and Evidence of the Standing Committee on Mines, Forests and Waters for Monday July 21, 1958. That is the same book I referred to previously.

You may question Dr. Convey about it at the next meeting. He has authority to answer. He is a member of the atomic research board, and he knows what is happening all over the world as far as atomic energy is concerned.

Mr. COATES: May we go back to the last question which Mr. Muir asked? You stated that recommendations were made to the government at that time. Could you tell the committee what action was taken on those recommendations, whether they were also offered to the Canadian National Railways, and if they were concerned with the Canadian National Railways at that time?

Mr. UREN: Recommendations were made to the Canadian National Railways. I personally went down and had a long conversation with Donald Gordon. I attended some meetings in the office of the Right Hon. Mr. St. Laurent when Donald Gordon was called in. But they maintained it was progress, and that we could not stem progress.

Mr. COATES: As a result of Donald Gordon's decision as president of the Canadian National Railways, were any alternative steps suggested that might protect the Nova Scotia coal industry?

Mr. UREN: Yes, we made suggestions. We knew we could not stem the general flow, so we made suggestions that as they turned their locomotive power over to diesels the locomotive power which was still steam should be concentrated in the maritime provinces.

Mr. COATES: Am I correct in saying that this in fact did not happen?

Mr. UREN: No, but they were still there. Steam power was still used to a greater extent down there.

Mr. DUMAS: There were studies made of the possibility of using coal. In fact, grants were provided to McGill University for the building of a special engine.

Mr. UREN: Everything was done that could be done. We recommended that we be allowed to pay a subvention against residual oil in the maritime provinces and the government did not see fit—

Mr. COATES: To carry it out?

The CHAIRMAN: When was that?

Mr. UREN: At least five years ago.

Mr. MUIR (*Cape Breton North and Victoria*): If remedial actions were recommended during all those years in which we were finding ourselves in difficulty with respect to coal, why has not something been done? This is not something new, I know from experience in working in the mines. The coal problem has been with us a number of years.

Mr. UREN: The problem of coal marketing has only been with you the last two years. When we made these recommendations as a result of our studies, we were thinking of the future, because as early as three years ago the Dominion Coal sales department sold 1½ million tons more coal than the Dominion Coal Company or the whole of the DOSCO organization could produce; and the sales people had to go back to the customers and either cancel the contract or fill it with imported coal from the United States.

Mr. MUIR (*Cape Breton North and Victoria*): Before your time on the coal board, that is 1939 and 1940, when Mr. Hitler became very active and gave a lot of industry to the world the mines in the Nova Scotia area—and I know from actual experience—were working only two and three days a week because of lack of markets. Therefore, this problem has not existed just for the last couple of years; and if these remedial actions and recommendations were made and acted upon, why do we find ourselves in this difficulty today? It should be overcome at this point.

Mr. UREN: The whole situation is brought about by the continuous and enormous increase in the production costs. With your costs of production and the price that is necessary for you to obtain for your coal, it is pricing you out of the market.

The CHAIRMAN: We will adjourn this meeting now, and I think it would meet with the favour of all members of the committee if we would postpone any further meetings until after the Easter recess. Is that agreeable.

Agreed to.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
APR 16 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 11

TUESDAY, APRIL 7, 1959

Estimates 1959-60 of the Dominion Coal Board.

WITNESSES:

Messrs. W. E. Uren, Chairman; C. L. O'Brian, Assistant to the Chairman; and D. A. Edgar, Financial Officer; all of the Dominion Coal Board: and Dr. John Convey, Director, Mines Branch, Department of Mines and Technical Surveys.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20886-8—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.
and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martin (*Timmins*),
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, April 7, 1959.
(12)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs Aiken, Cadieu, Doucett, Drouin, Dumas, Gundlock, Kindt, MacRae, Martel, Martin, (*Timmins*), McFarlane, McQuillan, Mitchell, Murphy, Robichaud, Simpson and Stearns.—(17).

In attendance: The Honourable Paul Comtois, Minister of Mines and Technical Surveys; *of the Dominion Coal Board:* Messrs. W. E. Uren, Chairman; C. L. O'Brian, Assistant to the Chairman; D. A. Edgar, Financial Officer; and G. W. McCracken, Administrative Officer; and *of the Department of Mines and Technical Surveys:* Dr. John Convey, Director, Mines Branch; and Mr. A. Ignatieff, Chief, Fuels Division.

The Committee resumed its consideration of Items 211 to 213 of the 1959-60 estimates, concerning the Dominion Coal Board.

Mr. Uren explained the purport of recent Orders in Council affecting the coal industry in the maritimes and the Crowsnest Pass area.

Dr. Convey and Mr. Uren answered questions which had been asked at previous meetings.

Mr. Uren was questioned on matters concerning the coal industry in Canada; Messrs. O'Brian and Edgar answered questions which were referred to them.

Items 211 to 213 were approved.

At 12.05 o'clock p.m. the Committee adjourned to the call of the Chair.

Eric H. Jones,
Clerk of the Committee.

20886-8—1½

EVIDENCE

TUESDAY, April 7, 1959.
11 a.m.

The CHAIRMAN: Gentlemen, we will begin our meeting. Prior to the Easter recess the chairmen of the various committees of the House met in the Whip's office to try and work out a schedule of meetings of the various committees that would not be too conflicting, and I hope this schedule meets with your approval. Our future meetings would be on Mondays at 11 a.m., on Tuesdays at 11 a.m. and on Thursdays at 9 a.m.

We have before us today the resumed consideration of items 211, 212 and 213 of the estimates of the Dominion Coal Board.

Mr. Robichaud asked at the last or at a recent meeting, to have someone here who could answer questions concerning the future use of coal for thermo power. I think he asked that Dr. Convey be present, and Dr. Convey is here.

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): He is here.

The CHAIRMAN: Just before we begin the questioning, we are in a bit of a dilemma respecting meetings concerning the estimates of the Department of Mines and Technical Surveys next week, inasmuch as the minister and his senior officials, including Mr. Uren of the Dominion Coal Board, have a commitment of some months standing to attend an important meeting. Therefore, they will not be able to be present.

I have asked if we could have the estimates of the Department of Northern Affairs and National Resources referred to this committee this week so that we could, if necessary, start with that department. In this way we would not miss any meetings, which is so vital, because I think we are going to be obliged to have quite a number. I have asked the clerk of the committee to ascertain, while we are in session this morning, from the Minister of Northern Affairs if he and his officials would be available beginning next Monday. So before this meeting closes today we will have a better picture of what next week will look like.

Mr. Robichaud, would you like to start questioning on your previous topic?

Mr. ROBICHAUD: Thank you, Mr. Chairman. During the deliberations of this committee last year Dr. Convey made certain statements before the committee, and we find on page 484 of the minutes and proceedings of last session—

The CHAIRMAN: Mr. Robichaud, would you pardon me if I interrupt you? Would you mind if we put on the record what has developed in respect to the coal industry, because of parliamentary action over the last few days? It might give you a better basis for your questioning later.

Mr. ROBICHAUD: Certainly.

The CHAIRMAN: Mr. Uren, would you place on the record what has transpired.

Mr. W. E. UREN (*Chairman, Dominion Coal Board*): Since we were in session before the Easter holidays the new Orders in Council for the fiscal year 1959-60 have been passed by His Excellency the Governor General in Council. Nova Scotia and New Brunswick, because of the complexity in

tariffs and additional knowledge that we want to get, on the effect of the seaway and several other items concerning competition, we extended for one month only; that is the month of April. However, we fully expect that before next week is out we will be able to bring the Order in Council up to date, because Mr. Appleton, the vice-president in charge of sales, and several of his associates are going to meet with us this afternoon and we will go over their sales program. We are pretty certain that what we have worked out for them, and for the maritimes in general, will fit into their sales program, which, incidentally, is progressing very satisfactorily.

As you undoubtedly know from the statement that was made—and I believe it was made before you recessed—the government has granted another $4 million approximately to take care of the production and distribution of maritime coals, basically to keep production up so they have no more idle time, or no idle time in addition to the 40 days already announced, and also to diminish the stockpile.

The New Brunswick Order in Council was not changed, because we find that in changing the Nova Scotia Order in Council to meet competition we would also have to make some changes in the New Brunswick Order in Council to keep them, not only competitive with the United States coals, or imported coals, but also to keep them on even competition with the product of DOSCO. The same holds good for the independent operators in Nova Scotia; we want to keep them on a competitive basis, not only with the United States coals, or imported coals, but also with the other coals produced in the Maritimes.

Therefore, while those Orders in Council were only continued for one month, before the month is out we will put them on the full yearly basis, and I am sure to the satisfaction of everyone, as far as anyone can be satisfied. In addition to that, there has been an amendment in the Order in Council covering Alberta and the Crowsnest Pass area of the west to provide an additional 50 cents; in other words, raise the maximum from $4 to $4.50 a net ton, which will—and I think has—enabled the western mines to sell 100,000 gross tons of coking coal and upwards of 30,000 tons of anthracitic type coal to Japan.

The deadline for the closing of the business for the 100,000 tons of coking coal is April 10. I have not the official word from the various companies, or from Mr. Whittaker, member of the coal board, who is also managing director of the association, but they had a meeting over the weekend and I am sure the business has been closed.

That puts the western coal operators of that type of coal in a very good position for the balance of this year. I do not think there is anything else, except that the general sales program seems to be going along very well.

Mr. ROBICHAUD: Mr. Chairman, I am sure that the members of this committee, as well as those interested in the coal industry, in the maritimes and in the west, will be pleased to hear that the sale of coal is progressing satisfactorily, and particularly that the stockpiles in Cape Breton will be reduced by these sales.

We are also pleased to hear that the sale of coal to Japan has been completed. We had a discussion here a few weeks ago on this very important matter, and it is satisfactory to hear that the sale has been completed.

Mr. KINDT: Mr. Chairman, I should like to add my word to what has already been said concerning the sale of coal to Japan and to express to the government the appreciation which I received from the industry in the Crowsnest Pass and in the west, on the action taken by the government in granting this additional subsidy to make it possible for coking coal to be shipped to Japan.

There are still a lot of problems, however, for the coal industry out there; but we do appreciate very much the action that has been taken with respect to coking coal.

Mr. ROBICHAUD: If I may now go back to the question which I intended to ask earlier—

Mr. UREN: There is one other statement I would like to make. The latest report we have from New Brunswick is that there is not a pound of coal on the ground in New Brunswick and they are shipping it out as fast as they can strip and mine it.

Mr. ROBICHAUD: We are very pleased to hear this statement, and we realize that one of the main reasons why there is a shortage of coal in New Brunswick is due to the fact that operations were curtailed so much last fall, especially in the last four months of 1958. Unfortunately, New Brunswick had to import coal from Nova Scotia even for its thermal plant during this past winter. I am sure, with no surplus of coal, the prospects for the 1959 fiscal year are promising. We hope to see the mines in the Minto area operating at full capacity in the present year.

Now, if this is all in regard to this matter for the time being, I would like to refer back to my question to Dr. Convey. In this committee last year certain questions were addressed to Dr. Convey concerning the future of atomic reactors as compared with thermal power stations, and in his reply Dr. Convey stated there were several types of reactors which were on the drawing board, some of which were in operation, but that we were very far from the breakthrough in producing atomic reactor power plants which would provide us with power, let us say, at six mills. This statement was made on July 21 of last year, but I understand since that time there have been further developments in atomic reactors. I have here a small article which appeared in the Montreal Gazette on February 25 entitled "thermal power increases seen", and I think with the permission of the committee I would like to read it so that it will appear on the record. It reads as follows:

> By 1970 the United Kingdom expects to be producing 40 per cent of its electricity from nuclear generating stations at 30 per cent of the cost of coal and oil generated power, Dr. David A. Keys, scientific adviser to the president of Atomic Energy of Canada Ltd., said Saturday night in a lecture to the Royal Canadian Institute.
>
> By 1980 Ontario would need 23,000,000 kilowatts of power, of which 18,000,000 would have to be generated by thermal stations, he said.
>
> "Hence our interest in nuclear power, especially as we have in this province one of the largest deposits of uranium in the world," Dr. Keys said.

In view of this statement, could Dr. Convey relate to us the developments that have taken place in the last twelve months, and would he also make a comment on this statement of Dr. Keys.

Dr. JOHN CONVEY (*Director, Mines Branch, Department of Mines and Technical Surveys*): Mr. Chairman and gentlemen: I am somewhat on the spot, but since I reported to you almost twelve months ago, I am in a position to give evidence that there has been a lot of experimental work done in the field of the development of nuclear power. However, it is still in the experimental stage and there do not exist any economical kilowatts produced by atomic reactors today. At Geneva last fall it was reported there were some thirteen power reactors producing power, but none of them economically. Eight of these exist in the United States, one in the U.S.S.R. and three in Great Britain. The situation is still one in which you have a combination of three main factors: the nuclear fuel, the moderator and the coolant.

Quite a number of experiments are under way at the present time, but the cost of producing power for these reactors is certainly nowhere in the neighbourhood of six mills. There are educated guesses as to when it will break through, but as far as I know at the present time it is merely a guess to say that by 1970 we will be producing economic power. A good example is at Shipping-Port in the United States. It has been producing power since 1956. They have come through with a cost and they maintain that power costs in the neighbourhood of 65 mills per kilowatt. This is fed into the grid-work and sold at eight mills, which means the United States government is subsidizing for the difference. I do not know of any power reactor anywhere which is producing power near 30 mills at the present time.

However, the experimental work continues. Just when they will produce economical power, I do not know. There are many, many engineering difficulties which have to be solved, not only from the viewpoint of safety, but in actually getting the materials themselves within a reactor to behave in a fashion in which there will be no danger or hazard by either contamination or radiation. So I would say right now that experimental work in reactors has not reached a stage wherein one could give an honest guess as to just when it will break through; and I cannot see it breaking through at least for another two decades.

Mr. ROBICHAUD: We are very pleased to hear this statement and if we can judge from what you have told us today you are still of the same opinion as last year when you said:

> From the point of view of the generation of power I feel that the coal industry has a good future ahead of it, and that the atomic reactors when they do come, will merely supplement the thermal power plants which are operating today.

You are still of the same opinion, Dr. Convey?

Dr. CONVEY: Yes.

The CHAIRMAN: Are there any other questions to be directed to this witness?

Mr. UREN: Mr. Dumas asked a question at the last sitting and we promised to obtain the information for him. Mr. Dumas asked for information on the distribution of Nova Scotia coal to the maritime provinces in 1958. I would reply by stating that the dominion bureau of statistics report on shipment from the mines for 1958 is as follows:

Coal supplied for bunkers	25,404	net	tons
Coal supplied to railway for locomotive use	95,184	"	"
Nova Scotia			
Shipments to industry and dealers	1,504,456	"	"
Sales direct to domestic consumers	170,881	"	"
New Brunswick	291,590	"	"
Newfoundland	156,186	"	"
Prince Edward Island	37,598	"	"
Total maritime shipments	2,281,299	"	"
Quebec and Ontario shipments	2,353,100	"	"
St. Pierre and Miquelon	2,664	"	"
Total shipments	4,647,063	"	"

The Quebec and Ontario shipments differ from the figures for subvention coal given on March 20 by some 43,000 tons. This is due to the difference in

timing between the shipments direct from the mines and the shipments ex St. Lawrence docks.

Mr. DUMAS: Thank you very much.

Mr. UREN: Mr. Woolliams asked a question, but he is not here today. Do you expect that he will be here later on?

Mr. KINDT: It might be well to put it on the record.

Mr. UREN: Mr. Woolliams asked for information on the average wage paid to coal mines in the maritimes as compared with the average wage paid to coal miners in the Crowsnest Pass. I would reply by stating that the Department of Labour reports on the average weekly wage paid during one week in each month.

The number employed, aggregate payment and amount per capita for the week ending December 1, 1958 is as follows:

	No. Employees	Aggregate Payroll	Per Capita Weekly Earnings
Nova Scotia	9,626	$ 718,849	$74.68
New Brunswick	803	50,383	62.74
Saskatchewan	358	36,652	102.38
Alberta	1,960	157,918	80.57
British Columbia	1,098	74,363	67.73
Canada	13,845	$1,038,165	$74.98

The data for the week ending January 1, 1959 is available but is not representative as it is affected by the Christmas holiday period. The report for the week ending about February 1 is not yet available but the data can be submitted to the Clerk of the Committee as soon as available, if desired.

Mr. ROBICHAUD: I understand from Mr. Uren's first statement that 156,186 tons were imported by Newfoundland last year. Now, is the coal board aware that Dosco is making all possible efforts to increase the sales in Newfoundland? The reason I ask this question is that we are being told on many occasions vessels from Newfoundland are going to Sydney or other ports in Nova Scotia for coal and have to wait weeks for delivery. In some instances they had to come back empty. Although I am not too familiar with the conditions in Newfoundland, it seems to me that the province of Newfoundland could import much more than 156,186 tons of coal annually from Nova Scotia. Has this matter ever been brought to the attention of the coal board?

Mr. UREN: Yes, ever since the coal board has been formed, and on two different occasions during the peak of the season; and one in particular about three years ago when I went down there and held a meeting as a result of which a traffic expediter was appointed by the province of Newfoundland to assist in scheduling the schooners and motor vessels that customarily carry the bulk of the coal to Newfoundland. The great difficulty is that these schooners and motor-vessels are engaged in more remunerative work all during the summer and sometimes late into the fall. They only come to North Sydney after they have finished their summer business and, naturally, there is a congestion.

The other fault which must be cured both by education and more co-operation on the part of everybody is that the Newfoundlanders will only take one type of coal. That coal must be loaded at North Sydney and in the main comes from the "Old Sydney" collieries. The methods of mining today are such that a very small percentage of coal comes out in the size they require down there.

The cause of the fault last year to a large extent was in not carrying the stockpile they had originally set aside for the Newfoundland trade. It got late in the season and they were fearful they would not be able to move it, so they sent it to Montreal, Three Rivers and Quebec, whereas they should have kept it there until the latter part of the season. They made attempts in previous years to have the larger distributors in Newfoundland stockpile during the summer months, even going so far as to put it in on consignment and not charge any over-riding cost if they put it in. That was not successful. I understand arrangements and agreements have been made whereby that situation will be sizably overcome this year.

In other words, the larger purchasers of coal have agreed to take some and stockpile it during the summer months. I do not forecast any great improvement in respect of the situation concerning the schooner trade because we have not been able to do anything about it in the past. All we can hope for is that it will run more smoothly this year.

Mr. ROBICHAUD: Better cooperation!

Mr. UREN: Yes, better cooperation. All that is required is better cooperation.

The CHAIRMAN: Are there any further questions?

Mr. Slogan who is not here had a question on March 20, on page 254, as to when it may be feasible to develop electricity using nuclear power with reference to the Selkirk power project. Could we have an answer to that and then probably pass these items this morning?

Dr. JOHN CONVEY: I would say that I have previously given the answer, that there seems to be no break-through at the present time with respect to the use of nuclear power for the generation of electricity.

Mr. AIKEN: Mr. Chairman, this may not be exactly the place to ask this question, but perhaps Mr. Uren might answer it. In my riding there is a new federal public building. I was under the impression that they were going to install oil heating. It now appears that it is going to be heated by coal. At the time I wondered if there is some policy or arrangement whereby coal should be used wherever possible in federal public buildings.

Mr. UREN: That is correct. We have a committee headed by Mr. O'Brian, my assistant, which endeavours to screen and recommend what should be or should not be burned, taking into consideration that in respect of federal buildings we hope that coal will be burned in all installations. On the other hand, if it should be very close to gas, practically on top of it, or if oil outshines coal to an economic extent, then the committee may have to soft-pedal.

This committee is not the deciding factor, they merely recommend. They gather all the facts and present them. We have found in this committee that the oil salesmen are pretty astute merchandisers. I think in most cases it is found that the figures—you would not say they are untruthful—do not tell the whole story.

As you know, the cabinet has issued instructions through the coal board to all departments to the effect that Canadian coal is to have a 20 per cent preference over imported coal.

Mr. AIKEN: Have we assurance, for example, in this particular building that Canadian coal will be used?

Mr. UREN: I am sorry. I do not know your riding. I do not know where the federal building is.

AIKEN: In any given federal building is there assurance that Canadian coal will be burned?

Mr. UREN: No, not 100 per cent. There may be some instances in which the installation is of a type or kind where coal may not be suitable.

The CHAIRMAN: I might observe in respect of your question that in Sarnia—and I make this statement in view of what Mr. Uren said, in respect of other forms of fuel—where we have the largest refinery in the British Empire, and two others, the new federal building is going to use Canadian coal.

Mr. AIKEN: I was quite pleased they were using coal. The difficulty would be that we are on the Canadian natural gas line and it would be unfortunate if they by-passed the gas-line and imported American coal.

Mr. UREN: No. We are not fearful of that.

Mr. MITCHELL: In respect of the smelting business, is there any indication that natural gas is being used to the detriment of powdered coal or coke which is being used now? The reason I ask that is in my riding the International Nickel Company are gradually converting to natural gas. I am not prepared to say what kind of coal they are using, although I believe it is Canadian coal. They have difficulty, particularly in the winter when piles of coal come in and are frozen because of falls of snow and so on, and they have a great deal of trouble in blasting this coal out of the coal-cars before they can use it or even attempt to powder it.

Natural gas seems to be an advantage to them. I am wondering if that is going to cause any further difficulty for the coal-miners?

Mr. UREN: It unquestionably will. You are speaking of the International Nickel Company. They are using Dominion Coal and United States Coal. Dominion Coal are sending them this year twice the tonnage of Canadian coal they sent them last year.

Mr. MITCHELL: I realize that in respect of gas conversion they expect this. It is being converted now.

Mr. UREN: Partially.

Mr. MITCHELL: Of course that would do away with the use of coal in their blasting furnaces and also do away with some of their electrical blast furnaces.

Mr. UREN: From what I can learn from Mr. Appleton, who personally handles the International Nickel account with Mr. Forsyth, there is not any indication so far that they will discontinue the use of coal entirely.

The CHAIRMAN: Would the new subvention be a factor in respect of the use of Canadian coal in that area?

Mr. UREN: Definitely. The subvention we put in last year—the increase we put in last year—enabled them to sell a sizable tonnage. With the change in competition the extra that we had to put in this year clinches the business.

Mr. DUMAS: Mr. Chairman, perhaps it would be of interest to the committee if Mr. Uren could tell us the amount of coal used for heating federal public buildings, let us say, in 1956 or 1957. If you have those figures, would you give us the amount of coal used for heating public buildings?

Mr. UREN: I think we can obtain that.

Mr. C. L. O'BRIAN (*Assistant to the Chairman, Dominion Coal Board*): The last figure we had I think was about two or three years ago of approximately 1,200,000 tons. In several cases we have asked for authentic information but we have to wait until each department is through the season.

Mr. DUMAS: I am thinking of Canadian coal. In the western part of Ontario there may be some American coal being used. I am interested mostly in the amount of Canadian coal used in Canadian public buildings.

Mr. O'BRIAN: I think about 80 per cent or 90 per cent, of the figure I gave you, is Canadian coal.

Mr. COMTOIS: From 80 to 90 per cent.

The CHAIRMAN: How would that affect the subvention on coal in Polymer?

Mr. UREN: The subvention is still not high enough to put maritime coal into Polymer.

The CHAIRMAN: What does Polymer use?

Mr. UREN: United States coal.

The CHAIRMAN: I mean in respect of quantity. I think you put it on the record a year ago.

Mr. UREN: They use 450,000 to 500,000 tons.

Mr. GUNDLOCK: There have been some remarks made at several meetings which are somewhat disturbing. This morning I heard something about the lack of cooperation between the coal mine operators and some of their customers, and that coal sales were dropped. At a previous meeting I heard that a certain mine in Alberta did not even bother to tender on certain contracts. At that same meeting we also heard that contract miners in certain Alberta mines were paid $3.30 per hour.

Along with such high wages and a particular lack of something or other, it seems to me that this committee and the government, which is supporting the coal industry to such a great extent, must be a little discouraged. I wonder if there is some way of coordinating those things? I think it is unfortunate, with the coal industry in the situation it is to have those things happen, particularly when they are supported to the extent they are.

The CHAIRMAN: It is an interesting question. Would you like to comment on that, Mr. Uren?

Mr. UREN: It is our aim and has continued to be our aim all the time to obtain the maximum cooperation from the coal operators in all sections of the country.

Until you have spent a lot of your life dealing with them you have no idea just what a rugged group of individuals they are.

Mr. KINDT: Mr. Chairman, I would like to add a footnote to what the member for Lethbridge has said. There seems to be a feeling among the coal-miners that the profits taken by the operators are excessive. That is a logical assumption when the markets for coal, and the stress for markets, are so acute. However, it is so persistent that I wonder if the coal board has at its disposal figures on the cost of operation. That is item number one.

Item number two is the difference in cost between strip coal and mined coal. In the Crowsnest Pass there seems to be the feeling that the subvention of $4.50 a ton to Japan was favouring strip coal, coking coal, and certain other types, and not the coal which was mined by the miners themselves. In other words, they felt that they were not getting the full benefit of it, and that an undue share of it was going to the operators. I do not say that that is true.

Mr. UREN: It is certainly far from the truth; and, as far as the coal board having the information is concerned, if you will look at pages 52 and 53 of the annual report for 1957-58 you will find the Canadian coal mines operating costs and revenues per net ton of marketable coal produced in 1956. I have here the 1957 figures, which is the latest date available, and which will be incorporated in the 1958-59 report. It is broken down according to deep-mined coal, in Alberta; and it is broken down according to Alberta domestic, underground Alberta domestic, strip, and Alberta mountain, and it clearly shows the true picture.

As far as any favouritism to strip coal is concerned in the export to Japan, the high percentage of coal that is going to Japan is deep-mined coal. It is true that in order to be competitive, the big companies do have some strip mines, but the strip mines in most instances are being rapidly depleted. We

feel that the prime reason for doing it is that, first of all, we do not want anything to happen to these coking coal mines in the Crowsnest Pass area, and in the Cascades area of Alberta; because along with all other people who are students of coal, of the coal industry and of coal uses, we know that the day is coming—whether it be five years, ten years, or whatever it is—when coal is going to be in great demand, and the mines should be preserved. And, what is more, the strength of the underground miners should be kept at a certain level, because you do not train an underground miner overnight.

The statements made by the miners are consistent with the labour statements, but the proof is there. The Dominion Coal Board get the reports under affidavit from each mine, so that we know exactly what each operation is making or losing, or what their profits are, because it is shown and broken down in such a way that we can tell how much per ton they either lose or make.

I can tell you that in no case in the west is there any sort of undue profit made. In fact, there are very few such places in the whole of Canada, or among individual companies.

Mr. KINDT: Thank you. May I raise one other question: everyone was grateful to get these orders from Japan, and for the effort of the federal government in making it possible. Still they also talk a lot about the domestic market, and the possibilities of getting into Ontario.

It was mentioned that if they could get half a million tons into Ontario it would solve their problem. They also, in the same breath, point out that all this subsidy is being paid to eastern coal. But still they do not seem to be able, in any way, to get into western Ontario and to head off this United States coal that is going into that area.

Therefore anything that the coal board can do to get a little bit more market in western Ontario, even if it were less than half a million tons, would help greatly to solve the problems of the coal industry of the west, tide us over, and keep that nucleus that you speak of, for future use.

I gather from what you said—and we all know—that these coking coals some day will be needed in a steel industry, because that is the primary use for coking coals. We all want to keep this nucleus of a coal industry going. But the feeling of the miners in the Crownsnest Pass is quite low. As a matter of fact it is very low. Therefore anything we can do to keep that nucleus going and get in with half a million tons of coal to take the place of United States coal would certainly be right down the line in the thinking of these western people.

Mr. UREN: You are talking about the Crowsnest Pass. This injection which has just been given to them should buck them up. But as far as domestic coal operators are concerned, and I refer chiefly to those in the Drumheller area and the prairie areas, I am very sorry, but I cannot foresee—and the other members of the board cannot foresee—any bright future for them whatsoever, regardless of reasonable, sensible, and economical subventions. They have lost their markets to gas and oil. Their coal is a single-purpose coal, and the domestic people are not using it.

As far as United States coal is concerned, there is very little United States coal going into northern Ontario that would be replaced or which can be replaced, or is being used in any sizeable quantities and could be replaced by domestic coal. It is a very depressing picture as far as the domestic operation in the prairie provinces is concerned.

Even the strip mines which can produce coal at a figure so much less cost per ton, are finding it very difficult to keep their heads above water—that is, with the exception of Saskatchewan.

Mr. McQUILLAN: I would like to ask Mr. Uren this question. Perhaps he has answered it before. But how does our national production per man compare with that of the United States?

Mr. UREN: I think in western Canada it runs from five to five and one half tons per man day.

Mr. O'BRIAN: Underground production runs about three tons in Canada, while in the United States the average would be from nine to ten tons.

Our strip mine production in Saskatchewan would run about 27 tons, while in Alberta it is running about sixteen. In the United States the strip mines over the whole country average about 18 tons per man per day.

Mr. McQUILLAN: Would that discrepancy in the underground mining production be due to the type of deposits, or would a great deal of it be due to the type of equipment and the methods being used? In other words, are our mines using the most modern and efficient mining equipment that is available?

Mr. O'BRIAN: Our underground production is based almost entirely on the physical condition of the mine, and the physical condition in which the seams are laid down.

The CHAIRMAN: Would you like to pursue that further Mr. McQuillan?

Mr. McQUILLAN: There is one other thing: I am making this as an observation, and perhaps there might be some comment on it. It seems to me, speaking with only a slight knowledge of the coal mining industry, that in many cases with these long established mines, where their sales have fallen off, their overhead has remained the same, and is out of proportion to the mining costs, or to the cost of production. Is that true or not? What I am referring to is that in some cases some of these mines which have for a number of years run at full production, are now down to one half or one quarter of what they previously produced, yet they still have a great deal of overhead. It is pretty much the same as it used to be years ago. Is that right?

Mr. UREN: Oh yes.

Mr. O'BRIAN: That is right. When a mine production declines, it depends in part on the development of that mine. If they are going to abandon their operation, they can market some of the coal that is left more cheaply; they can take it out at a comparatively low cost and pull out and abandon the rest. If they wish to protect their investment—you are perfecly right—as production goes down, overhead goes up; the over-all costs keep up.

Mr. McQUILLAN: Do you feel that the coal mining companies have faced up to the situation or that they have carried on in some cases with the same type of administration that would be required for full production instead of getting down to a realistic basis in their administration costs?

Mr. O'BRIAN: Mr. Edgar, our financial officer, keeps track of those things, and he can answer your question.

Mr. D. A. EDGAR (*Financial officer, Dominion Coal Board*): I would say that when a mine closes down for a certain period, the administration cost does go up considerably.

Mr. McQUILLAN: I realize that, but some of these companies have been established for a long time and they have got into the habit of supporting heavy administrative costs and heavy overhead costs. Sometimes it seems to me that they still have a tremendously large office staff at their head office when they have a comparatively small production of coal. They say it is all added to their production costs, that they cannot do anything about those

costs, because they are fixed. But I am not so sure that sometimes there is not a good deal of extravagance in the way of overhead and administrative costs with some of these mines.

Mr. EDGAR: In the statement "Coal mines, operating costs and revenues", as shown here, the administration expenses in each province are shown for the year, and while they do vary from year to year I doubt very much if some of these mines—the smaller ones at any rate—would carry a heavy administrative load. But the bigger mines probably do so.

Mr. MCQUILLAN: I was referring to the larger ones, or the ones that have been there for some time.

Mr. EDGAR: Yes.

The CHAIRMAN: Are there any other comments, gentlemen? Then is the committee ready to pass items 211, 212 and 213?

Items 211, 212 and 213 agreed to.

The CHAIRMAN: Gentlemen, that winds up the discussion on the estimates of the Dominion Coal Board and the Mines Department, except for another meeting, or probably more than one, when we will have the heads of the branches and divisions appearing before the committee, as was requested some time ago.

The Clerk has been busy trying to contact the Minister of Northern Affairs to ascertain when he would be available. He is to be a guest speaker at an important meeting next week. I am wondering if the committee would like to see—maybe next Thursday morning—the very enlightening motion pictures and coloured slides of the atomic blasts, prepared by the Atomic Energy Commission of the United States. I think that will be interesting to this committee and to many members who are not on it, in view of the proposed idea of using that method for separating the oil from the sand in the Athabasca tar sands.

One movie film was taken by the Atomic Energy Commission of these underground explosions, and slides were taken by the Richfield Oil Company. They will, I think, be very interesting to see. If it suits the convenience of the committee, it might be advisable to have those pictures shown at our next meeting. Would that be satisfactory?

Some hon. MEMBERS: Agreed.

The CHAIRMAN: Then, gentlemen, as soon as I get information as to what we may expect I will contact Mr. Dumas and the other members of the steering committee and we will arrange for future meetings.

Mr. DUMAS: Thank you.

The CHAIRMAN: Then this meeting is adjourned.

Mr. KINDT: Mr. Chairman, may I just make one statement before we adjourn?

The CHAIRMAN: Yes.

Mr. KINDT: I think it is important. With regard to the publicity which is now being given to the north country and the work which the federal government is doing, I find, in talking with people, that they will read those particular articles in preference to any others on the printed page. In other words, there have been several articles going out about the continental shelf and other things, and I have found, in talking to people lately, that they will read that particular article in preference to perhaps a hundred other articles on the same page. They will turn to the article on the north country and read it first.

That connotes to me that any additional publicity the departments of government can focus on the north country is in line with the desire for information of the Canadian people.

The CHAIRMAN: That is a good observation, Dr. Kindt.

Mr. MCQUILLAN: At what time do we meet for our next meeting, Mr. Chairman?

The CHAIRMAN: Our meeting is on Thursday at nine o'clock.

Mr. MCQUILLAN: I was on the Estimates Committee meeting this morning and I understand we alternate with them on the nine o'clock meetings. It was about 9:20 before we had a quorum, and it was decided that we would meet in future at 9:30, rather than have the departmental officials and others sitting around. Do you think we might not find the same problem?

The CHAIRMAN: We have had success in the past, Mr. McQuillan, in regard to our meetings at nine o'clock. But I think if we are just going to have the pictures, one and a half hours would be sufficient. Would that be all right, gentlemen—to call the meeting for 9:30?

Mr. DUMAS: Yes.

The CHAIRMAN: It will be at 9:30 then.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 12

THURSDAY, APRIL 16, 1959

RECEIVED
APR 23 1959
LIBRARY OF PARLIAMENT

Estimates 1959-60 of the Department of Mines and Technical Surveys

---

WITNESSES:

Hon. Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director General of Scientific Services; Dr. John Convey, Director Mines Branch; Mr. S. G. Gamble, Director, Surveys and Mapping Branch; Mr. K. M. Pack, Chief Administrative Officer; and Mr. R. B. Code, Chief, Personnel and Office Services Division.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

20925-4—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Richard (*St. Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

ORDER OF REFERENCE

HOUSE OF COMMONS,
WEDNESDAY, April 8, 1959

Ordered,—That the name of Mr. Fleming *(Okanagan-Revelstoke)* be substituted for that of Mr. Payne on the Standing Committee on Mines, Forests and Waters.

WEDNESDAY, April 15, 1959.

Ordered,—That the name of Mr. Fisher be substituted for that of Mr. Martin *(Timmins)* on the Standing Committee on Mines, Forests and Waters.

Attest

LÉON J. RAYMOND,
Clerk of the House.

20925-4—1½

MINUTES OF PROCEEDINGS

THURSDAY, April 16, 1959.
(13)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Cadieu, Coates, Doucett, Dumas, Fisher, Fleming *(Okanagan-Revelstoke)*, Granger, Gundlock, Hardie, Martineau, McFarlane, McGregor, McQuillan, Mitchell, Muir (*Cape Breton North & Victoria*), Murphy, Nielsen and Woolliams. (19)

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director General of Scientific Services; Dr. J. M. Harrison, Director, Geological Survey of Canada; Dr. John Convey, Director Mines Branch; Mr. S. G. Gamble, Director, Surveys and Mapping Branch; Dr. M. J. S. Innes, Acting Dominion Astronomer; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. W. K. Buck, Chief, Mineral Resources Division; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; Mr. H. P. Kimbell, Chief, Explosives Division; and Mr. J. Murray Sutherland, Chief, Financial Services Division.

The Chairman recorded that an informal meeting of members of the Committee had been held on Thursday morning, April 9th, to see a movie film, Operation Plowshare, produced by the Atomic Energy Commission of the U.S.A., concerning the use of underground nuclear detonations, and a film strip produced by the Richfield Oil Corporation concerning the proposed use of nuclear detonations in the Athabasca tar sands. Dr. Convey had answered questions following the showing of the films.

In view of the substitution of Mr. Fisher for Mr. Martin (*Timmins*) on the Committee, on motion of Mr. Coates, seconded by Mr. Dumas,

Resolved,—That Mr. Fisher be substituted for Mr. Martin *(Timmins)* on the Subcommittee on Agenda and Procedure.

Pursuant to its resolution on March 12, 1959, the Committee reverted to the main items of the Main Estimates of 1959-1960 relating to the Department of Mines and Technical Surveys.

Dr. Convey was questioned on the proposal for oil development from the Athabasca tar sands by means of a nuclear explosion.

On Item 186, Departmental Administration, Mr. Pack was questioned on problems of staff and accommodation of the department at large. Dr. Boyer and Dr. van Steenburgh answered in part. Mr. Code was questioned on problems concerning personnel, in particular on those of sufficiency, acquisition and retention. Again, Dr. van Steenburgh answered in part.

During the foregoing discussion, on motion of Mr. Nielsen, seconded by Mr. Aiken,

Resolved,—That the table of salaries of senior officials of the department, dated March 1959, now being distributed to members, be printed in this day's proceedings of the Committee.

On Items 186 to 199 concerning the Surveys and Mapping Branch, Mr. Gamble was questioned on problems of sufficiency, acquisition and retention of staff in that branch, also on the suitability and sufficiency of its accommodation. The Minister answered in part.

On Items 202 and 203 concerning the Mines Branch, Dr. Convey was questioned on problems faced by his branch, in particular on those related to sufficiency, acquisition and retention of staff and to accommodation, and on the degree to which lack of sufficient funds contributed thereto.

Reverting to the administration of the department as a whole, on motion of Mr. Nielsen, seconded by Mr. Coates,

Resolved,—That the salary comparison chart for departments or agencies employing scientific personnel, dated March 1959, which he now produced, be printed in this day's proceedings of the Committee.

At 10.55 o'clock a.m. the Committee adjourned until 11.00 o'clock a.m. on Monday, April 20, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

THURSDAY, April 16, 1959.
9.00 a.m.

The CHAIRMAN: Gentlemen, we will begin; we have a quorum. The last meeting of this committee was rather unofficial. We had the showing of the movie film produced by the Atomic Energy Commission of the United States, concerning the use of underground nuclear detonations, and we had a film strip produced by the Richfield Oil Corporation. Dr. Convey was also present and answered questions. I mention that to have it on the record.

Since the last meeting we have had the name of Mr. Fisher substituted for that of Mr. Martin on the committee. Inasmuch as the committee selected the steering subcommittee, it is necessary to have a motion to the effect that Mr. Fisher's name will be substituted for that of Mr. Martin on the steering subcommittee. Would somebody like to so move?

Moved by Mr. Coates and seconded by Mr. Dumas.

Motion agreed to.

The CHAIRMAN: I might say, since we are nearing the end of the estimates of this department, we have not yet had the estimates of the Department of Northern Affairs referred to this committee. The motion was deferred on Monday, and I am hoping, in spite of the procedure that the budget debate be not interrupted, that probably by agreement that program can be interrupted so we may have those estimates referred. The house leader was not present yesterday, but I will see about that today, with the hope that we can start with Northern Affairs not later than a week from today.

It may take one meeting, a closed meeting, for the report. I am assuming that it may take one meeting and probably part of another one for the review, according to the minutes of March 12, when the committee decided to revert, after the estimates of the Dominion Coal Board were through, to discussion of the main items of the department.

MINES BRANCH

Item 202. Administration, Operation and Maintenance	$ 3,527,130
Item 203. Construction or Acquisition of Equipment	269,245
	$ 3,796,375

Gentlemen, if it is agreeable to the committee I would like to have Dr. Convey appear before the committee for just two or three questions regarding his previous statement concerning the proposed explosions in the Athabasca tar sands. If the committee is agreeable, I would like to ask Dr. Convey one or two questions.

Dr. Convey, at a previous meeting you mentioned that at some time, probably next February when the ground is frozen, there would be an experimental test made of separating the sand from the oil in the Athabasca tar sands by means of a small atomic bomb explosion. You also mentioned that this bomb would be obtained from the United States Atomic Energy Commission, and that the Richfield Oil Corporation and several Canadian agencies would be present for this test. You estimated in your statement that there were 17,000 square miles, and you also indicated to the committee the coverage of one of these bombs. I wonder if you would just elaborate on that statement.

Dr. JOHN CONVEY (*Director, Mines Branch*): Assuming that our investigations over the next few months are successful, then the earliest possible date on which this experiment could be carried out would be around next February. It appears that the extent of the tar sands area is some 17,000 square miles. Am I right in assuming that what you want to know now is, assuming the experiment is a success, how many bombs would be needed?

The CHAIRMAN: Yes. Would you repeat what you said before regarding the cost of that particular bomb, and then you could go on from there and indicate what would be the number of bombs, in your estimation, that would be required for this project?

Dr. CONVEY: The estimated cost of a bomb today, so far as we have been able to determine, is this. For the small type 2 kiloton bomb it would cost somewhere in the neighbourhood of half a million dollars. The large bomb—that is the 10 kiloton bomb—costs, approximately $1 million. The price does not seem to go up very markedly from that position.

If the experiment is a success, it will mean this, that in order to liberate the bitumen from the tar sands you would have to put down a pattern of these bombs to cover an area, and if one were to assume that one bomb and the area of its influence, say, would cover one acre, then you would have 640 of these bombs to a square mile.

If one does a little calculating, then there are 17,000 square miles, times 640, and you would end up with something like one million of these bombs. That is assuming that everything was uniform and was succeeding. It could be that the number might be reduced; on the other hand, it might be increased.

That seems like an awful lot of explosives, but remember this would be a project which would not be done over night.

Mr. DUMAS: When you say one million bombs, are you referring to small bombs?

Dr. CONVEY: Yes, that is the small type.

The CHAIRMAN: In dollars and cents, Dr. Convey, what would that represent?

Dr. CONVEY: About one billion dollars, at the present costs. That would be the total cost of the explosives alone.

The CHAIRMAN: Is it not more than that?

Mr. DUMAS: That is the cost of the bombs?

Dr. CONVEY: That is just the cost of the bombs. That is assuming the prices are as I have said. I do not know the actual figures for these explosives. It could be much more.

The CHAIRMAN: You say there would be one million bombs at half a million dollars each?

Dr. CONVEY: Half a million apiece. I am assuming a 10 kiloton bomb would be used. That is $1 million to a bomb. Of course, these figures are subject to this experiment either working or not working.

Mr. COATES: How much oil would one of the small bombs free? Are you able to estimate how much oil one of these small bombs would free?

Dr. CONVEY: I would have to calculate that. It is a little more involved than one can do just standing up. You have an area covered of something like 40,000 square feet, and you have 200 feet of thickness of tar sand. I would have to sit down and work it out in order to be quite sure.

Mr. NIELSEN: These are really not bombs in the conventional sense, are they? Are they not underground nuclear devices?

Dr. CONVEY: I would prefer that the word "bomb" not be used. They are really nuclear explosives.

The CHAIRMAN: Dr. Convey, the other day you discussed the experiment from the viewpoint of safety; would you care at this time to repeat or amplify the statement you made?

Dr. CONVEY: From the viewpoint of safety it has been indicated that, in regard to experiments performed in the United States with nuclear explosions above ground, these underground detonations eliminate all the hazards.

Mr. MARTINEAU: Would Dr. Convey state if, in his opinion, this process is economically feasible?

Dr. CONVEY: Well, if one were to take the Richfield Oil Corporation's figures, it is very very economical. They have quoted a price for the recovering of the oil, that is the bitumen, and state it can be brought to the surface at $1 less than the conventional method of bringing oil to the surface at the present time. Those are their figures.

The CHAIRMAN: That is less $1 a barrel?

Dr. CONVEY: Yes, less by $1 a barrel.

Mr. MCGREGOR: Is there any assurance that this will work?

Dr. CONVEY: The only assurance will come with the actual experiment itself. However, it is one of these experiments wherein you must calculate what are the chances and risks that must be taken. Up to the present time it looks quite promising.

Mr. MCGREGOR: How much money has been spent on this test already; or has there been any money spent?

Dr. CONVEY: I could not estimate what has been spent up to now, but the total experiment is expected to cost $1 million, which will be paid by the Richfield Oil Corporation.

The CHAIRMAN: You are referring to the experiment next February?

Dr. CONVEY: Yes.

Mr. DUMAS: All the money that has been spent to date has been put up by Richfield Oil Corporation?

Dr. CONVEY: Yes.

Mr. COATES: You are in there just as observers?

Dr. CONVEY: We are in the position that we must be satisfied in our own minds that this experiment is going to prove useful and that there are no hazards or dangers whatsoever associated with it.

Mr. COATES: Going back to the straight atomic device—

The CHAIRMAN: You mean the nuclear explosion?

Mr. COATES: Yes. Would it not seem more economical to use a stronger nuclear explosion, from a national viewpoint?

Dr. CONVEY: Your question is whether we should probably use the larger size nuclear explosive?

Mr. COATES: Yes.

Dr. CONVEY: There is no doubt about that. It would probably be in the order of 10 kilotons.

The CHAIRMAN: Dr. Convey, from your experience as a scientist and also from your experience in this particular field, would it involve a great expenditure for Canada to produce the necessary products to enter into the production of this project?

Dr. CONVEY: I think, Mr. Chairman, the answer to your question would be a little more authentic if it came from Atomic Energy of Canada. However, in looking at it, if this experiment succeeds and nuclear explosives are used to any extent in the mining industry, I do think that Canada should look into the production of her own explosives.

The CHAIRMAN: Are you referring to mining in base metals and so on, in addition to this project?

Dr. CONVEY: Yes, the use of the explosive in quite a few of our mining ventures.

Mr. MCGREGOR: To whom do these states areas belong?

Dr. CONVEY: I would say they belong to the Alberta government.

The CHAIRMAN: There are some 40-odd oil companies that have leases in this area.

Mr. MCGREGOR: Do you not think if this bomb is such a wonderful thing that the oil companies would be looking after it themselves?

The CHAIRMAN: Well, they are. There is an oil company that has undertaken the project.

Mr. MCGREGOR: Who is going to pay for it?

Hon. PAUL COMTOIS (*Minister of Mines and Technical Surveys*): The first experiment will be at the expense of the Richfield Oil Corporation.

Mr. MCGREGOR: If they decide to go ahead with the bomb test the government will not have to pay the bill.

The CHAIRMAN: No. Canada enters the picture by having the atomic representatives from different departments of government there as observers. There is no money involved, or no expenditure by the Canadian government, or even the Alberta government.

Mr. MCGREGOR: How many personnel will attend as observers?

The CHAIRMAN: This has been set out on the record; Dr. Convey knows.

Dr. CONVEY: In addition to the Mines branch there will be the Department of National Health and Welfare, Atomic Energy of Canada Limited, the government of Alberta and university representation. They will form the main participating departments on the first committee.

Mr. MCGREGOR: There will be about half a dozen men from the government?

Dr. CONVEY: There will be nine altogether. Of course, there is the addition of two personnel from the United States Atomic Energy Commission who will act as advisers to that group.

Mr. WOOLLIAM: This is not a question. It probably was covered previously and I have not had time to review the printed proceedings. As I understand it, this area covers approximately 17,000 square miles. Is this leased from the Alberta government to the federal government or who has the oil lease on this? I know this witness is a scientist, but I was wondering whether anyone has that information.

The CHAIRMAN: I think it is on the record.

Dr. MARC BOYER (*Deputy Minister of Mines and Technical Surveys*): It is the private companies that have leases, and they are leased from the government of Alberta.

The CHAIRMAN: Dr. Boyer, has not Canada an interest in a small area there?

Dr. BOYER: Yes, there is still an area over which Canada retains a certain interest because of work that had been done in that area during the war years. But that again is leased to a private company, and whenever the tar sands on that particular lease are exploited and if they return any profit, the government of Canada would recoup some of its investment.

Mr. WOOLLIAMS: The resource itself, though, is a provincial resource because of an agreement in 1930 between the provincial and federal governments; and if the federal government has any equity in it, it is through lease,

no matter whether the work was done during the war or not. It is not a reservation in the agreement that was kept when the resources went to Alberta in 1930.

Dr. BOYER: No. The interest that the government of Canada still retains there is due to an operation during the war years where processes were tried out in a certain area. Tests were made and holes were bored in order to find the extent of the area and the size of the deposit. The federal government retains an interest there and will get its money back whenever a company that has that lease starts operating and returns a profit.

Mr. WOOLLIAMS: That is the point. If they did work during the war, they must have had some agreement with the provincial government to obtain an equity and go in and do that work, because this belongs to the province.

Mr. BOYER: I do not think the federal government owns the mineral rights. It is in the same class as the other leases.

The CHAIRMAN: Would you answer Mr. McGregor's question concerning the federal expense in connection with this project.

Dr. BOYER: For the coming project, there are no expenditures involved except travelling expenses incurred by the group of federal representatives on the technical committee that is headed by Dr. Convey. In addition a few laboratory experiments may be conducted involving the tar sands.

Mr. MCGREGOR: I cannot see why you have to have so many government men looking after this if it is being done by the oil companies. Surely they know as much about this as we do, and I only hope it will not be made a sink-hole for more government money.

Dr. CONVEY: There will also be representatives from the Richfield Oil Corporation. In this experiment there is much more at stake than meets the eye. The position which we are in at the present time is that we want to be sure in our minds that this experiment at least indicates that it will prove possible without any hazards to anyone; and in our own laboratories, together with the various atomic energy groups, we have much more experience in these factors than the Richfield Oil Corporation. They are interested in this solely as a means of producing oil.

Mr. MCGREGOR: Do you not think the oil companies could look after this?

Dr. CONVEY: Well, they are paying the bill.

Mr. MCGREGOR: That is fine, as long as they pay the bills.

Dr. CONVEY: And there are several oil companies now who wish to join in.

Mr. MCGREGOR: So far as government ventures are concerned, that is not what has happened generally. We generally wind up with the government paying the bills, and I venture to say that will happen here before we are through.

Dr. CONVEY: I would not think so. Mr. Chairman, may I correct my previous figures concerning the number of nuclear explosives required for the tar sands area. It would be something of the order of 10 million bombs and not just a million.

The CHAIRMAN: Yes, I think your arithmetic and mine is now the same. If Canadian agencies like the Atomic Energy Control Board or the Chalk River development could produce material for these nuclear explosions, it would actually mean a $10 billion industry for Canada.

Dr. CONVEY: From the evidence available and calculations we have made, that would be the approximate figure.

Mr. MARTINEAU: Will the witness state whether or not this process for the extraction of minerals by explosion has been used in any countries other than the United States?

Dr. CONVEY: We know there have been at least seven such experiments in the United States.

Mr. MARTINEAU: Have they been successful?

Dr. CONVEY: To date, I would say they have been more than successful. These experiments have not been conducted in a neighbourhood, such as the Athabasca tar sands, but they have been carried out in connection with other mineral deposits; and it is on the basis of the results of those experiments that we are taking a good look at the possibility of using the nuclear device for the liberation of the bitumen from the tar sands.

Mr. MARTINEAU: Have we passed from the experimental stage to commercial extraction?

Dr. CONVEY: We are still in the pre-experimental stage.

Mr. MARTINEAU: I mean in Canada—the extraction of minerals by atomic explosion.

Dr. CONVEY: No, it is in its early infancy. The experiments to date have been to find out what happens when you detonate a nuclear explosion underground.

The CHAIRMAN: Thank you, Dr. Convey. In accordance with the minutes I referred to a few moments ago, and if it is agreeable to the committee, we will revert and call the heads of the different divisions. The first witness would be Mr. Pack, the chief administrative officer.

ADMINISTRATIVE SERVICES

Item 186. Departmental Administration $687,289

Mr. MARTINEAU: Mr. Pack, could you tell us some of the main problems that are encountered in your function as chief administrator of the department?

Mr. K. M. PACK (*Chief Administrative Officer*): I would say that from an administrative point of view one of the most difficult problems we face in administration is keeping pace with the operational requirements. This is made rather difficult in view of the fact that all our activities do not take place in a static location, but are spread about through many parts of the country. In the peak of our operational season, we have as many as 250 to 300 individual components of the department spread about carrying out their operational work, and they have to meet the basic elementary administrative requirements. I could not possibly elaborate on that because our department is called upon to negotiate a great number of contracts in regard to everything from aircraft and horses down to ships. We have a quite serious problem of logistics in that, as our work moves farther north and up to the Arctic area, we are faced with the problem of providing supplies, food and all the requirements of an operation to a particular area. There is always a time element involved.

Of course, we have the problem of maintaining these units and supplying them with spare parts and other related requirements. I think possibly one of the other points which makes it more difficult is that the individual units are sent out with a chief, who is required primarily to do a technical or operational job. But we cannot hope to have an administrative person available for each and every one of them and we have to ask our chief to act in a dual role. He is asked to do the best he can to get the job done, and to do it in a way which will stand up to any fair and reasonable criticism.

That is a general summation of our problems. If I have not covered the whole area, possibly a question from a member would bring it out.

Mr. MARTINEAU: Are these activities preconcentrated or coordinated at Ottawa?

Mr. PACK: Generally speaking, they are first coordinated at Ottawa and controlled at Ottawa. We have one large-sized, continuing, decentralized establishment on the west coast, and it will be increased in future. But to a very great extent most of our actvities are oringated and maintained from Ottawa. Of course, as you would expect, we do decentralize a fair amount of authority to each individual party chief or head of a unit so that he can act on his own initiative. However, basically I would say that Ottawa is the controlling agency.

Mr. MARTINEAU: Would the witness state if the departmental activities have been handicapped by a lack of proper accommodation or for similar reasons here in Ottawa during the last few years?

Mr. PACK: Are you speaking of the whole department or the head office administration group?

Mr. MARTINEAU: I take it that the administrative group coordinates the activities of the whole department. Am I correct in saying that?

Mr. PACK: Yes, it works at different levels. The head office, or what we term departmental administration, attempts to coordinate, help out, revise and assess any of the detailed operations that are carried out by each branch.

Mr. MARTINEAU: Have these activities been hampered or curtailed due to the spreading out of the departmental buildings in different sections of Ottawa?

Mr. PACK: I would say most emphatically, yes.

Mr. MARTINEAU: Would you care to elaborate on that?

Mr. PACK: Well, I have forgotten the number of buildings we have occupied in the city at any one time; I think it was 28 or 30. The fact that our operations are all closely knit makes it desirable that they be as close together as possible if, for no other reason, than the transfer of mail from one office to another. Due to the fact that these buildings have been spread about, other difficulties are imposed. Personal contact is cut down, to a degree.

Mr. MARTINEAU: Am I correct in saying the spreading out of these buildings has hampered or impaired the efficiency of the department?

Mr. PACK: I do not know how you would measure that. For a qualified answer, I think you would have to say yes.

Mr. MARTINEAU: Has this situation existed for a number of years?

Mr. PACK: As you may know, we are in the process of a large building program which, in its present form, will not reach completion for another two years or so from now.

Mr. DUMAS: When was that program started?

Mr. PACK: The Booth street program was started in 1956, and it has been on the planning boards and in the discussional stage for eight, nine or ten years. I think the real planning started with the creation of the department in January, 1950. Of course, as everyone will realize, there is a great deal of preparation necessary before you reach the day when you get the authority to dig the first hole.

Mr. NIELSEN: Are you aware as to whether the financial wherewithal to proceed with these buildings was refused by Treasury Board, when first they were submitted?

Mr. PACK: I cannot say that I am aware of that.

Mr. NIELSEN: Is anyone in the department?

Mr. PACK: We make our requests to the Department of Public Works and they carry the ball for us.

Mr. NIELSEN: Perhaps the deputy minister would like to comment on this. When did you first ask for the funds to put these buildings up; was it in 1950.

Mr. PACK: The department was created in 1950, and when the need for a long-term plan became evident, discussions commenced as to what should be done, how to do it, and when it would be commenced.

Mr. NIELSEN: I will put the question again. Were you refused, when first you submitted your request for funds to proceed with this expansion program?

Dr. BOYER: I do not think I can say we were "refused". In the first place a heavy demand for construction materials by industry around 1950 made it necessary to curtail government building programs. Then came a plan of the government for dispersal of buildings in the Ottawa area, within a radius of about 100 miles. So our plan, calling for a concentration of four or five buildings on the same site was deferred.

Mr. NIELSEN: That still does not answer my question. You asked for money to build buildings. When you asked for that money, at the time you asked for it was it given to the department in order that they could go ahead with the building?

Dr. BOYER: It was not given because, as a matter of policy, or principle, our plan could not be accepted for building on this site immediately. There were also problems of expropriation and these again retarded the project. But when we asked for the money finally and the plan was accepted for building on this site, we started getting the money.

Mr. DUMAS: When your plan was ready and you had everything ready to go ahead, a certain amount of money was asked for from the treasury, and it was agreed upon?

Dr. BOYER: Yes; but it took some years to have the plan accepted, and until the plan was accepted for building on that site, no moneys could be made available for the buildings.

Mr. NIELSEN: That is not quite my understanding of what you and Mr. Pack have been saying. Is it not the fact that the department has had difficulty in obtaining, not only for this purpose, but for all purposes, funds from Treasury Board to undertake the projects that you want to undertake? Is that not so?

Dr. BOYER: I would say, yes.

Mr. MARTINEAU: Mr. Chairman, could Mr. Pack tell the committee if it is the fact that for a number of years the department has been carrying on its operations in certain inadequate buildings, some of which have been slated for demolition for a number of years?

Mr. PACK: Yes.

Mr. MARTINEAU: And are you still carrying on under those conditions?

Mr. PACK: We have units of our department in buildings that we would be very happy to vacate.

Mr. MARTINEAU: Would you tell us the number of such buildings that are involved.

Mr. PACK: This is a guess: I would say there are four to five buildings that we would be very happy to vacate. I will put it another way: When these units are vacated and we move into new quarters, I do not think there will be any comparison between what we move into and what we move out of.

Mr. MARTINEAU: And is it the fact that because the operations of the department have been carried out in these quarters, that has retarded the department's activities such as its mapping program?

Mr. PACK: As a matter of fact, I was intending to base my reply on the compilation unit. Here it is a fact that if we could put more presses and more equipment in, we would obviously turn out more maps and get out the job that much more quickly.

Mr. MARTINEAU: Mr. Chairman, I think the witness said that because of these conditions the survey of the northern regions of the country, and of other parts, have been delayed by several years.

Mr. PACK: If I may have the permission of the committee, I would say this. This is a rather technical question and I would prefer it to be answered by either the deputy minister or the minister. I do not want to deal with the technical aspects of it.

Mr. COATES: Mr. Chairman, when I was asking questions earlier when you appeared before us, Mr. Pack, I questioned you with regard to the obtaining of IBM equipment. You told me at that time that you had been purchasing some and renting some. I believe you said you were renting—

Mr. PACK: Renting the service.

Mr. COATES: As a result of the fact that your buildings are spread all over the city and you have not any coordinating center, has this resulted in an increase of personnel over what might be necessary if you had the department coordinated in a smaller area, fewer buildings?

Mr. PACK: Speaking on this particular subject, we did not anticipate the value or the need for mechanical processing equipment until a few months ago. I will put it this way: We did not establish the need definitely until just a few months ago. I will say, within a year.

As you probably know, it takes a year or so to obtain that equipment. The result is that we actually have the centralized facility for that unit before we could get the equipment from the IBM people. In the planning of our departmental administration building, we were, in the final stages, able to introduce a change in it and thereby specific provision for this unit. The provision is there now.

As a matter of fact, the staff are pretty well lined up now, but we will have to wait for two or three months to have the equipment delivered. So on that particular subject, the provision of the space and the provision of an adequate unit is actually ahead of the equipment. I do not know whether that is a complete answer to your question.

Mr. COATES: Would you say this, that as a result of your operations being spread out you have duplications of staff which might not otherwise be the case?

Mr. PACK: If we are still on the electro-mechanical processing, I would not say that applied.

Mr. COATES: I am talking generally now and I am just referring to your operation as it presently is.

Mr. PACK: Well, I could quote an example. We have messengers running between buildings to a greater extent than would ever be the case if they were all located, as we will be, in one building. We have motor vehicles being used to take person A to see person B, which would otherwise be unnecessary. That is an example. Perhaps that is not the best illustration to give.

Mr. COATES: And probably this could also be the case with regard to clerical staff?

Mr. PACK: Yes; there is no question that in the clerical field and in the stores field a consolidation will inevitably bring about some improvement and some economies.

Mr. COATES: Further on this line, do you feel in your planning that with these IBM machines you will eliminate still further some of the clerical staff which is now necessary?

Mr. PACK: In line with the general trend of use of mechanical processing equipment, I think we have every right to believe that, when they are operating at their peak, they will do the work that would otherwise be done by staff.

In this department we do not see that in a clear, open figure because our general trend of development is up. It does not come out as a nice bookkeeping entry.

Mr. COATES: I appreciate that.

Mr. PACK: We are using up our economies.

Mr. COATES: Yes. Have you anything to do with the construction planning of the Department of Mines and Technical Surveys as such?

Mr. PACK: Yes. This is a cooperative effort on the part of the applicable branch directors, the director general of scientific services, the deputy minister and myself. Although I actually have the staff under my control who look after some of the details.

Mr. COATES: Well, would you answer some questions for me with regard to planning for the Dominion Observatory?

Mr. PACK: I could attempt to, but I may not have enough information to answer your questions.

Mr. NIELSEN: Dr. Beals is here, is he not?

Mr. PACK: The acting Dominion Astronomer is here. I imagine that between the two of us we could answer the questions.

Mr. COATES: When I was questioning him, he said he could tell me the facts about the present facilities, but he had not planned the building they are now in, and that is what I am interested in questioning on.

Dr. W. E. VAN STEENBURGH (*Director General of Scientific Services*): At the present time the Dominion Observatories are planning an extra floor on the geophysical laboratory building. This floor, when completed, will provide space which will barely meet the requirements of the scientific work of the Dominion Observatories. Dr. Beals is a rather modest man, and when discussing this matter before the committee the other day, he failed to point out that the basement of his house at the present time is utilized as laboratory space and scientists are working in that basement.

Mr. NIELSEN: How long has that been going on, Dr. van Steenburgh?

Mr. COATES: I want to go on. This building of which you speak is a fairly new building is it not, Dr. van Steenburgh?

Dr. VAN STEENBURGH: May I just make one addition to my statement before I answer that question? The building that Dr. Beals lives in is on the observatory grounds and belongs to the government.

The CHAIRMAN: Dr. van Steenburgh, would you answer Mr. Nielsen's question? He asked how long this has been going on.

Mr. COATES: I think that is probably the same question as I asked.

Dr. VAN STEENBURGH: I can only speak as to the period I am acquainted with. These crowded conditions for the observatory have existed over the period of 10 years.

Mr. COATES: How old is the building they are presently in? I believe I received the answer in reply to a question on page 180 of the proceedings, where it was said it was finished three years ago.

Dr. VAN STEENBURGH: That is an exceptionally good laboratory building, but it is not large enough. This is the building to which the extra floor is being added.

Mr. COATES: In answer to a question put by Mr. Nielsen, Dr. Boyer stated that there was some doubt as to whether an extra floor could be placed on this building.

Dr. VAN STEENBURGH: The building we are speaking of at the present time, the geophysical laboratory, is stressed for one more floor.

Mr. COATES: But even with this one more floor you might not have facilities which will—

Dr. VAN STEENBURGH: The facilities will barely meet the requirements of the Dominion Observatory.

Mr. COATES: If this building is only three years old, even with the extra floor that is being provided, it would seem to me that there is some very poor planning on the part of someone either in your department or the Department of Public Works, whoever did the planning—or the Department of Mines and Technical Surveys—with regard to the forward look of the department.

Dr. VAN STEENBURGH: I think the committee should realize that planning for buildings for a department is a very involved procedure. We examine our needs and plan for those requirements. Then we add to those requirements what we think is a reasonable expansion over, say, five years. The plans go to the Department of Public Works, where they are reworked. Then they, in their good judgment, may decide that we have asked for too much. Then the plans are reworked on the basis of that decision, and the final decision as to the size of the building we get is determined by Treasury Board. Most departments, as with most individuals, will make provision for their future, but that provision is subject to a number of considerations after the initial planning is done.

Mr. COATES: That is a very convenient way of getting around this. That is a convenience that the Civil Service often seeks to use, as far as I am concerned. No one seems to be able to pinpoint any one particular department or person who is responsible for the irregularities which occur and cause expenses which the Canadian taxpayer has to bear.

Mr. AIKEN: You can blame the Department of Public Works here, I think.

Mr. COATES: That is right. And if you were the Department of Public Works, you would blame the Department of Mines and Technical Surveys?

Dr. BOYER: May I be permitted to say a word, Mr. Chairman. The member referred to page 180 and a statement I might have made that the building would not stand an extra storey.

My statement was rather a general statement, that the amount of money needed for that extra storey on that building may not be listed in our estimates next year because of the question of expansion under discussion. The point is whether we should continue to add to the site of the Dominion Observatory where it is presently, on the experimental farm, with the amount of traffic on Carling Avenue. The discussion is whether it should be moved somewhere else, or expanded on its present site. This matter and the matter of the green belt have retarded the project.

Mr. COATES: My point was, the plan involved in the construction of this building is not such as to provide the necessary facilities for future requirements, which I consider should have been recognized by the officials who were planning the building.

Dr. BOYER: I fully agree that we need more accommodation for the Dominion Observatory, but we have to deal with the Department of Public Works, the experimental farm, and those who are administering general planning of the buildings through the green belt.

Mr. MARTINEAU: I should like to ask Mr. Pack whether full use is being made of the equipment purchased by the department. Are the employees and the officials of the department making full use of that equipment, in view of the cramped conditions in which they have to operate? Is the best advantage being taken of such equipment as was required?

Mr. PACK: You are speaking basically of our technical divisions?

Mr. MARTINEAU: Yes; and particularly with regard to your training equipment.

Mr. PACK: I know they have made every attempt to do the maximum but whether or not they might have coaxed a little more out of it in a different location would, I think, be open to doubt.

Maybe you would rather pursue that question with the individual branch directors, who are closer to the equipment as such than I am.

Mr. MARTINEAU: If I may refresh the memory of the witness, in the review published by the departments, "Pre-cambrian", in April, 1958, it stated that the buildings—

Mr. DUMAS: On which page?

Mr. MARTINEAU: Page 37. "The buildings now occupied by the branch do not permit the use of mapping equipment to best advantage". Would that be a correct statement?

Mr. PACK: I think I would say yes. I am speaking now particularly of the map reproduction equipment. We have an old building there which of course, sets the limitations of space, and that sort of thing. You have to do your best to fit what equipment you can in, as contrasted to designing and laying out a building.

Mr. MARTINEAU: Would it be a fair summary of the witness' testimony, Mr. Chairman, to say that the activities of the department have been more costly and less efficient throughout a number of years, due to bad housing and bad building accommodation?

Mr. PACK: I will agree with that, yes.

Mr. NIELSEN: Mr. Chairman, we still have six witnesses to go through here, and we have about 55 minutes left. I wonder if we could pass on.

The CHAIRMAN: All right. Is that agreed? Then the next witness will be Mr. Code, who is the chief, personnel and office services division.

Mr. WOOLLIAMS: Mr. Chairman, I should like to ask a few questions by way of summary. Mr. Code, what is your principal concern, as chief of the personnel and office services division? Is it looking after personnel?

Mr. R. B. CODE (*Chief of Personnel and Office Services Division*): I assume by that you mean, what are our main problems?

Mr. WOOLLIAMS: That is right.

Mr. CODE: I am speaking on that in a general way. I think you will find that each individual branch director will tell you what his problems are in so far as his branch is concerned and how they specifically affect him and his program.

In general, the main, continuing problem in personnel in the Department of Mines and Technical Surveys is the getting and keeping of scientific and technical personnel.

Mr. WOOLLIAMS: What is the difficulty in being able to retain good personnel in your department?

Mr. CODE: As is most often the case—it is so in our case—the difficulty in retaining them is largely centered around the salaries we are able to pay them.

Mr. WOOLLIAMS: Is there any problem when you look at the department as a whole? It is broken down as I see it, into five or six divisions. When you look at the department as a whole, is there any problem in respect of the ceiling of the salaries—and if so, why?

Mr. CODE: Well, the whole problem regarding salary starts at the entrance level. At the present time the entrance salaries that we are able to pay, or that the Commission authorizes on our behalf, are competitive across Canada. But employees who join us very soon find themselves slipping behind their counterparts in industry. The added difficulty in this connection is that not only do they slip behind industry, but they find their value to industry increases through their work and experience with us.

Mr. WOOLLIAMS: I see that the salary range of a director, say in the Mines Branch, runs from $13,000 to $14,000. What are the qualifications of a man holding a position such as that, and what is the competition that industry offers? What kind of salary would a director get in industry, with approximately the same qualifications? I think that seems to come to the crux of the problem.

Mr. CODE: I do not really think I am in a position to answer that question, but it would be substantially more than that level with us.

Mr. WOOLLIAMS: How many people are employed in the over-all Department of Mines and Technical Surveys?

Mr. CODE: This year our estimates provide for 3,761.

Mr. WOOLLIAMS: What increases would you require to bring your department up to the standard mentioned by the last witness in reference to administration?

Mr. CODE: I am wondering if that question could not be better applied to each individual director.

Mr. WOOLLIAMS: Well, would you give me a general answer, or would you rather leave that for another witness? I do not want to belabour the situation.

The CHAIRMAN: I am inclined to think that each director should answer, Mr. Woolliams:

Mr. WOOLLIAMS: All right, Mr. Chairman.

The CHAIRMAN: Would you agree with that?

Mr. WOOLLIAMS: That is fine, Mr. Chairman. Then I will leave that. In the over-all picture are there any recommendations with regard to certain employees being changed? In other words, could they be reduced, in a sense, so that you could save money and obtain certain other employees who would be to the benefit of the over-all picture?

Mr. CODE: If I understand your question correctly, you want to know whether, when we find people are misfits in some areas, we should transfer them to other areas and make way for properly qualified persons?

Mr. WOOLLIAMS: Have you any particular recommendations in that regard?

Mr. CODE: No, I do not think I have.

Mr. WOOLLIAMS: Then really the sole problem, as you see it as chief of personnel, is that once you train a man and he becomes skilled, the competition from local industry is such that he will likely leave the department—as has been done in the past—and go and work for industry? That is your problem?

Mr. CODE: That is the main problem. I should also include with industry, of course, universities and, latterly, secondary schools.

Mr. AIKEN: Could you give me any indication of the percentage of employees in the department who are administrative personnel, and who are operational; that is, in the field?

Mr. CODE: I can give you a percentage of the employees in this department who are scientific and technical, and maybe in reverse that will answer your question.

Mr. AIKEN: Yes.

Mr. CODE: The total number of personnel is 3,761. The total number of scientific and technical employees is in the neighbourhood of 1,460. There are substantial supporting staffs, who are not clerical or administrative, in the other areas. There are also some of those scientific and technical people who are administrators.

Mr. AIKEN: In this category there would be people probably classed as non-operational who are nevertheless engaged in actual work of a scientific nature, who are working within the building of the Department of Mines and Technical Surveys.

I am sorry; I am afraid I did not make myself clear. My first question was concerned with this. How many people are operational; and by that I meant, engaged in scientific or technical work either in the field or in the buildings? I was wondering if the percentage in your department is more or less than would normally be expected.

Mr. CODE: I have no figures on that, but I am sure they would be extremely high in our department.

Mr. AIKEN: The number of technical and scientific persons?

Mr. CODE: Extremely high, yes. Much higher than most others.

Mr. COATES: Mr. Chairman, I wonder if the witness has any idea how many scientists are doing administrative work as well as their scientific work; and can he give us some idea of the policy of the department with regard to this matter?

Mr. CODE: We have five branches, as you know, in the department, and each of these branches is headed by a scientist, who is also an administrator. In the three larger branches there are five divisions in each, each of which is headed by a scientist who has become a scientist-administrator.

Mr. COATES: Is it the policy of the department to have their scientists doing administrative work, or not? I know that is a general question.

The CHAIRMAN: It is obvious that that would be necessary, Mr. Coates.

Mr. COATES: To a degree; but I find that some of the departments here are endeavouring to place administrative men in administrative positions and keep the scientists free to do their scientific work only.

Dr. VAN STEENBURGH: I should like to answer that question, Mr. Chairman, because as director general I am closer to the technical aspects of the department than the personnel officer.

Ten years ago there was a tendency to move scientific and technical personnel into administrative posts for one reason or another. Latterly, we are making a strenuous effort to build up a strong administrative category throughout the department and protect the scientific and technical people from administration functions.

If we are paying a man for his technical knowledge, we should use him in the technical field to the best of our advantage. So the policy in the department now is to build up a strong, efficient administration service, which will relieve to the maximum extent the scientists and technical people for the job that they should be doing.

Mr. COATES: That is a very commendable effort.

Mr. CODE: Mr. Chairman, might I correct one meaning that might be taken from one figure I gave you? I gave the total strength of the department we are aiming at for this year as 3,761; but I should say included in that are 1,400 seasonal people. So the comparison of the 1,461 scientists and technical people is against a total continuing staff of 2,361.

Mr. WOOLLIAMS: I have here a chart of the salaries of senior departmental officers of the Department of Mines and Technical Surveys and it shows the directors receive from $13,000 to $14,000. I show this to the witness and ask him if he has any recommendations to make in this regard.

The CHAIRMAN: He has one.

Mr. WOOLLIAMS: In speaking about competition with private industry, what recommendation would you make as to what category these salaries should be in, and how much should they go up to meet the competition?

Mr. CODE: Well, Mr. Chairman, I am not in a position to make a recommendation in regard to part of this. Is this chart in general distribution?

Mr. COATES: It has been.

Mr. NIELSEN: Perhaps, Mr. Chairman, we could have it introduced as part of the committee proceedings.

Mr. WOOLLIAMS: I would be quite willing to do that.

The CHAIRMAN: Would the committee like to have this recorded in the minutes?

Mr. CODE: It shows a comparison of salaries within the department.

Moved by Mr. Nielsen and seconded by Mr. Aiken that the chart form part of the proceedings.

Motion agreed to.

(Chart follows.)

SALARIES OF SENIOR DEPARTMENTAL OFFICERS

MINES AND TECHNICAL SURVEYS

March, 1959

Salary Ranges	Departmental Administration	Dominion Observatory	Geological Survey	Mines Branch	Surveys and Mapping Branch	Geographical Branch
18,000	Deputy Minister					
14,000–16,000	Director-General					
13,000–14,000			Director	Director	Director	
11,500–12,500		Director	Associate Director			
10,000–11,000	Chief Mineral Resources Division	Dominion Astrophysicist	Chief of Division Mines & Technical Surveys	Chief of Division Mines & Technical Surveys	Chief of Division Mines & Technical Surveys	Director
9,060–10,140	Chief Administrative Officer Chief Inspector of Explosives Senior Scientific Officer 3, MTS	Senior Scientific Officer 3, MTS (Chiefs of Divisions)	Senior Geologist Senior Scientific Officer 3, MTS	Senior Scientific Officer 3, MTS	Administrative Officer Chief Cartographer Engineer 7	
8,340– 9,420	Chief of Personnel Senior Scientific Officer 2, MTS	Senior Scientific Officer 2, MTS	Geologist 4 Senior Scientific Officer 2	Senior Scientific Officer 2, MTS	Engineer 6	
7,980– 9,060					Ship Construction	
7,500– 8,580	Senior Inspector of Explosives Senior Scientific Officer 1, MTS	Senior Scientific Officer 1, MTS	Senior Scientific Officer 1, MTS Geologist 3	Senior Scientific Officer 1, MTS	Engineer 5	Geographer 5

Mr. CODE: In looking at the chart, I think it is obvious that between the ranges that currently exist, from the deputy minister's salary down, we do not have any substantial gaps wherein to play. You asked me how far we thought the salaries were lagging behind outside salaries. Well, they lag at varying degrees as they go up the scale. Some of the senior scientists salaries are at least $2,000 or $3,000 per annum behind.

Mr. WOOLLIAMS: The deputy minister receives $18,000 and that puts a ceiling on it.

Mr. CODE: I think that is correct.

Mr. NIELSEN: I have just one last question in connection with this. Is it the feeling, Mr. Code, that the directors should be at the same salary level throughout and that that salary level should be increased to raise the overall salary level so that the lower echelons would be in position for promotion?

Mr. CODE: It is true that the directors' salaries should be raised so that this could happen. Your question as to whether all five directors should be parallel or not can best be answered by the deputy minister.

The CHAIRMAN: Mr. Gamble, the director of Surveys and Mapping Branch is our next witness.

SURVEYS AND MAPPING BRANCH

Item 189. Branch Administration, including a Grant of $1,000 to the Canadian Institute of Surveying and Photogrammetry	$ 82,820
Item 190. Geodetic Survey of Canada	788,606
Item 191. International Boundary Commission	83,224
Topographical Surveys, including expenses of the Canadian Board on Geographical Names—	
Item 192. Administration, Operation and Maintenance	1,980,020
Item 193. Construction or Acquisition of Equipment	100,000
Canadian Hydrographic Service—	
Item 194. Administration, Operation and Maintenance, including Canada's fee for membership in the international Hydrographic Bureau	3,661,349
Item 195. Construction or Acquisition of Buildings, Works, Land and Equipment	2,777,057
Item 196. Legal Surveys and Aeronautical Charts	775,463
Item 197. Provincial and Territorial Boundary Surveys	43,800
Map Compilation and Reproduction—	
Item 198. Administration, Operation and Maintenance	1,283,532
Item 199. Construction or Acquisition of Equipment	180,200
	$11,756,071

Mr. NIELSEN: Mr. Gamble, could you explain to the committee what problems you feel concern your branch; and explain also whether you feel that your work is being impeded and if so, why?

Mr. S. G. GAMBLE (*Director of Surveys and Mapping Branch*): Mr. Chairman, I wonder if I could again deal with the divisions of the branch rather than lump the whole branch together. I make this request because the problems are so different in the five areas, and what I may say in a general way may not always apply to all the areas. Would that be acceptable?

Mr. NIELSEN: Yes.

Mr. GAMBLE: First, I would like to speak about the geodetic survey. Of course, the problem there has been staff; also the training of staff. You just cannot take on a lot of people and put them to work because of the technical and precise nature of the job. It takes several years to develop and train them. I do think we have to look forward to a greater effort in precise control work, not only in the north but in the settled areas; and I would look forward over a period of years to seeing some increase in the staff there.

Mr. NIELSEN: What increase do you look forward to?

Mr. GAMBLE: I was thinking about planning for about 2,500 permanent staff members over a period of five years. This would require sixty seasonal employees, or thereabouts, to support them in their summer-time work.

Mr. NIELSEN: Do you feel that this increase would be the minimum acceptable now in order to properly discharge your function at this time?

Mr. GAMBLE: I would say yes. In regard to housing for the geodetic survey, I would say that with the present staff we are not too comfortable. However, it is reasonably acceptable until such time as the new surveys and mapping building is completed. We hope to be able to go into that building about fifteen months from now.

The problem with the topographical survey is the compilation of the 1:50,000 and 2:50,000 maps. This unit has been confronted with space difficulties and they have not been able to use their equipment to the best advantage. Much of it is jammed far too closely together and we have not been able to put the auxiliary equipment, which would increase the production of this equipment, along with it.

Mr. MARTINEAU: Does the witness agree that the first requirement in our national resources would be topographical mapping?

Mr. GAMBLE: Topographical mapping is an early requirement, but it is rather difficult to assess that as against the hydrographical work. It is rather a matter of placing emphasis on areas for certain purposes rather than stating that topographical mapping is more important than hydrographical work, or aeronautical charting.

Mr. MARTINEAU: Do you agree it is one of the primary requirements?

Mr. GAMBLE: Yes.

Mr. MARTINEAU: And would it also be important in compiling your navigational data?

Mr. GAMBLE: Yes. Aeronautical charts are deficient at the present time and do not show adequate information. As we proceed with the topographical mapping, information is obtained that can be transposed to aeronautical charts. This will bring them up to the required standards. Thus topographical data will be used in several different ways.

Mr. MARTINEAU: Would it also be used for geological and geographical surveys and prospecting for oil and gas?

Mr. GAMBLE: I believe Dr. Harrison could answer that better than I. But I believe, from my experience, the Geological Survey is most anxious to get our topographical maps in advance of any operations, wherever practical, to aid them in carrying out exploratory work.

Mr. MARTINEAU: Is it the feeling of the witness that such work in topographical mapping has been lagging in the last few years due to cramped space and the lack of proper personnel?

Mr. GAMBLE: It is difficult to say whether it is lagging, because it has been going forward faster and faster all the time.

Mr. MARTINEAU: Has it been going forward and keeping pace with the development of our resources?

Mr. GAMBLE: No, it has not.

Mr. MARTINEAU: To what do you contribute the chief cause for that?

Mr. GAMBLE: Lack of staff and accommodation. The two are tied in close together and these would be the main reasons.

Mr. MARTINEAU: To your knowledge, has the department ever considered the employing of private firms to carry out topographical surveys?

Mr. GAMBLE: This has been discussed at certain levels, but we feel it is primarily a government function.

Mr. NIELSEN: Mr. Gamble, I wonder if we could have your recommendation as to the immediate number of additional personnel which you feel is necessary in order adequately to discharge the responsibilty of topographical surveying?

Mr. GAMBLE: My answer for that is that we will need, during the next five years, forty continuing employees and no additional field staff.

Mr. HARDIE: What has been the average increase over the past ten years?

Mr. GAMBLE: Are you confining this to the topographical surveys?

Mr. HARDIE: Would you give me the average increase on the surveys mapping as well?

Mr. NIELSEN: It is about 10½ per cent, is it not?

Mr. GAMBLE: Yes.

Mr. HARDIE: How does this compare with the increases you think you should have now in surveys and mapping for the next five years? I think you said twenty-five.

Mr. GAMBLE: That was for geodetic surveys.

Mr. HARDIE: What percentage of increase would that be?

Mr. GAMBLE: For the straight scientific and technical personnel, it would be a 60 per cent increase.

Mr. HARDIE: Over the five years or over each year?

Mr. GAMBLE: Over the five-year period.

Mr. NIELSEN: And this 10½ per cent represents an increase over a ten-year period, does it not?

Mr. GAMBLE: I can speak more authoritatively on the Topographical Survey than on the others, because the period of expansion was from 1946 to the early fifties, when there was a very sizable expansion in that divsion. Since 1950 the expansion has been very much less; so when we proportion this expansion over the ten-year period, it is on the order of 10½ per cent. Over the last five-year period it has been something like one or two per cent per annum. Does that answer your question?

Mr. WOOLLIAMS: Is not the getting and retaining of scientific and technical personnel something that creates the same problem in each of these branches? It seems to me that is the general trend of these branches, and I was wondering if we could not shorten the time spent here. Do we have to have the personnel man up and ask him these questions? Perhaps we could just ask each director how much increase they feel they need in order to have the department working efficiently. Otherwise we will be going over the same ground twice and wasting a lot of time. The same tone runs through each branch, it seems to me; each director is asking for more personnel, and they all have similar problems. I do think that would expedite the proceedings.

Mr. GAMBLE: For Legal Surveys there are 30 continuing employees, supported by 30 seasonal employees. For map compilation, 100 continuing employees, approximately half of whom would be on graphical work; the rest would be on the reproduction equipment and other types of work. Again, this is a five-year period. The Hydrographic Service—this is the largest figure—has 490 continuing employees listed here. I think I should break this down some way. There are 30 hydrographers, 60 oceanographers, 100 on compilation and office type of work. There are 300 ships officers and crews and 40 seasonal employees. The total for the branch is 815 over this 1957 period.

Mr. COATES: This 815 would be new employees additional to what you presently have?

Mr. GAMBLE: That is correct.

Mr. COMTOIS: I think, Mr. Chairman, I should mention that this includes the additional crew which will be required for the new ship that is going to be built this year.

Mr. NIELSEN: And the ships that will be working in the future?

Mr. COMTOIS: That is right.

Mr. NIELSEN: Over this five-year period?

Mr. COMTOIS: Yes.

The CHAIRMAN: Gentlemen, are we ready for Dr. Convey? As you know, Dr. Convey is the director of the mines branch.

MINES BRANCH

Item 202. Administration, Operation and Maintenance	$ 3,527,130
Item 203. Construction or Acquisition of Equipment	269,245
	$ 3,796,375

Mr. NIELSEN: Could I ask the same type of question of Dr. Convey? What does he feel is impeding—if anything—the function of his branch, how can it be cured, what additional staff requirements are necessary in order to meet the responsibilities of his branch and to ensure that it is working efficiently, and so forth?

Dr. CONVEY: The Mines Branch, as you know, is interested in the processing of Canadian minerals to their finished products. There has been a change in emphasis in this work, particularly within the last ten years. It is one in which Canada has witnessed an expansive mineral program, and at the same time we are now having to deal with complex ores, which are a little more difficult to treat them than the high grade ores of the past.

In addition, we seem to have had a growth in the mining industry, and the requests we are receiving for technical assistance are increasing at a rapid rate. We have insufficient hands to accommodate the majority of these requests, and we find that quite a lot of money is going out of the country into the United States research laboratories for such technical assistance.

The change in emphasis, as I have mentioned, is, first, with respect to the need for more specific research into the treatment of these complex ores, which perhaps will have a benefit to Canada within the next five or ten years. Those are the difficult ones. In addition to the processing of ore, we have mining troubles. We are reaching, in our mining procedures, mining at greater depth. Associated with that we have problems in actual mining mechanics which did not exist a few years ago.

We are paying a token respect to this work at the present time, but we realize that we must expand our efforts.

Then we come into fuels research. There is the previously-mentioned program associated with the processing of tar sands. We may get the oil to the surface, but there is still a lot of work associated with bringing that oil into a marketable product. In addition to that we have the possible future application of our scientific acumen, if you wish, into the possible applications of nuclear explosives in mining in general.

When we consider extractive metallurgy we enter a highly scientific development which requires a planning of the efforts of chemical engineers, metallurgists, physical chemists and physicists.

In the past the metallyrgist could look after the work himself. Today he cannot; he has to call in these other colleagues as part of a team effort. In metallurgy—that is in respect to the finished products—the demands today are for metals to have associated with them physical properties which were not required in the past. I am thinking now in terms of high temperature resistance and cold temperature resistance.

The result of the work means a redirection in our present personnel set-up in which we have some 4 per cent of our staff whom we will class as clerical, concerned with administration. The rest is made up of professional, university trained scientists and engineers and technicians. The ratio there I have kept in the order of about two technicians to three scientific personnel. I have purposely done that in order to see to it that the scientist himself is doing his own work and does not become an armchair scientist. In some areas I recognize that more technicians are needed. However, the net result is this, that, trying to look ahead for five years I would say we are going to require at least an increase of about 30 staff members, which would bring a total of 150 in five years.

Mr. NIELSEN: Thirty annually?

Dr. CONVEY: Thirty annually. In the past we have been receiving new staff at the rate of approximately, during the past five years, a 12½ per cent addition. We seem to have risen from a total of approximately 500 to 600 in five years. Unfortunately, we cannot undertake all the work that is brought in to us, and quite often that delay means a lot to a mining community.

Mr. NIELSEN: Then you are not keeping pace, in your branch, with the demands that are placed upon it?

Dr. CONVEY: Definitely not. I would say right now we have some 25 different ores waiting to be processed. We have insufficient hands, our space is limited, and we just cannot keep pace with the mining developments.

I will admit that over the last few years we have encouraged the provincial governments to get into this field to try and do a little of their own work. Unfortunately, in most of the provincial government laboratories, that have come into existence, are expected to cover the whole waterfront of resources.

Mr. NIELSEN: Apart from staff difficulties do you find you are unable to undertake projects which you would like to undertake in your branch because of a lack of financial support?

Dr. CONVEY: I can answer that very easily in this way. Each year we ask for more money than we receive.

Mr. NIELSEN: Do you find yourselves seriously curtailed in your function by being precluded from undertaking scientific projects by reason of a lack of funds?

Dr. CONVEY: Yes. There are some projects which we would like to undertake, particularly those of a fundamental nature, which unfortunately, due to lack of staff, we have to put on the shelf for the time being.

These projects are as a rule very long-term, but I am quite sure that the dividends one would obtain from such work would be of great benefit to Canada.

Mr. NIELSEN: Apart from the specific questions concerning your branch in particular, would you answer me as a scientist whether, in your opinion, Canadian science as a whole is being retarded by its inability to obtain the necessary financing?

Dr. CONVEY: Yes, it is being retarded, for this reason, that although we need professionally trained men to carry out the work such as our department is doing, the universities find themselves in a position that they cannot provide us with the staff which we need. They in turn come after us and they want to know, "Can you in some way enable us to obtain financial support for research in mineral processing and mining". This last year we did attempt to get treasury to award us a $50,000 grant which we would

administer in order to try and encourage, at least in one field, some bright university graduates to enter the field of mining research. Mining research in Canada today is literally non-existent.

Mr. NIELSEN: Did you get the grant?

Dr. CONVEY: We did not; we were turned down.

Mr. NIELSEN: How long have you been with the department?

Dr. CONVEY: I have been with the department now eleven years in June.

Mr. NIELSEN: How long has this condition existed?

Dr. CONVEY: I would say the condition seems to have existed over the past ten years.

Mr. NIELSEN: I have no further questions, Mr. Chairman.

The CHAIRMAN: I think there is one question, Dr. Convey, that should be cleared up. You gave a statement earlier about the amount of research carried out in the United States. You did not specify any amount. Would you tell the committee this. If your staff were increased, could that work be done in Canada?

Dr. CONVEY: Quite a lot of it could be done in Canada. The main reason for the submission of this work to the United States is that a particular mining company in question just cannot wait for six months until we find the time and the space to attempt to solve their problems.

Mr. CHAIRMAN: Have you a question on that, Mr. Woolliams?

Mr. WOOLLIAMS: Yes. If you had the staff increases you have mentioned, would much of the work that is done in the United States now be done in Canada?

Dr. CONVEY: I would say that quite a bit of it could. I am thinking now of two or three areas in which work has been done in the United States, and eventually it comes back into our hands to finalize it.

Mr. NIELSEN: It seems to me, Dr. Convey, that private industry in Canada could perhaps be expected to undertake more Canadian research here themselves rather than expecting, perhaps, the whole of the responsibility to lie with the Mines and Technical Surveys Branch.

Dr. CONVEY: Yes. I will say this, that over the past 10 years Canadian industry has attempted to do some of their own research, but they seem to reach a stage in which they lack the personnel they are wanting, and the facilities, and that is when we come into cooperation with them. However, there are quite a few firms who are attempting to solve a lot of their own problems.

On the other hand, I must again repeat that when it comes to mining research, our Canadian companies are just beginning to become research conscious.

Mr. WOOLLIAMS: Of course, if we covered the whole field we might not stimulate too much activity in private industry in that regard.

Dr. CONVEY: I would disagree with you there; I would think it would be the other way around. Once we undertake a problem the company becomes more interested, and eventually what happens is that they go back home and do a lot of their own homework; and we coordinate this program in such a fashion that we literally demand that they become more than a sleeping participant.

Mr. COATES: Dr. Convey, you were mentioning one specific instance where the work could not be done here in Canada for some mining company and had to be done in the United States. What difference did it make where the work was done?

Dr. CONVEY: It meant this, that there were a great many Canadian dollars which went south of the border which I think should have been kept at home.

Mr. COATES: In that they paid some individual research organization in the United States?

Dr. CONVEY: Yes.

Mr. NIELSEN: This recent survey in Manitoba is a good example.

The CHAIRMAN: Could the witness answer Mr. Coates' question?

Mr. Coates, would you like to ask the witness if he has any idea of the amount of Canadian dollars that have been spent broad?

Mr. COATES: Yes, Mr. Chairman, I would. What amount of Canadian dollars has been spent abroad, to the organizations in the United States?

Dr. CONVEY: The only information I have with respect to these costs was given in confidence in association with the research reports, which we were provided with, and I should not like, without their permission, to disclose just how much it cost.

I can answer your question further. There does not exist in Canada any commercial research institution as such that can compare with the Batelle Research Institution, located in the United States; and through the lack of these well-founded research institutions, naturally the mining industry either has to go to the United States or depend upon us, and we cannot undertake all the work.

Mr. COATES: Dr. Convey, would you say as a direct result of this that Canada is losing the industry of processing raw material into finished products?

Dr. CONVEY: Yes, I would say a lot of our research today is in this position. We feel we should be processing more of our minerals to the finished product than we are doing at the present time. But if this work is done outside of the country, one other factor, other than the dollar cost, is that in return these research institutions and companies, that is some of the United States companies, eventually entice our staff to join them. Over the last five years we have lost at least twenty-five top-notch research scientists to the United States.

Mr. COATES: Would you say that the fact that they go to these research organizations in the United States to develop their products, and since it all emanates in the United States, that the actual production of the raw material into the finished product takes place there as well?

The CHAIRMAN: You mean it takes place in the United States instead of Canada?

Mr. COATES: It is obvious the processing they are going to do is with respect to their own immediate market specifications or the conditions which exist within their own country. I think we have one real good example in Canada and that is in a lot of our thermal power stations and heating establishments the equipment installed in them is of American origin. It is only within the last two years we have recognized that we must look at these thermal stations with respect to the installing of Canadian equipment which will burn Canadian coal. The equipment of American origin is designed around the burning of American coal.

Mr. COATES: Therefore you say that if we had more research in Canada its result would be that we would have more industry in Canada based on the production of the raw materials into the finished product.

The CHAIRMAN: As a result of research?

Mr. COATES: Yes.

Dr. CONVEY: Yes, as a direct result of research, I would say we would have a Canadian attitude toward the whole mineral industry.

Mr. COATES: In connection with your association with the different companies in Canada, have you noticed any forward moves in regard to the production of the raw materials into the finished product within the last five years? Is this on the increase or not?

Dr. CONVEY: Well, there is one good example. Within the last year some of our iron steel producers have been looking more toward the actual production of iron in Canada than has been done in the past.

Mr. COATES: Perhaps we should go back to the tar sands experiment. The fact that this experiment is being carried out in Canada and your people are involved in arranging it, and if it materializes, a great many industries will be set up for the refining of the material which you will get from the tar sands and the product will be saleable.

Dr. CONVEY: That is quite obvious. I think that once it becomes a Canadian enterprise, then the product will emanate from this country and its end use will be developed right here.

The CHAIRMAN: It is your opinion, is it not, Dr. Convey, that speaking from your experience, Canada is lagging behind in her research program?

Dr. CONVEY: In our particular phase and what we have done, I would say that we are with respect to the results of the few developments which we have brought out second to no one in the world; but when we stand up today and regard the over-all mineral research picture in a country such as Canada, with our large mineral deposits, we are not lagging; we are not even in the race.

Mr. COATES: And if we in Canada want to have our raw material made into finished products, we must first provide industry with the research that is necessary.

Dr. CONVEY: Yes.

The CHAIRMAN: Did you say, Mr. Coates, provide industry?

Mr. COATES: Yes, provide the research which is necessary for industry to obtain the necessary information.

The CHAIRMAN: You mean that industry should be stimulated in its research efforts?

Dr. CONVEY: Yes. Through our efforts, we hope to stimulate our own industry to look after themselves, and our hope is that we can look to the day when we in the government laboratories can attend to those long-term research propositions which will be of benefit to the whole industry, and not to a particular part of industry.

Mr. COATES: But you feel you must set a pace and industry will follow?

Dr. CONVEY: I have no doubt in my mind that if we can set the pace, industry will follow along. I must admit that within the last two years I have had representations from the major research institutions in the United States who were looking into the possibility of actually opening up in Canada. Now, they would not come up here with a view to establishing themselves in this country if they did not recognize that we have quite a future ahead of us.

Mr. NIELSEN: Before you adjourn the meeting, Mr. Chairman, I wonder if I could move that this chart, which I have, a salary comparison chart for departments or agencies employing scientific personnel as of March 1959, be published in the proceedings of today.

Mr. WOOLLIAMS: I will second that motion.

Motion agreed to.

SALARY COMPARISON CHART FOR DEPARTMENTS OR AGENCIES EMPLOYING SCIENTIFIC PERSONNEL

March, 1959

Maximum Salary	Mines and Technical Surveys	National Research Council	Defence Research Board	Agriculture	Northern Affairs	National Health and Welfare
21,000		President				
20,000				Deputy Minister		
19,000			Chairman			2 Deputy Ministers
18,000	Deputy Minister				Deputy Minister	
16,500		Vice President Scientific	Vice Chairman			
16,000	Director-General Scientific Services			Asst. Deputy Minister Admin. Asst. Deputy Minister Research Asst. Deputy Minister Production and Marketing		Director Indian and Northern Health Director Health Services
15,500		Vice President Admin.	Chief Scientist			
14,500		Divisional Directors	Chief of Establishments			
14,000	Director Geological Director Mines Director Surveys & Mapping		Chief Superintendent	Director-General Research Director-General Production and Marketing	Assistant Deputy Ministers	Principal Medical Officer Associate Director Medical Services Regional Superintendent
13,500			Chief of Admin. and Secretary Director of Scientific Research Superintendent			
13,000			Superintendents of smaller establishments			

SALARY COMPARISON CHART FOR DEPARTMENTS OR AGENCIES EMPLOYING SCIENTIFIC PERSONNEL—*Continued*

March, 1959

Maximum Salary	Mines and Technical Surveys	National Research Council	Defence Research Board	Agriculture	Northern Affairs	National Health and Welfare
12,500	Dominion Astronomer Associate Director, Geological			Assist. Dir. Gen. Production and Marketing Assist. Dir. Gen. Programme Directorate Head, Economic Division Head, Health of Animals Div.	Director, National Parks Director, Water Resources Director, Northern Admin. Director, Forestry Branch	Director, Welfare Branch Medical Officer 6—Chief of Division Director, Food and Drugs Director, Research and Statistics
12,000		Principal Research Officer Assistant Directors Admin. Assistant Directors Research	Director of Wings			
11,500			Director of smaller Wings			
11,000	Chief of Division M.T.S. Director. Geographical Dominion Astrophysicist			Level of Division Chiefs Directors of Programmes	Assistant Directors Chiefs of Divisions Director, National Museum Director, Canadian Travel Bureau Director of Administration	Senior Medical Consultant Senior Research Economist, Health Chief, Public Health Engineering Consultant, Hospital Admin. Medical Officer 5 Solicitor 7 Civil Defence Co-ordinator Chief, Lab. of Hygiene Consultant, Atmospheric Pollution
10,500		Senior Research Officer	Grade 5B Defence Scientific Service Officer			Deputy Civil Defence

SALARY COMPARISON CHART FOR DEPARTMENTS OR AGENCIES EMPLOYING SCIENTIFIC PERSONNEL—*Continued*

March, 1959

Maximum Salary	Mines and Technical Surveys	National Research Council	Defence Research Board	Agriculture	Northern Affairs	National Health and Welfare
10,140	Chief Administrative Officer Chief Inspector of Explosives Senior Scientific Officer 3 M.T.S. Senior Geologist Chief Cartographer Engineer 7	Head, General Services		Chief of Organization and Personnel Chief of Information Division Senior Economist Asst. Dir. of Programmes O i/c Research Institutes O i/c Field Stations, Large Research Centres	Superintendent Forest Products Lab. Administrative Officer 8 Chief Engineering Services District Engineer 3	Solicitor 6 Senior Economist Medical Officer 4 Planner, Food and Drug
9,720				Research Officer 5 Supervisor		
9,500			Grade 5A Defence Scient. Service Officer			
9,420	Chief of Personnel Senior Scientific Officer 2, M.T.S. Geologist 4 Engineer 6	Head, Public Relations		Research Officer 5	Economist 5 Administrative Officer 7 Chief of Personnel Engineer 6 Chief of Historic Sites District Engineer 2	Economist 5 Assistant Director Welfare Branch Regional Welfare Administrator 5
9,060	Ship Construction Officer					Director, Personnel Services Director, Information Services
9,000		Associate Research Officer	Grade 4B Defence Scientific Service Officer			
8,880				Research Officer 4 Supervisor		

SALARY COMPARISON CHART FOR DEPARTMENTS OR AGENCIES EMPLOYING SCIENTIFIC PERSONNEL—*Concluded*

March, 1959

Maximum Salary	Mines and Technical Surveys	National Research Council	Defence Research Board	Agriculture	Northern Affairs	National Health and Welfare
8,580	Senior Inspector of Explosives Senior Scientific Officer 1, M.T.S. Geologist 3 Engineer 5 Geographer 5			Research Officer 4	Economist 4 Forestry Officer 4 Engineer 5 District Engineer 1	

The CHAIRMAN: Gentlemen, this has been a very interesting morning. It appears as though we have three more gentlemen to call, which will mean one more meeting on this department. The next meeting will be at eleven o'clock Monday morning.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAY 4 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 13

Including Index of Items of the Estimates considered, relating to both the Department of Mines and Technical Surveys and the Dominion Coal Board.

MONDAY, APRIL 20, 1959

Estimates 1959-60 of the Department of Mines and Technical Surveys.

WITNESSES:

Dr. J. M. Harrison, Director, Geological Survey of Canada; Dr. N. L. Nicholson, Director, Geographical Branch; Dr. W. E. van Steenburgh, Director General of Scientific Services; and Mr. K. M. Pack, Chief Administrative Officer.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21005-4—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, April 20, 1959
(14)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Cadieu, Dumas, Fleming (*Okanagan-Revelstoke*), Granger, Kindt, Korchinski, MacRae, Martel, Martineau, McFarlane, Mitchell, Murphy, Nielsen, Robichaud, Simpson, Slogan, Stearns and Woolliams.—19.

In attendance, of the Department of Mines and Technical Surveys: The Honourable Paul Comtois, Minister; Dr. Marc Boyer, Deputy Minister; Dr. W. E. van Steenburgh, Director General of Scientific Services; Dr. J. M. Harrison, Director, Geological Survey of Canada; Dr. M. J. S. Innes, Acting Dominion Astronomer; Dr. N. L. Nicholson, Director, Geographical Branch; Mr. K. M. Pack, Chief Administrative Officer; Mr. R. B. Code, Chief, Personnel and Office Services Division; and Mr. L. C. McDonald, Personnel Division.

The Committee resumed its consideration of the main items of the Main Estimates of 1959-60 relating to the Department of Mines and Technical Surveys.

On Item 200, Geological Survey of Canada, Dr. Harrison was questioned on the adequacy of the estimates for his branch in view of its responsibilities, in particular in regard to staff and accommodation.

On Item 204, Geographical Branch, Dr. Nicholson was questioned on like problems of his branch.

On Items 205 and 206, Dr. van Steenburgh was questioned similarly concerning the Dominion Observatories. Mr. Pack answered questions which were specifically directed to him.

Dr. van Steenburgh was also examined on the problems of acquisition and retention of scientific staff throughout the department, and on the salary levels of certain officials of the department as compared with those of comparable scientists in other departments. During his examination Dr. van Steenburgh produced three tables relating to staff and the allocation of funds for research and technical services; the Committee agreed that the said tables be printed as appendices to this day's Minutes of Proceedings and Evidence. The said appendices are as follows:

Appendix "A" Allocations to research and technical services for the years 1957-58, 1958-59 and 1959-60 in the Department of Mines and Technical Surveys, the Department of Agriculture and the National Research Council.

Appendix "B" Projected staff increase in the Department of Mines and Technical Surveys over the next five years.

Appendix "C" Percentage increase in scientific and technical positions since the Department of Mines and Technical Surveys was formed in 1950.

21005-4—1½

The Chairman expressed the appreciation of the Committee for the assistance which had been given to them by the Minister of Mines and Technical Surveys and his officials during the consideration of the estimates of that department and of the Dominion Coal Board.

On motion of Mr. Slogan, seconded by Mr. Fleming (*Okanagan-Revelstoke*),

Resolved,—That Mr. Martineau be appointed to the Subcommittee on Agenda and Procedure in substitution for Mr. Latour.

At 1.00 o'clock p.m. the Committee adjourned to the call of the Chair.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

MONDAY, April 20, 1959.
11:00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Before calling the first witness, Dr. Harrison the director of the geological survey of Canada, I would like to ask you for an expression of opinion on a matter which I have not had an opportunity of discussing with any member of the steering committee.

In view of the evidence given recently by Dr. Convey, which, as you all know was welcomed by most of the press across this country, it occurred to me that some of you might be wondering whether or not we should call in a witness or two from Chalk River.

I was in a dilemma, but perhaps you noticed a most interesting report by Walter Gray—which appeared, I think, in last Saturday's *Globe and Mail*—that covered in full the subject and problem as he viewed it; that is, the public concern about fall-out and radioactivity. Perhaps you might "kick this idea around" while we are meeting this morning, and if any of you would like to see this article, I would be glad to pass it along to you.

If it is your decision that we should call another witness, we shall be very glad to contact the National Research Council or the authorities of Chalk River. Of course, as some of you are aware, it may be that we will later have an opportunity to discuss this and many other matters with the officials from Chalk River, and the National Research Council.

Mr. KINDT: In view of the fact that the estimates of this particular section are coming up, why would it not be appropriate to have a representative, or representatives, from Chalk River to give evidence before this committee? I am sure questions will arise which they, and they alone, could answer. It may be of help to them as well as to us.

Mr. SLOGAN: I was in Winnipeg a couple of weeks ago where I attended a dinner of the Kinsmen's club. The speaker was Dr. Kettner, a scientist of the University of Manitoba who raised several questions which are perturbing to me. I would like to have an opportunity of asking an authority about these questions regarding fall-out. I would welcome any witnesses.

The CHAIRMAN: You were not here to hear Dr. Convey. He emphasized that there was not any danger. We wondered whether or not we should have anyone to substantiate or support that evidence, to alleviate any disturbance there might be in the minds of the people.

Mr. WOOLLIAMS: I would like to endorse what Dr. Kindt said.

Mr. DUMAS: I think it would be very interesting to have some of these persons appear here to substantiate what was said by Dr. Convey.

Mr. KINDT: Could we go one step further by meeting a few minutes early, and if they have any slides, pictures or illustrated material, I am sure it would be very welcome in respect of the Chalk River set-up?

The CHAIRMAN: Gentlemen, are there any other ideas? How would it be if, at the convenience of the steering subcommittee, having heard opinions expressed this morning, perhaps we could have a brief meeting on this? We will have the meeting of the steering subcommittee in my office.

Mr. NIELSEN: Mr. Chairman, I would like to obtain confirmation from Dr. Harrison on two statements, before putting a number of questions to him.

First, would I be correct in saying that the Geological Survey of Canada must not only keep pace with the mineral industry, but work ahead of it, providing it with geological data well in advance?

GEOLOGICAL SURVEY OF CANADA

Item 200. Administration, Operation and Maintenance, including Canada's share of the cost of the Geological Liaison Office, British Commonwealth Scientific Conference, London, England, and $50,000 for Grants in aid of Geological Research in Canadian Universities	$ 3,299,108
Item 201. Construction or Acquisition of Equipment	198,118
	$ 3,497,226

Dr. J. M. HARRISON (*Director, Geological Survey of Canada*): That is the idea on which we work.

Mr. NIELSEN: The second general statement on which I would like confirmation is this: Would I be correct in saying that the immediate goal is to complete the geological reconnaissance mapping of Canada at the earliest possible date, with more detailed maps to follow and that only by following this procedure can Canada's mineral wealth be assessed and its orderly and efficient development assured?

Dr. HARRISON: Yes, I think that is a true statement.

Mr. NIELSEN: Would you say that some two-thirds of the country remains unmapped, even on a reconnaissance scale?

Dr. HARRISON: Yes, that is very close,—about two-thirds or three-fifths.

Mr. NIELSEN: In the past, funds have been allocated only for specific projects. In your view does this practice leave sufficient room for changing plans and meeting emergencies as they arise?

Dr. HARRISON: You will recall that last year, owing to conditions which we had not foreseen, some of the field parties had to be brought in early. I think the Yukon was one area which was affected by this. Probably we have been trying to budget a little too closely in terms of what we thought should be done.

The CHAIRMAN: May I interrupt here? Would the area to which you referred as two-thirds of Canada be on the mainland?

Dr. HARRISON: The total area; all of Canada.

The CHAIRMAN: Including the Arctic area?

Dr. HARRISON: Including the Arctic archipelago.

Mr. DUMAS: And taking into consideration what has been done by the provincial governments?

Dr. HARRISON: Yes.

Mr. NIELSEN: Should more latitude be given within the framework of the budget to allow more latitude by the branch heads within government?

Dr. HARRISON: As a branch head, I would certainly welcome the opportunity.

The CHAIRMAN: Give your opinion as a branch head.

Dr. HARRISON: I would certainly welcome the opportunity to have a little more room in which to manoeuver.

Mr. NIELSEN: Would this not alleviate the situation where you are called upon to meet emergencies, and find yourself incapable of doing so because of the restrictive character of the budget?

Dr. HARRISON: That is right.

Mr. NIELSEN: The budget for the geological survey in 1956 was $2,520,000. As I understand it this was 2½ per cent of the revenue to the federal government from taxes by mining companies, quarry operations, and oil and gas producing companies, which was a combined revenue of $90 million in 1956. From 1927 to 1957 the value of Canada's mineral production increased from $247 million to $2,133,000,000. This may be a difficult question, but I would like your opinion. Would you say, in comparing these figures, that your branch is receiving a fair share of the income derived from mining in order to enable you adequately to carry out your function in this branch?

Dr. HARRISON: This is something to which I have given quite a bit of thought. I would say, flatly, no.

Mr. NIELSEN: At the present rate of progress the reconnaissance mapping of Canada on the scale of one inch to four miles, and in certain cases one inch to eight miles, would be completed by 1980? Is that correct?

Dr. HARRISON: There are a lot of assumptions. I think the year we were working toward was 1970 or 1975, but this was assuming we would be able to get a considerably greater number of positions than we have had heretofore.

Mr. NIELSEN: I am speaking of the present rate of progress.

Dr. HARRISON: At the present rate of progress we might be able to do it by 1980, but not by 1970.

Mr. NIELSEN: Does this match the emergency of the situation as you see it?

Dr. HARRISON: This is a difficult question to answer. I do not think I could make any answer other than a qualified "no". It depends a lot on what the people paying the taxes consider a matter for speed. We are governed largely by what they consider they require.

The CHAIRMAN: You mean by that, the taxpayer?

Dr. HARRISON: I should say the mining companies, who are paying the taxes.

Mr. NIELSEN: With sufficient additions to your branch would it be feasible to complete the preliminary mapping by 1970?

Dr. HARRISON: Yes.

Mr. NIELSEN: Would it be desirable?

Dr. HARRISON: I think so.

Mr. NIELSEN: Before I enter into another subject matter, perhaps other members would like to ask other questions along these lines.

The CHAIRMAN: Yes.

Mr. AIKEN: This mapping would be purely preliminary work of the geological survey?

Dr. HARRISON: It will be reconnaissance mapping of the country. Some of you will perhaps recall a map which was on display a month or two ago when I appeared before you, in which it showed the areas of Canada which had been mapped, the areas currently under investigation, and the blank areas which remained.

Mr. DUMAS: Let us say we would aim at completing this reconnaissance geological survey across the country in the next ten years. How much more personnel would you need to do the job?

Dr. HARRISON: Probably an increase of about 20 per cent to do that particular job—15 or 20 per cent. I would like to point out, gentlemen, that the Geological Survey has a great many more irons in the fire than simply the reconnaissance geological mapping of Canada.

Mr. DUMAS: I am thinking of increasing the program which you actually have in this sphere of reconnaissance surveying. You have a certain amount of staff doing this work right now. You have a program for the coming season. What would be the increase of personnel needed to complete the job, let us say, within the next 15 years?

Dr. HARRISON: I would say from 15 to 20 per cent.

Mr. DUMAS: What would be the yearly increase in cost?

Dr. HARRISON: When fully implemented I would judge it would be from $600,000 to $750,000 a year.

Mr. DUMAS: Actually, how much money is voted for that particular field of your department?

Dr. HARRISON: I do not think I could give you the figures on that particular job, but our whole field program, exclusive of salaries paid to the permanent officers on the staff, runs to about $1,200,000 this year. We would have to increase it substantially. And in addition to that, of course, there is the cost of the men themselves. Their salaries are not included in the figure itself.

Mr. DUMAS: In other words, it is fair to say that it can be done quite easily, and that it would mean about $750,000 more a year.

Dr. HARRISON: When fully implemented.

Mr. FLEMING (*Okanagan-Revelstoke*): Supposing you get the personnel, have you the plant and equipment, once the survey is completed, to compare the findings and to turn out the neccessary maps, let us say, at that rate of progress?

Dr. HARRISON: Yes, by making certain other changes in the set up of the organization. But the new building we have and the facilities contained in it should do a great deal in expediting it.

Mr. FLEMING (*Okanagan-Revelstoke*): You do have the necessary plant, and if you were to secure the personnel, your plant could keep up to the increased volume of work; they would be ready to do that processing?

Dr. HARRISON: As far as printing is concerned, I do not know because we do not do the printing ourselves. But as far as preparing the material for publication, provided we get the people, yes.

Mr. NIELSEN: Rather than to pinpoint one particular phase of your operations, may I put this to you in this form: would it be an accurate statement of the facts to say that your overall branch requirements would have to be increased by more than 15 per cent—and closer, perhaps, to 40 per cent than 15 per cent—for you adequately to fill the responsibilities falling on the branch?

Dr. HARRISON: I would say that 40 per cent would be an underestimate actually, because the requirements which have been brought to our attention in the last few years have increased at a tremendous rate.

I can give you all kinds of examples. For example, the sudden increased interest there has been by industry in the search for oil in the Arctic archipelago. Now that the Department of Northern Affairs is administering it, it requires large quantities of information to be provided quickly in order to assist them. This puts an enormous drain on our staff, who have to take their time from the preparation of geological maps, in order to utilize all the information which is readily available so as to give appropriate advice.

Another aspect of our activity is that of investigating underground supplies of water, especially in those parts of the prairie provinces where water is a problem. This is something which has only come to the fore in the last few

years. And the "roads to resources program", which perhaps some of you have seen in the newspapers, is another thing which is putting quite a strain on our activities.

Mr. NIELSEN: You are travelling from crisis to crisis in your branch?

Dr. HARRISON: Yes.

Mr. NIELSEN: How long has this been going on? Would it have existed over ten years?

Dr. HARRISON: Yes, I think it would.

Mr. WOOLLIAMS: Speaking in terms of dollars and cents, could you give us any idea of the increase in dollars and cents that would be necessary over the estimates, as now allocated, to your department?

Dr. HARRISON: I would judge that perhaps some of you will recall that last autumn a brief was presented for expansion of the geological survey. That brief requested an increase of about 60 per cent. We prepared some figures which were designed to implement the recommendations of that brief over a period of five years. Roughly, a 60 per cent increase was shown.

Full implementation of the recommendations, would cost about $2 million extra per year. Our budget now runs fairly close to $3 million.

The CHAIRMAN: Who presented that brief?

Dr. HARRISON: The brief was presented by the Royal Society of Canada, and the Geological Association of Canada, endorsed by other organizations such as the Canadian Institute of Mining, the Canadian Metal Mining Association, the Mineralogical Association of Canada—and probably others.

The CHAIRMAN: Did Mr. Dumas have anything to do with that?

Dr. HARRISON: Not directly, so far as I know.

Mr. DUMAS: Indirectly.

Mr. WOOLLIAMS: In order to develop that, you would need a budget of about $5 million?

Dr. HARRISON: In terms of 1959 dollars, yes.

Mr. FLEMING (*Okanagan-Revelstoke*): My first question involves the 20 per cent increase for the survey itself. If you were to get an increase in funds in order to increase your staff, do you envisage what your requirements would be, and would you still, with your plant and the new building and equipment, have sufficient plant going to be able to take care of this greatly expanded program, supposing it were to come into effect?

Dr. HARRISON: No.

Mr. FLEMING (*Okanagan-Revelstoke*): You would require additional housing and facilities?

Dr. HARRISON: Additional housing and facilities, yes. But we would plan to expand our regional offices rather than extend the existing facilities in Ottawa—except for the laboratory and processing facilities.

Mr. NIELSEN: Would it be correct to say that the geological studies in Canada are not keeping pace with the growth of the mineral and petroleum industries?

Dr. HARRISON: Yes.

Mr. NIELSEN: And would it be correct to say that in recent years the lack in expansion of government geological services as compared with the accelerated pace of industrial development has been very marked?

Dr. HARRISON: Oh yes, indeed.

Mr. NIELSEN: Is it not a fact that studies by the geological survey are the foundations on which the resources of metals, non-metallic minerals, and mapping products are discovered?

Dr. HARRISON: They provide the basic data for all exploration of minerals in Canada.

Mr. NIELSEN: Should the geological foundation be laid now for resources which will be needed some 20 years hence?

Dr. HARRISON: Yes.

Mr. NIELSEN: Perhaps other members of the committee may wish to ask questions at this time.

The CHAIRMAN: Perhaps the witness would care to amplify some of the brief answers he has been giving. They are very important.

Dr. HARRISON: Yes. In respect to the last question, I think the best example I could offer is that of W. H. Collins' mapping in the Blind river area which was completed in the 'twenties or early 'thirties, when uranium was simply an element in the periodic table. These were basic investigations which only later were utilized in economic form. They were primarily scientific studies made to determine the general succession of rocks, and their history in the given area. They succeeded so well, that when uranium became important, and when the first discoveries were made in the region by Dr. Joubin, he was able, by using these maps, to pick out three other places where he thought they should prospect in detail. These three places turned out to be mines in the Blind River area.

Another example is that of A. P. Low, and his exploration of the Labrador iron formations in 1893-1894, when he recognized the possibility, and so stated, that some day there would be a fabulous supply of iron ore for the nations of the world. Of course they have been realized now.

It is impossible to determine in the present day what will come for industry, from all the mapping, in terms of dollars and cents.

We also try to carry out basic research in our laboratories and to support the basic research of universities by means of grants-in-aid, so we may have a better understanding of what we see in the field. I think that practically all the work of the Geological Survey is research in that sense.

Mr. AIKEN: Geological work done now might even be useful in future years for minerals in which we are not presently interested, or of which we have no knowledge.

Dr. HARRISON: That is right.

Mr. AIKEN: And is it correct to say that careful geological work now, with a view perhaps to uranium or iron ore, might in future provide all the information required for something else?

Dr. HARRISON: That is true. What we are trying to do is to plan our mapping projects so that the results are available for future utilization years after, regardless of what the particular mineral might be which caused the mapping in that place and time.

Mr. AIKEN: Thank you very much.

Mr. FLEMING (*Okanagan-Revelstoke*): Do you get direct requests from industry for surveys in areas which are presently not surveyed, or are you endeavouring to anticipate requests all the time?

Dr. HARRISON: The answer to your question is a qualified "yes". We do get requests from industry—usually not direct requests. Their representatives say: you should do mapping in such and such an area. This is initial mapping, where no basic information is available.

We also get requests from industry for something specific, in the way of mapping in particular areas where something of interest is known, and they want to find the information.

Accepting all these requests would create chaos in our planning. We know that if we are going to do a systematic job, we must have a definite order in respect to these things, and in order to make efficient use of our people.

Mr. FLEMING (*Okanagan-Revelstoke*): If you had such increase in staff as you feel desirable, would you be able to meet some of these requests more rapidly? Would it be desirable to do so, provided you had the people available?

Dr. HARRISON: We have to judge each request on its own merits in its relation to the overall picture. In many respects I do not think that any government organization is justified—certainly our organization is not justified —in dealing with special pleading of this nature. But if the request is in respect to any particular area, then it would be assessed on its merits and the work would be done if possible.

Mr. WOOLLIAMS: You yourself raised a question when you referred to the recent interest in the Arctic with respect to oil mining and natural gas. We in Alberta have received the report of an estimate that we have resources of three hundred trillion cubic feet of natural gas.

Have you or your department any information with respect to the Arctic in the way of recent figures about oil and natural gas?

Dr. HARRISON: There have been no figures given. There has been no drilling done to try to tap the resources of oil and gas in the Arctic islands so far as I know yet, and I am moderately certain that I have not missed anything. All we can say, without going into a great deal of detail, is that the geological environment is favourable for the discovery of oil and gas.

Mr. WOOLLIAMS: That knowledge would be pretty important in determining whether Canada should in the future export certain quantities of natural gas, would it not?

Dr. HARRISON: This, I think, is—

The CHAIRMAN: This is a little out of Dr. Harrison's field, I imagine.

Dr. HARRISON: Yes.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. SLOGAN: Dr. Harrison, going back to the subject we were just discussing: how many of these private companies pose requests to the government and, if the government do not accede to them, do they actually go on their own and do this geological surveying on their own—or what percentage of them would?

Dr. HARRISON: The larger companies spend a great deal of money in exploration of the kind that would normally be done by the Geological Survey.

Much of this information becomes available to the Geological Survey, when we wish to make a map of a given area. Probably the best example I can mention is the recently concluded Operation Mackenzie—the Mackenzie river basin area north from latitude 60. The geologist in charge spent some time in Calgary and Edmonton, well ahead of going in, and the companies supplied him with a wealth of information. In some instances not specific, but general information, which materially assisted him in compiling the geology of the area in a short and relatively inexpensive fashion. That information is now being made available to all companies by the publication of our geological map.

Mr. SLOGAN: So there is actually cooperation between the private companies and the government?

Dr. HARRISON: As a matter of fact, yes. There is wonderful cooperation. We have not been able to make proper use of this, simply because of the lack of staff, especially drafting and supervisory staff. The companies would make this material available to us, but we simply have not been able to utilize it,

and we figure that at this juncture it may just as well be resting in company files as our own. There is a lot of information available for the compiling that could be made available for the good of the country.

Mr. MARTINEAU: Mr. Chairman, would the witness state if there is any duplication of services as between the department's geological branch and private companies?

Dr. HARRISON: This is a little difficult. I cannot answer "yes" or "no". The companies are working towards different things. They are working specifically for a certain mineral or a certain commodity, and all their work is directed toward that end.

The government geological survey work is designed to obtain the total information on an area, so it is not limited specifically to that one commodity. If a company is mapping in an area in search of a particular mineral, their information is usually made available to the officer of the Geological Survey also working in that area, so he has the benefit of their background information on which to extend his fuller investigation.

Mr. KINDT: Dr. Harrison, has the Geological Survey completed the delineation of the boundaries of areas in the Canadian Arctic in such a way that we know where those boundaries are, and can readily refer to a given group of islands as belonging, say, to Keewatin or Mackenzie and all up through the Arctic for another 1,000 or 1,500 miles? Has that job been completed?

Dr. HARRISON: In a broad way, yes; in detail, not at all. In a broad way, though, the geologists who have been working in that region in the Arctic islands can designate a particular group of islands as being of a particular geological environment.

Mr. KINDT: In other words Dr. Harrison, you look for oil and gas in a sedimentary basin, and you would look for minerals off in the Precambrian?

Dr. HARRISON: Yes.

Mr. KINDT: And you would find where the demarcation is between the two: and that would be a starting point?

Dr. HARRISON: In a broad way, we have the demarcation made.

Mr. KINDT: Right up through the Arctic islands?

Dr. HARRISON: Yes.

Mr. KINDT: It seems to me that from a publicity standpoint there would be something to be gained by fixing in the minds of the Canadian public that certain groups of islands up there are called certain specific names. I know that each island is named, but I think something would be gained in that respect if there was a group name given to certain islands, probably with the thought at some future time of using that group for administrative purposes.

I do not know whether we have progressed far enough to where we can get down to that basis of really saying "This belongs to Canada"—that is what I am getting at—and set it out, put a ring around it, and then proceed systematically with our service on all fronts in the development area.

Dr. HARRISON: As far as the Geological Survey is concerned, we are working on the assumption that all the land areas included in that Arctic archipelago are under Canadian sovereignty, and we plan our mapping based on that assumption.

Mr. NIELSEN: Going back to the requirements of your department, Dr. Harrison: could you tell the committee the number of permanent employees you consider necessary to be engaged, in addition to those now employed by your branch, in order adequately to discharge your function?

Dr. HARRISON: About 200, I would say.

Mr. NIELSEN: This is a continuing employee as opposed to a seasonal employee?

Dr. HARRISON: Yes.

Mr. NIELSEN: Any seasonal employees?

Dr. HARRISON: Yes, 175.

Mr. NIELSEN: This is an absolute increase over what period?

Dr. HARRISON: Over five years.

Mr. NIELSEN: Would you tell the committee, Dr. Harrison, in terms of numbers, or in terms of a percentage, what has been the increase or decrease, as the case may be, of personnel in your department over the past ten years?

Dr. HARRISON: The total increase, I understand, is between 35 and 40 per cent, which would mean an annual increase—not allowing for compound interest—of around 3 per cent a year in the last ten years.

Mr. NIELSEN: That includes the whole of your department?

Dr. HARRISON: This is just within the branch.

Mr. NIELSEN: The whole of your branch?

Dr. HARRISON: Yes.

Mr. NIELSEN: I thought it was more in terms of 150 per cent of an increase.

Dr. HARRISON: The figure I have been given is 38 per cent, the over-all percentage increase, with an absolute increase of 73 scientific and technical positions in that ten years.

Mr. NIELSEN: How long have you been with the branch, Dr. Harrison?

Dr. HARRISON: Fifteen or sixteen years.

Mr. NIELSEN: Can you give the committee, in your own words, your own estimation of the impediments, if any, which you feel you have had to confront in your branch over the last ten years?

Dr. HARRISON: Money, men and space, I would say—probably in that order.

Mr. NIELSEN: Would you like to elaborate on those, Dr. Harrison?

Dr. HARRISON: I can only speak about the money end of it with any degree of authority, since I took my present office, which was something over two years ago. We have had to curtail some of our activities simply because of the lack of money in that time. I believe that in the past, on occasion, there has been more money available than could be spent, simply because the proper qualified technical people could not be obtained, in order to take care of the budget allotment.

Space has been a major factor in reducing the efficiency of the staff; but we look forward to much better things in the near future.

Mr. NIELSEN: Something has occurred to me as a result of the last meeting, where evidence was tendered that these buildings, which were planned, and on which construction was commenced in 1956, are already too small before you have even moved into them. Just how much say do you have, as a branch head, in determining the design, the size and the nature of the structure in which your branch is to be housed in this building now being constructed? Were you asked for your views at all?

Dr. HARRISON: Oh yes. A considerable amount of time and effort on the part of various professional geologists went into that.

Mr. NIELSEN: Was your advice followed?

Dr. HARRISON: To a considerable degree, yes. Of course, we asked for more space than we were allowed.

Mr. NIELSEN: Why, then, is the building now too small? Is it as a result of inadequate planning on your part, or on the part of those who are putting the building up?

Dr. HARRISON: I am not trying to put thoughts in someone else's brain, but I think within the framework of planning someone other than our Geological Survey Branch certainly has the final say as to what is required and what is not. Our original plans were reduced considerably in relation to what we submitted, in terms of space.

Mr. NIELSEN: Would you say that this is the reason why, when you move into this new building, your space is not going to be adequate for your needs?

Dr. HARRISON: It will be adequate for the immediate needs, but only the immediate ones.

Mr. NIELSEN: In other words, five years from now you will have outgrown the space that is available to you?

Dr. HARRISON: Oh, yes.

Mr. NIELSEN: Did you find any reluctance on the part of others in planning these buildings, apart from your own department, in projecting these plans to meet future needs?

Dr. HARRISON: I understand there are certain regulations which govern policy in this connection; but just what they are, I do not know.

Mr. NIELSEN: Do you mean regulations which would prohibit planning for future needs?

Dr. HARRISON: That is limited to a certain amount, I understand; but what that figure is taken at, I do not know.

Mr. NIELSEN: In this place, the buildings were commenced in 1956, and you will be moving into them in 1960?

Dr. HARRISON: We hope to move in in 1959.

Mr. NIELSEN: This is a space of three years? Do you mean to infer by your answer that there is a regulation in existence which prohibits planning any further ahead than three years?

Dr. HARRISON: Please remember that I was not in on this planning for the building. At that time I was not one of the administrative "hierarchy" in the organization, so I was not closely associated with it at that time. But my understanding is that there were certain regulations which—not "regulations"; perhaps policy is a better word—stated that the expansion could only be allowed for a certain period of years—perhaps five years—I do not know—I am guessing now. Also, it would probably be at the over-all increase that had been established for civil servants, and since we have increased somewhat greater than that over-all increase, this may be the reason.

Mr. NIELSEN: Perhaps we could leave that question for Dr. van Steenburgh when he gives testimony. I have only two other questions, Dr. Harrison.

You said that my estimate of 40 per cent increase over-all was inadequate. What would be your estimate of an accurate assessment of the increase necessary adequately to discharge your function in the branch?

Dr. HARRISON: I would say, in the next five years, in regard to professional and technical services, the professional staff of the branch should increase by about 60 per cent, with supporting services as required.

Mr. NIELSEN: Do you have staff turn-over difficulties now, and have you had them in the past?

Dr. HARRISON: We have had very bad turn-over difficulties amongst staff in the past. We have not had so many difficulties in the last couple of years because, as you know, there has been something of a recession in the mineral industry. But we have had three resignations from professional people within the last two months.

Mr. NIELSEN: Why is there this difficulty?

Dr. HARRISON: I think a good part of it was because of the working conditions. The working conditions for many years were appalling in our various quarters. Also, we will always lose a certain number of people to the academic field. Then too, industry was making it so much more attractive, that a great many of our men went into industry.

As Dr. Convey mentioned the other day, our people get excellent training, and after they have been with us for five or ten years, when they are most valuable, they get offers from industry and in many cases they simply cannot refuse.

Mr. NIELSEN: This will be my last question. In your own words, would you please tell the committee what you feel are the inequities, if any, of present salary structures throughout your branch, and give your suggestions, if any, as to their improvement?

Dr. HARRISON: I will speak only in terms of professional services. I will come at it through the back door. The university professors have always been held up as the people who have not been appreciated. However, under the present plan of academic salaries being implemented, their salaries start about $1,000 a year higher than ours. Their top salaries for scientific work —without having to undertake administration—are about $3,000 higher.

Mr. NIELSEN: You are losing a lot of these persons. You mentioned that you had lost three top scientific personnel recently; where did they go?

Dr. HARRISON: One went to industry and two to a university.

Mr. NIELSEN: How do the salaries in industry compare with those in your branch?

Dr. HARRISON: They are generally higher; but it is difficult to appraise it, because usually industry pays what it needs to pay to get the man it wants.

Mr. NIELSEN: Of course, we cannot do this.

Dr. HARRISON: No, we cannot do this.

The CHAIRMAN: If there are no other questions, gentlemen, we will call on Dr. Nicholson, the director of the Geographical Branch.

GEOGRAPHICAL BRANCH

Item 204. Administration, Operation and Maintenance, including a Grant of $500 to the Canadian Association of Geographers and a Grant of $3,500 to the University of British Columbia in aid of Research in Foreign Geography ..$ 358,681

Mr. NIELSEN: Dr. Nicholson, I wonder if you could explain to the committee what you feel are the impediments you have had to meet, if any, over the past ten years; and how you feel they are being cured or may be cured in the future.

Dr. N. L. NICHOLSON (*Director, Geographical Branch*): I think our branch has had one difficulty the others have not had. Ten years ago we hardly existed. So in the last ten years we have had to form the branch, as it were. This is something the others did not have to deal with; they have existed for a long time; I think, the Geological Survey, for over one hundred years. Therefore, we have had that additional problem. But putting that aside, I suppose the biggest problem has been this matter of salaries, due to the fact that geographers are used in such a wide variety of activities—not merely

industry or reasearch, but also in teaching. The competition from all these various directions has been one that we have had to try to meet, and the salaries really have not enabled us to meet that. As a result, we have had a very large turnover of staff, from time to time.

Mr. NIELSEN: Is the competition from geographers who are available each year from universities affecting the operations of your branch?

Dr. NICHOLSON: There has been severe competition for the services of well-trained, fully qualified geographers during the past years.

Mr. MARTINEAU: What is the total number composing the Geographical Branch?

Dr. NICHOLSON: Do you mean professional, as well as others?

Mr. MARTINEAU: Yes.

Dr. NICHOLSON: There are 43 continuing employees on the staff.

Mr. MARTINEAU: Of that number, how many are scientifically trained?

Dr. NICHOLSON: Thirty-five.

Mr. AIKEN: From where does your competition in this field come; is it mainly from the universities?

Dr. NICHOLSON: I suppose there is a little more competition from the universities. However, competition is increasing from industry, because industry is beginning to use geographers in larger numbers in their planning and research areas, and from time to time they have had the edge on the universities, or have had during the last ten years.

Mr. AIKEN: Generally speaking, then, is the competition the same as in the Geology Branch?

Dr. NICHOLSON: Except for the competition from high schools—geology is not taught in high schools. But now that geography is a separate subject in Ontario, since social studies has been done away with, there is enormous competition for anyone with any specialist training in geography. We took on in our branch last fall one geographer, and we paid him what we thought was a respectable salary. He came to me recently and said he could get a larger salary by going to a new high school in this area, and that the high school board would send him to O.C.E. to obtain whatever educational requirements he needs. He has his master of arts degree, and he does not need to go any further; whereas, if he stays with us, we expect him to go on to his Ph.D.

Mr. WOOLLIAMS: In a few words, could you pinpoint the function of your department, so we can have that on the record?

Dr. NICHOLSON: Well, essentially, our function is to be able to provide geographical information to any other government department which requires the same for its own purposes. But in order to do that, we have to be like Boy Scouts. We have to "be prepared", and to try to anticipate the areas for which such information will be required. Therefore, rather like the Geological Survey, we are trying to put our program on a systematic basis throughout the whole country in order to produce this information. Of course, we are not able to do this properly. The department accepted a contract for terrain analysis on a map-sheet basis, which was consigned to our branch in 1952. We have only just brought out the first report on a map-sheet basis, because we have not the staff to proceed any more rapidly. As I pointed out when I spoke to the committee last, sometimes we are caught, and we are not able to provide all the information we would like to.

Mr. FLEMING (*Okanagan-Revelstoke*): I would like to revert to this question of salaries, and to find out how they compare. Could you give some exact comparisons between the salaries you are able to pay to various grades and those you are competing with outside the government service?

Dr. NICHOLSON: Let us take this high school case. We are paying the man something in the order of $5,400 a year. This high school I mentioned will take him at $6,000 a year, and he can go up to $9,000 automatically in a period of twelve years. Our staff are unable to attain that level automatically, at least not without getting further academic training.

Mr. WOOLLIAMS: How many years of university training would this particular person have?

Dr. NICHOLSON: This particular man has more than he needs for high school teaching.

Mr. WOOLLIAMS: I just wanted to compare it with other professions in regard to what the allowances are.

Dr. NICHOLSON: I would say he did five years of post-graduate training. He has his M.A.

Mr. WOOLLIAMS: And the department is paying him $5,400 a year?

Dr. NICHOLSON: Yes.

The CHAIRMAN: At what salary did he start?

Dr. NICHOLSON: He started at that salary.

The CHAIRMAN: After nine years of university training?

Dr. NICHOLSON: Yes.

Mr. STEARNS: Is he a geographer, grade 1?

Dr. NICHOLSON: Yes.

Mr. NIELSEN: Is this situation common in all salary brackets in your branch?

Dr. NICHOLSON: Yes. We have been unable to get anyone at higher levels, because we have never had anything to attract them. Therefore, we are out of the picture so far as the higher levels are concerned.

Mr. WOOLLIAMS: May I suggest that some of the oil companies in the city of Calgary pay their stenographers more.

Dr. NICHOLSON: Yes.

Mr. NIELSEN: I notice from the exhibit we introduced in our proceedings of the last meeting, that your salary range is $10,000 to $11,000. Has the fixing of your salary level at that point anything to do with the difficulties encountered in these lower levels?

Dr. NICHOLSON: Really, I would not know that.

Mr. NIELSEN: I am asking for your opinion.

Dr. NICHOLSON: Well, this could be. Of course, I am not in on the fixing of salaries.

Mr. NIELSEN: I will tell you what I am driving at. A man who is employed by the branch as a geographer, grade 5, cannot rise above your level; is that correct?

Dr. NICHOLSON: No.

Mr. NIELSEN: The question logically follows: is it desirable that scientific persons who are under your supervision be allowed to rise higher than the $10,000 to $11,000 level mark?

Dr. NICHOLSON: Probably that is not desirable, but I would not mind if they could rise to the same level. I can see nothing wrong with it. However, I think other persons would have a different view from mine.

Mr. NIELSEN: Do you think the "cap" should be taken off that level so far as you are concerned; and if so, do you think it would solve any of the conditions existing at lower levels than yours?

Dr. NICHOLSON: Let us put it this way: if the "cap" were taken off that salary, I would be less tempted by various groups that sometimes come to me for my services.

Mr. FLEMING (*Okanagan-Revelstoke*): I think we could put it on a more impersonal basis. If the director's salary was more in keeping with what he could secure in outside industry, then all other officials of the department, or scientists, and so on below the director's level, would have an opportunity to rise. In other words, it is purely a matter of paying the salaries for the positions held. If the director's was lifted, the others might be raised.

Dr. NICHOLSON: Yes, I think that would help. I am not convinced it will solve our problem, but I think it will help.

Mr. FLEMING (*Okanagan-Revelstoke*): It would contribute towards solving the problem.

Dr. NICHOLSON: Yes.

Mr. NIELSEN: In your opinion how far is your branch lagging behind; is it five years, ten years, one year, or are you up to date? Are you keeping pace with industry?

Dr. NICHOLSON: I would say we are between five and ten years behind.

The CHAIRMAN: In the work in your department?

Dr. NICHOLSON: Yes.

Mr. NIELSEN: That is comparing it with the pace that industry is setting and the demands being placed on your department.

Dr. NICHOLSON: Yes.

The CHAIRMAN: Would you answer this question: is the yearly salary paid these scientists, who require such high educational standards, high enough to warrant their staying in government service?

Dr. NICHOLSON: No. Indeed, I would rather say that they were even better trained. We have sent several away on educational leave after they have come to us because I think the contributions that our branch can make would be very many times better if we could get some of the better technically trained people.

The CHAIRMAN: The point I am driving at is this, are the salaries commensurate with the educational standards you demand?

Dr. NICHOLSON: No, they are not; that is the answer.

Mr. NIELSEN: How many personnel will you require in the next five years in additon to the present staff in your branch?

Dr. NICHOLSON: I think if we could add between fifteen and twenty to the staff in the next five years, it would help a great deal. But I would suggest that this is supplemented by the possibility of being able to give money for research to the geographers in the universities, because some of the best qualified are in the universities. Even if we could get them, it would not be desirable. But I wish we could use them more for work that we are called upon to do. However, we have no machinery for doing that at the moment. This would be one way of using people at the higher level.

Mr. NIELSEN: Is the fifteen or twenty, of which you speak, seasonal or continuing employment?

Dr. NICHOLSON: Continuing.

Mr. NIELSEN: Do you feel any seasonal increase is necessary?

Dr. NICHOLSON: No, I think not.

Mr. NIELSEN: What has been the increase in personnel in your branch over the last ten years?

Dr. NICHOLSON: May I give them in absolute numbers, because the percentage looks enormous. In 1950-51 we had fourteen scientific and technical persons and this year we have thirty-five.

Mr. NIELSEN: That is over a ten-year period?

Dr. NICNOLSON: Yes, over a ten-year period.

Mr. NIELSEN: An increase of what?

Dr. NICHOLSON: According to this, we have an increase of twenty-one.

Mr. FLEMING (*Okanagan-Revelstoke*): And you provide all or the majority of the geographical information required by all government departments? You are required to do that?

Dr. NICHOLSON: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): Do you have specific requests from industry which you also endeavour to fulfil, or are unable to fulfil?

Dr. NICHOLSON: Yes; but they are not usually of a major nature. We can usually fill them from industry.

Mr. KORCHINSKI: May I ask Dr. Nicholson whether or not he is aware that most of the geographers are trained in Canada, or whether there have been some brought in from other countries?

Dr. NICHOLSON: We have one man on our staff who is a United States citizen, because we could not get a Canadian citizen in Canada with the qualifications we wanted for the job.

Mr. KORCHINSKI: That is the only one to your knowledge?

Dr. NICHOLSON: He is the only one who is not now a Canadian citizen.

Mr. KORCHINSKI: I am not trying to find out whether or not they are all Canadian citizens, but whether there have been some coming in from other countries as geographers, who have taken on jobs with the department. Then, afterwards, do they realize perhaps that the department is not granting them as high salaries as they get in industry, and are they just taking on these jobs because they came from other countries.

Dr. NICHOLSON: No. We recruited one man direct from the United Kingdom some years ago; but essentially they have been recruited from Canada.

Mr. WOOLLIAMS: Is it not a fact that the success of your branch would also mean success for industry? If one became more successful, then the other would become more successful; and this might become a vicious circle. If industry became more successful there would be more demand in industry for your personnel, and as industry developed you would lose more personnel?

Dr. NICHOLSON: Yes, this could happen.

The CHAIRMAN: Where do the Ph.D's which you have in your division get the higher learning? Have you any record of that?

Dr. NICHOLSON: We have only four. I am the only one who received all his university training in Canada. One other received his Ph.D. in Poland and the other two in the United States.

The CHAIRMAN: Did they take their preliminary university training in Canada?

Dr. NICHOLSON: Yes.

The CHAIRMAN: And went on to these other countries for their higher degrees?

Dr. NICHOLSON: Yes.

The CHAIRMAN: I wish you would tell the committee the reason why they have to go to other countries. Are our universities not equipped to give that particular degree?

Dr. NICHOLSON: Some are. There are five universities in Canada which offer the Ph.D. in geography. I think one reason that they go to the United States is that the United States universities have money to offer them. They have teaching assistantships and fellowships, which our universities do not have. The people just cannot pay their way through. I think that is the main reason.

As a matter of fact, I have just returned from the University of Wisconsin—A number of Canadian students go there for geography. There they have funds available for these people. There are five Canadian geographers studying there. They tell me that there will be eight next year. I am sure it is because they have money to offer them. They actually put it to me at the university this past weekend that the universities are almost in the position of having to pay for their graduate students.

Mr. NIELSEN: Have you made any suggestions to your superiors on this suggestion of yours regarding scholarships, bursaries and so on?

Dr. NICHOLSON: Not officially. I have discussed it in a general way.

The CHAIRMAN: Are there any restrictions on the students who go to the universities in the United States?

Dr. NICHOLSON: Not that I know of.

The CHAIRMAN: They can come back to Canada?

Dr. NICHOLSON: Yes. In the United States they hope that these people will come back, in order that they will not be in the position of having to get jobs for all these people when they finish their training. They hope they can make this contribution to their training, and send them back to their own countries where they can apply their knowledge. Some stay; but this is not the intention of the universities.

Mr. KINDT: I think it is very often an actual fact that students have in mind their future salaries. As a general observation, it seems that the smaller the field, and the more restrictive the field, the lower the salaries are in that field; and conversely, the larger the field, the higher the salaries.

For example, contrast geographers with lawyers. Now, there are very few taking up the geography profession because the field is limited. You have to make it more attractive. Whereas in the legal profession, you put out your "shingle" and run your own business or work for government. Lawyers are a dime a dozen!—and that is said without any reflection on the legal profession. It is simply a matter of opportunities. How to overcome this problem is the core of what you are speaking about. I see no way by which it can be overcome unless there is a higher award for the person who takes up say, geography, which is in a more restricted field.

Suppose you put the salary up in the field of geography: dozens would go into it, and if there were only a few jobs you would be faced with a dilemma. Therefore the law of supply and demand operates to keep the thing low. That is why we are having difficulties in all these highly-experienced and technical fields.

It seems to me this should be met somewhere, either through scholarships, assistance from the state, assistance from the universities or by something.

Mr. WOOLLIAMS: The way to reduce lawyers' salaries is to get into politics!

Mr. FLEMING (*Okanagan-Revelstoke*): What is the attraction for so many?

The CHAIRMAN: I think, Mr. Kindt, we are glad to have those observations, because these things will be our responsibility in preparing our report.

Mr. FLEMING (*Okanagan-Revelstoke*): Would you say there is a lack of emphasis in teaching geography in schools which perhaps leads through to a lack of emphasis in universities, and consequently a lack of available geographers to yourself, to industry and to those who require them? Do you find that geography does not receive emphasis in the educational program of the country at the present time?

Dr. NICHOLSON: That is right. But it has changed remarkably in the last few years, particularly in Ontario, and similarly in British Columbia. I think eventually this will be true across the country.

Mr. FLEMING (*Okanagan-Revelstoke*): Students themselves, because of this, may be turning more to geography, which might lead in time to a greater number of geographers being available?

Dr. NICHOLSON: Yes, I think so.

The CHAIRMAN: Will you tell the committee if there are any schools, or any regulations in Canada, which enable students to take mathematics or else? I understand that is the situation existing across the border. Do you know anything about that?

Dr. NICHOLSON: No, sir. I do know in geography now—

The CHAIRMAN: I am speaking of mathematics.

Dr. NICHOLSON: In their program they are now required to take some courses in statistics which obviously depend fundamentally upon mathematics.

Mr. MARTINEAU: What are the fields in Canadian industry which depend upon the services of geographers?

Dr. NICHOLSON: We have some geographers with the oil companies, one with Dominion Rubber, one with T.C.A., and many with semi-crown companies like British Columbia hydro and Ontario hydro. They do not fall into any particular category. In fact, in one instance we have a chain-store group which took on a woman geographer with her Ph. D. from McGill. She has worked out extremely well for them doing analysis work.

This field is increasing in Canada now, and has been increasing in the United States for many years. This sort of thing is spreading to Canada.

Mr. WOOLLIAMS: In the curricula of many of the provinces across the country, geography and mathematics, as we used to know them, have been combined into social studies, and that sort of thing. I take it that you would welcome it if these classes were distinct classes, so as to keep the scientific field open, or at least in a state of good development?

Dr. NICHOLSON: Without any doubt.

The CHAIRMAN: Are there any further questions?

Mr. KORCHINSKI: In a course which leads to a degree in geography, I wonder would it require very much for a geographer to take an additional course and perhaps branch off into another field?

Dr. NICHOLSON: Perhaps—although the reverse happens more frequently. A man may get his B.A., say in botany, and go on into graduate work in geography, which really means that he ends up being a plant-geographer. The reverse does not really happen. I cannot think of any cases in Canada.

The CHAIRMAN: Are there any further questions, gentlemen? If not, we have Dr. van Steenburgh who will give evidence in respect of Dr. Beals' branch in the absence of Dr. Beals, that of the Dominion Observatories.

DOMINION OBSERVATORIES

Dominion Observatory, Ottawa and Field Stations—	
Item 205. Administration, Operation and Maintenance, including the expenses of the National Committee for Canada of the International Astronomical Union, the fee for membership in the International Astronomical Union, and a Grant of $3,500 to the Royal Astronomical Society of Canada	**$ 896,930**
Item 206. Construction or Acquisition of Buildings, Works, Land and Equipment	**486,800**
Dominion Astrophysical Observatory, Victoria, B.C.—	
Item 207. Administration, Operation and Maintenance	**146,838**
Item 208. Construction or Acquisition of Buildings, Works, Land and Equipment	**67,975**
	$ 1,598,543

Mr. NIELSEN: Is it usual for the Dominion Observatory to have to accept substantial cuts in their estimates?

Dr. W. E. VAN STEENBURGH (*Director General of Scientific Services*): I think, to clarify the position and the work of the Dominion Observatories, I should point out that their work is quite scientific in character. In considering the growth of the Dominion Observatories we think more in terms of expanding their basic scientific studies. Just recently the public and general interest in the scientific work of the Dominion Observatories has been greatly increased by the satellite invasions of outer space, so that now the dominion observatories' work, which was considered fairly academic in years past, has taken on a very practical application.

The CHAIRMAN: Would that be since "Sputnik"?

Dr. VAN STEENBURGH: The beginning of it was "Sputnik". But there are other fields of interest in the Dominion Observatory which have also added to its usefulness in a practical way, this is the seismic research and its relationship to oil exploration, and aerial magnetic charting which is a direct aid to navigation. More and more, with the passage of time, the activities of the Dominion Observatory have greater practical application.

In answer to the question, I might say that it is doubtful whether the Dominion Observatory would have wished over the past years to expand at a greater rate than actually took place. But now, with the added emphasis on their work, I feel that we have reached the place where we can contemplate greater expansion than in the past.

Mr. NIELSEN: That still does not answer my question, which was this: is it usual for the Dominion Observatories to have to accept substantial cuts in their estimates?

Dr. VAN STEENBURGH: In the two years—and I am speaking only of the two years in which I have been associated with the Dominion Observatories—they have not had serious limitations of funds, such as the other branches have suffered. They have received, in general, what they have asked for; but it should be pointed out that their requests have been modest compared to those of some of the other branches. They have each year received certain restrictions in funds, but they have not been serious.

Mr. NIELSEN: In other words, my question would be answered, yes, if I took out the word "substantial"?

Dr. VAN STEENBURGH: That is right.

Mr. NIELSEN: Thank you. Has the denial of funds impeded the Dominion Observatories in the discharge of that branch's responsibility?

Dr. VAN STEENBURGH: The only substantial restriction that the Dominion Observatories have received in the last two years has been in the field of moneys allotted for contracts to carry out aeromagnetic surveys.

Mr. NIELSEN: What reasons, if any, have been advanced as justification for any such cuts?

Dr. VAN STEENBURGH: Well, aeromagnetic survey is an endeavour, which may be expanded quite rapidly, or which can be restricted. There is a great deal of elasticity possible in the amount of funds which you could spend on aeromagnetic surveys.

In the good judgment of the government it was thought that in this particular field the Dominion Observatories had asked for too much money, and it was cut back.

I talked this over with Dr. Beals, and he feels we should be able to carry out a very satisfactory program in aeromagnetic surveys in the Dominion Observatories during 1959, with the funds that are available.

Mr. NIELSEN: Has the amount of scientific work which the Dominion Observatories accomplished in the past been restricted or reduced by financial inability to carry it out? This has to do with the amount?

Dr. VAN STEENBURGH: I talked this matter over with Dr. Beals who, by the way, is ill; and he expressed the opinion that they had received funds which allowed them a normal expansion, and which did not restrict their field of endeavour to any major extent.

The CHAIRMAN: That division is the exception—am I right?

Dr. VAN STEENBURGH: I wish to make it quite clear that the Dominion Observatories in this particular area is the exception, when compared to the rest of the department.

The CHAIRMAN: To the rest of the department?

Dr. VAN STEENBURGH: To the rest of the department.

Mr. NIELSEN: Will the Dominion Observatories be able to carry out this year the program of astronomical and geophysical work which they have planned?

Dr. VAN STEENBURGH: The Dominion Observatories this year, with the exception of a cut in the aeromagnetic survey, received all funds that were necessary to carry out the program they had planned.

Mr. NIELSEN: But not the aeromagnetic survey?

Dr. VAN STEENBURGH: That is the exception.

The CHAIRMAN: Are there any other questions?

Mr. NIELSEN: I have one or two more questions, if you will permit me to examine Dr. van Steenburgh in his own right.

The CHAIRMAN: Yes.

Mr. NIELSEN: As a scientist, Dr. van Steenburgh, would you say that Canadian scientific projects, as far as the government is concerned, and this department, have been adequately financed in the past?

Dr. VAN STEENBURGH: No. I feel that the scientific work of the government, with particular application to this department, has been restricted in the funds necessary to carry out an adequate program and to meet the requirements of the country as a whole.

Mr. NIELSEN: My second general question is this: is Canadian science as a whole in your opinion being retarded by its inability to obtain necessary financing?

Dr. VAN STEENBURGH: My answer to this question, I must point out, is a personal opinion. I feel that Canada as a nation is suffering because of the low level of funds which are channelled into research.

The CHAIRMAN: You should have been in the house the other day to speak for me in respect to my resolution!

Dr. VAN STEENBURGH: It is my contention that a country such as Canada, which is undergoing rapid economic development requires, or should require, a higher level of scientific output to keep parallel with development. Dr. Convey brought this out very clearly in his discourse at the last meeting: because of the low level of scientific endeavour in Canada and the salary range which is paid to scientists in Canada, we are losing a high percentage of our scientifically trained personnel to the United States. This figure reaches, in some of the professions, as high as 30 per cent. My contention is that Canada cannot afford over a long period of time to lose this type of highly trained personnel to another country.

The CHAIRMAN: How long has this been going on?

Mr. NIELSEN: That is my next question, Mr. Chairman.

The CHAIRMAN: Oh, it is your next question; very well.

Dr. VAN STEENBURGH: Our loss of highly trained personnel to the United States started soon after the war. It varies from year to year. At the present time I should say the level would be in the neighbourhood—and this is a most difficult thing for which to give a percentage— but I would think that we were losing from 15 to 20 per cent of our scientifically trained personnel to the United States.

Mr. NIELSEN: That has gone on for 15 years?

Dr. VAN STEENBURGH: Since the war.

Mr. KINDT: In the higher bracket of training, such as the Ph. D. level, the percentage would be higher than that, would it not?

Dr. VAN STEENBURGH: At the Ph. D. level, we lose a higher percentage than we do at the lower levels. And it might interest the committee for me to point out that the National Research Council has just completed a survey of candidates who received scholarship assistance to obtain their Ph. D.'s. They took close to 1,000 as a basis for this investigation.

It became apparent that of those who took their graduate training in Canada, 30 per cent located in the United States; and of those who took their graduate training in the United States, 49 per cent came back to Canada.

Mr. NIELSEN: This does not give us any idea of how many came back to Canada, or whether there is any deficit balance in scientists at this time?

Dr. VAN STEENBURGH: I do not think there is any question but that there is a deficit balance as far as Canada is concerned in favour of the United States.

Mr. NIELSEN: How, in your view, are we going (a) to attract more scientists to government service, and (b) keep them, once we have obtained them?

Dr. VAN STEENBURGH: Scientists are not attracted by salary alone, but, as you, gentlemen, know, salary is a very important item in recruiting and holding scientists. However, I feel that in the government service one of our most acute competitive items at the present time is salary.

Mr. NIELSEN: It is both an attraction as well as a retainer?

Dr. VAN STEENBURGH: That is correct.

Mr. SLOGAN: How would a position in the government compare in security and in what they call the fringe benefits in the government, alongside one in private industry?

Dr. VAN STEENBURGH: Up until five years ago fringe benefits and other attractive features of government service were such that they tended to act as a holding factor, but this is no longer true. Many companies, and even

provinces, at the present time have superannuation plans and offer fringe benefits which are as good as or better than those offered by the government.

Mr. SLOGAN: Do you feel that the training facilities in our universities are adequate, if we are losing that number of scientists to the United States? I would feel that obviously our training facilities must be adequate, otherwise there would be a greater demand for those people in Canada.

Dr. VAN STEENBURGH: Our universities, speaking generally, offer excellent training facilities. There are certain scientific areas and disciplines for which our students must go to the United States or overseas. But our universities are excellent, and in most fields they can offer adequate training.

The CHAIRMAN: Are there any other questions?

Mr. FLEMING (*Okanagan-Revelstoke*): Getting away from the line of questioning that has been going on during the last few minutes, I would like to refer to something which came up when Dr. Convey was a witness the other day. I was impressed by the fact that the Mines Branch receives a number of direct requests from industry.

I am afraid my question will be long and involved. I apologize, but I do not know how to do it in any other way.

As I understand it, industry makes specific requests of the branch for research. But because of limited personnel and facilities the branch is unable to accept other than a mere fraction of the number requested, and perhaps a great many of those projects have to be undertaken by private research firms in the United States.

When such projects are undertaken in the United States on a commercial basis, they are paid for by industry. They must have that research done.

What is the general feeling by the department in Canada? I gather that they receive the benefits of the research that has to be made, and on occasion they lend personnel. But there is no policy established with respect to a scale of fees of any kind to be charged to industry for research projects undertaken on its behalf.

Has any great thought been given, or is it being given, to fixing a scale of fees to industry for research projects? This is not fundamental research, but direct, applicable research on projects they submit. I ask this question for this reason, and perhaps I should go a little further and amplify.

My feeling is that if industry were contributing to the funds of the department, this money coming in, could be used to expand the work of, say, the Mines Branch. It would be a method of securing additional money, which would enable the Mines Branch to go further in the field of fundamental research. You might build up the funds of the department to allow for work that cannot be done at the moment because of lack of funds.

Has any consideration been given to a scheme of this sort?

Dr. VAN STEENBURGH: The Mines Branch does charge fees for routine work. It is only in those projects which are felt to be in the national interest the facilities of the Mines Branch are placed at the call of industry.

In those cases, wherever possible, it becomes a cooperative venture in which the company may supply personnel and, quite often, specialized equipment. The matter of charging industry has been discussed many times. Up to the present no action has been taken in that field because it was felt that what the Mines Branch was doing was in the general over-all interests of Canada, and it was better to encourage it at this stage.

My personal feeling in the matter—which may not be Dr. Convey's—is that as fast as it is possible for us to do so, we should encourage the establishment in Canada of independent research organizations, and then we should take active steps in our own department to encourage industry to go to those groups.

Mr. FLEMING (*Okanagan-Revelstoke*): I thought that if the department were to charge a fee for this research work, it would focus the attention of, say, private research groups coming into Canada and providing facilities.

If no free facilities, let us say, or facilities at a reduced charge, were made available, it would encourage private research projects to come into the country and set up separate facilities to meet this demand, which facilities the government is now providing without a fee. That would free the branch to devote its attention more to fundamental research, which apparently is Dr. Convey's objective. I feel that in the long run, if fees were charged more people would be encouraged to undertake research projects. The money would be available from the work itself, and that in turn would encourage private research to become established on a fee basis. Then in time perhaps the government could get the branch out of the field of this type of research that could be done commercially and leave it free for its fundamental research.

I realize this is going a long way round. It is an attempt to make industry realize that the basic responsibility of the branch should be fundamental research and the other type of research should be handled commercially. If the government were to establish fees, it would tend to emphasize that point and might lead to the establishment of the necessary organizations in the country.

Dr. VAN STEENBURGH: In this particular case—I do not want to put words in the deputy minister's mouth—I can only express my personal feeling. Personally, I agree with you 100 per cent.

Mr. KINDT: Mr. Chairman, I have just one final thought on this question of losing technically trained personnel to the United States, about which we have heard so much. My experience has been—and I stayed a few years down in the United States, because I took my graduate training there—that there are dozens, I would even say, hundreds, of the men whom Dr. van Steenburgh has mentioned, who are now in the United States, working either for the government or private corporations in their respective fields of the physical or social sciences.

In talking with those men, even though they have had to take out United States citizenship papers to enable them to stay there, there is not one among them who would not be delighted to come back to Canada. So, I am wondering if there is a record kept anywhere in government of the various fields of science, in order to follow the training of these men into the United States.

I realize that there is here a reservoir of men with Canadian background. It is far better to have them than bring in somebody from Europe, or somebody who was born in the United States. They are people who are "long lost", and who would be here if we made them a sufficiently attractive offer; in other words, if we gave them security, and a salary which they can get in the United States.

I remember that when I was down there and when I finished my Ph.D. work, I went on to some temporary work. Dr. Tory wrote to me and he was the National Research Council director. He asked me if I would come back, and he offered me a salary. The salary that he offered me was $5,000 less than I was getting there, and I just could not accept it. I wrote and told him that there was nothing I would love as much, and I wanted to come back to Canada, but I had to have the price of a "meal ticket". Also, some savings gives you a certain degree of security.

I feel there is the reservoir of people in the United States, and if a proper record were made of those people, that pool could be drawn upon here for scientific purposes.

I find this, that a Canadian who graduates in the United States in a particular field will come all the way up before he becomes a United States citizen. He will go to this university, to this particular corporation or to this particular department of government. He will make the rounds and spend $200 or $300 of his own money trying to find a job in Canada. Then he becomes discouraged, and takes a position in the United States. If you talk to those people down there, you will find that is the situation—and they want to come back to Canada.

Take my own case: I simply returned and started my own department in western Canada as a consultant, and I have never been sorry that I did; it was the finest thing I did in my life. But if you happen to be in one of the fields where you cannot do that, then you must choose where the salary is greatest. And, as a parting thought, I believe that there are plenty of men in the United States that we could get for the expansion of our technical services, if we just made the inducement right.

Dr. VAN STEENBURGH: The Bureau of Technical Personnel keeps track of all Canadians with technical training who are located in the United States and on whom they can get information. Occasionally they circulate a list of these people to the department.

I must say that in the past we have had very few "takers" from this list, the salary differential seems to be one of our stumbling blocks.

Mr. KINDT: That is right.

Mr. NIELSEN: Mr. Chairman, I have one or two questions I would like to get on the record.

The CHAIRMAN: Excuse me for a moment, Mr. Nielsen. Dr. van Steenburgh, we are on this important question, and I am going to base my question to you on a survey made by the university people who came to Canada some few years ago from the United Kingdom.

They were of the opinion that universities here would be better equipped to give the necessary training in the scientific fields, special training for B.Sc.'s, and so on, if we had very highly qualified technical men, research men, on the campus of every university. Do you agree with that?

Dr. VAN STEENBURGH: Most certainly I agree with it.

The CHAIRMAN: The reason I say that is this. A specialist in a certain field looks around different universities to see if someone in that field is really the top man to whom he could go for training, with the result that he does not find that to be the case in our universities and he goes elsewhere. Is that not right?

Dr. VAN STEENBURGH: I would like to refer to my previous answer. In the general fields of science I feel that our Canadian universities have excellent departments. It is only in those specialized fields where the demand is low in Canada, that students must go out of the country for training.

The CHAIRMAN: There are several of those specialized fields, though, are there not, doctor?

Dr. VAN STEENBURGH: Oh, there are many of them!

The CHAIRMAN: Yes. Thank you, Dr. van Steenburgh. All right, Mr. Nielsen.

Mr. NIELSEN: Dr. van Steenburgh, could you, for the purposes of comparison, tell the committee how much money has been allocated to research and technical services for the periods 1957-58, 1958-59, 1959 and 1960, in the Department of Mines and Technical Surveys, the Department of Agriculture, and the National Research Council?

Dr. VAN STEENBURGH: In 1957-58, Mines and Technical Surveys, excluding the Emergency Gold Mining Assistance Act, received $20,167,414. In

the same year Agriculture received for its scientific and technical work, $25,016,853. National Research Council, in the same year, received $20,494,051.

The CHAIRMAN: You just have the figures for the three departments?

Mr. NIELSEN: Have you the figures for the other years there? May I suggest, Mr. Chairman, they be inserted as an appendix to the record of these proceedings?

The CHAIRMAN: Is that agreed, gentlemen?

(See Appendix "A")

The CHAIRMAN: You need each department of government where scientific reseach is part of the activities?

Mr. NIELSEN: These three departments I mentioned, Mines and Technical Surveys, Agriculture, and National Research Council, for the three periods 1957-58, 1958-59 and 1959-60.

The CHAIRMAN: Do you want other departments?

Mr. NIELSEN: If you have a comparison with other departments, it would be very useful.

Dr. VAN STEENBURGH: These figures are fairly comparable. When you go to other departments, it is difficult to sort out the money that is definitely allotted for scientific and technical work. A figure for the other departments would require considerable research by the finance people.

Mr. NIELSEN: I think it serves our purposes to have those three comparisons, because they are the three departments largely concerned with scientific and technical services.

The CHAIRMAN: Yes.

Mr. NIELSEN: I wonder if there is in existence an appendix that could be affixed to these proceedings, showing the estimates which have been brought out during the last meeting, and this one of the increases in personnel that the various branches have asked the committee to consider over the next five years?

Dr. VAN STEENBURGH: These figures are the total of the figures that were given by the various branch directors during the questioning period.

Mr. NIELSEN: Mr. Chairman, could we have that put in as an appendix?

The CHAIRMAN: Yes.

(See Appendix "B")

Mr. NIELSEN: There is one other appendix I would like to have introduced into the proceedings; that is a table, if it is available, of the percentage increase in scientific and technical positions over the last 10 years. It is the absolute one.

Dr. VAN STEENBURGH: You want the absolute one? There are two of them.

Mr. NIELSEN: I think the one that Mr. Pack is holding—both of them would be nice. Let us have the absolute one, the one you are holding, Mr. Deputy Minister.

The CHAIRMAN: This is the one you want?

Mr. NIELSEN: Yes.

The CHAIRMAN: Is that agreeable to the committee?

Agreed.

(See Appendix "C")

Mr. NIELSEN: Mr. Chairman, if you will allow it, I have one last question. I wonder, Dr. van Steenburgh, if you would care to comment generally on the evidence over the past two meetings. One thing which I would like you

specifically to comment on is the line a number of committee members have been following with regard to the comparison of salary range of the directors of the various branches within the department.

Dr. VAN STEENBURGH: The salaries of the directors of the three main branches of the department, that is Geological Survey, the Mines Branch and Surveys and Mapping Branch, are from $13,000 to $14,000 annually. The director of the Dominion Observatories is one classification below that, $11,500 to $12,500. That is, the director of the Dominion Observatory is one classification below the three other main directors. The director of the Geographical Survey is at the same level as the divisional chiefs in the other branches. With regard to the Dominion Observatory, this means the divisional chiefs in turn are one classification less than the divisional chiefs in the larger branches.

Mr. NIELSEN: Dr. van Steenburgh, is this, in your opinion, an undesirable state of affairs?

Dr. VAN STEENBURGH: I consider it very undesirable. Recently I was at a meeting with senior scientists of the National Research Council and this level of salary between the director of the Dominion Observatory and our other directors came up for discussion. One of the senior officials of the National Research Council told me that if Dr. Beals was on his staff he would be getting close to $3,000 more than he is getting on our staff.

Mr. NIELSEN: Are there any other general comments that you would like to make with regard to the impediments if any, being encountered, over the last ten years or now in the department; and what restrictions, if any, have been placed on your scientific endeavours, and so forth?

Dr. VAN STEENBURGH: First, I might speak about salaries. On many occasions it has been pointed out to the committee that as soon as our men become national, or international specialists, they tend to have great attraction for the universities and industry. Our serious loss of staff is at our specialist level; and until salaries as between universities, industry and ourselves are adjusted, this condition is going to continue. Our great difficulty—and this has been pointed out to the committee in the past—is that we have an accordion effect in our higher salary ranges. There is no place for the outstanding scientist to go. We need our whole upper salary structure raised materially to give us the latitude to take care of the persons at this very vulnerable level, the specialist level.

The CHAIRMAN: Have you made representations to have this level altered?

Dr. VAN STEENBURGH: The department has made specific and general requests to have this matter adjusted.

The CHAIRMAN: Over how many years?

Dr. VAN STEENBURGH: That has been going on ever since I came into the government, which is about twenty-five years ago.

Mr. NIELSEN: So far as your department is concerned, do you hold with Dr. Convey that we are not even in the race so far as keeping pace with mineral and industrial expansion in this country?

Dr. VAN STEENBURGH: I feel most definitely we are not meeting our responsibility to Canada in this department at the present time.

Mr. NIELSEN: I think that is a good note on which to move for adjournment.

Mr. KORCHINSKI: May I ask a question, Mr. Chairman, in regard to the Dominion Observatory?

The CHAIRMAN: Yes.

Mr. KORCHINSKI: I am referring to a specific item in the estimates and that is in regard to the charter of an aircraft. I notice there is an additional

$30,000 for this year, and yet on the other hand we see a decrease of $5,000 in regard to publication of technical reports. I wonder why in one case it suggests an increase of activity, and in the other a decrease?

The CHAIRMAN: I think that was explained at an earlier meeting, but perhaps we could have it answered again.

Dr. VAN STEENBURGH: Mr. Pack will answer that question for you.

Mr. K. M. PACK (*Chief Administrative Officer*): I may have missed part of the question; did it have something to do with charter of aircraft?

Mr. KORCHINSKI: Yes. There is a $30,000 increase for charter of aircraft. Would you say why there was a decrease of $5,000 in the publication of technical reports?

The CHAIRMAN: What page is that on?

Mr. KORCHINSKI: At page 279.

Mr. PACK: Well, I will have to speak generally. This is particularly, as we call it, a primary publication of technical reports. It does not maintain a constant level. Due to the way the reports become available there are heaps and dips in the level of expenditure for this particular item. In this particular case, I think it is one of those dips when the supply of publications is down and a higher point will be reached in a succeeding year. If you watch it, you will find generally there is not always a steady trend developed. It has a tendency sometimes to go up and sometimes go down, depending on the way they are processed, the printing of them and so forth.

Mr. KORCHINSKI: Would you explain then the charter of aircraft? I see there is an increase of some $30,000 in the estimates for this year.

Mr. PACK: Basically that is accounted for by the fact that the type of plane especially required to carry out the aeromagnetic survey this year will cost more than the one last year. Last year we had a B-17 aircraft, and for technical or scientific reasons it was felt that the same type of aircraft should not be used again this year. Of course, there will be an increase in cost to obtain the one which will be suitable. Generally speaking, that is the reason for it, plus the fact, I believe there is one extra aircraft operation required in central Quebec. That is an additional operation for this year.

Mr. KORCHINSKI: There is one further question I would like to ask and that concerns the construction or acquisition of buildings, works, land and equipment. Would you indicate where this building is being constructed, what type of building it is, and the use of it?

Mr. PACK: The extra construction project affecting the dominion observatory in the estimates before you is a carryover expense of the radio astronomy project being developed in Penticton, British Columbia. It started last year and is in the active stages of development at this moment. I think Dr. Innes could explain its technical application better than I, but it is a new project established in Penticton to carry on radio astronomy study. The work is being done through the Department of Public Works, and we have an extra financing job in this fiscal year.

Mr. KORCHINSKI: Did I understand you to say it is the continuation of what you started the previous year?

Mr. PACK: It was a project which was commenced on paper last year. Basically, there was very little money spent in the fiscal year just ended. The main load is coming this year.

Mr. KORCHINSKI: I notice the estimates are lower this year.

Mr. PACK: I think you will find in due course that we will have a second item in the forthcoming supplementary estimates to bring that into balance.

We had hoped to proceed more quickly last year than we did, and some of the money will have to be revoted in the supplementary estimates.

Mr. KORCHINSKI: Do you also expect an addition in supplementary estimates for the acquisition of equipment, because that item is revised?

Mr. PACK: I would not expect so, because we have had to buy the equipment for this particular project. It was largely paid for last year. It is the construction part of it that has been delayed. I do not anticipate seeing any increase at all in the equipment for this fiscal year.

Mr. KORCHINSKI: Would the estimate provided complete the project, outside of any additional equipment that may be incidental?

Mr. PACK: Yes. That which is in front of you will not complete the project; we have to depend on a supplementary estimate to bring up the shortage left by the work that was not done last year, but that we thought would be done.

The CHAIRMAN: Gentlemen, before you leave, may I say the steering committee was appointed by this committee and I think that a member wishes to make a motion in that regard.

Mr. SLOGAN: I would like to move that Mr. Martineau take the place of Mr. Latour on the steering committee.

Mr. FLEMING (*Okanagan-Revelstoke*): I will second the motion.

The CHAIRMAN: It has been moved and seconded that Mr. Martineau be substituted for Mr. Latour.

Motion agreed to.

Mr. SLOGAN: I have one question. Why does the aeromagnetic survey come under the Dominion Observatory rather than under the Surveys Branch?

Mr. PACK: I believe mainly because the Dominion Observatory has been interested in magnetics phenomena and they have had qualified scientists and technicians who could develop the equipment and carry out the program.

The CHAIRMAN: On behalf of the committee, Mr. Minister, I wish to express our appreciation to you and to your officials, both of your department and of the Dominion Coal Board, for the assistance given to the committee in the examination of these estimates which we have now completed.

Gentlemen, before you go, may I say I think you will have to accept the adjournment at the call of the chair, in view of the decision that the steering subcommittee might make this afternoon regarding the calling of other witnesses, on the subject of fallout, radiation and so on, as we discussed at the beginning of this meeting. We should know their decision some time after lunch.

After that, I would ask the steering subcommittee to get a draft report ready for consideration, so that it may be presented to the House as soon as possible. However, I do not think the draft could be ready until Thursday at the earliest. If it is then ready we will hold a meeting in camera on Thursday next, if the committee is prepared to meet then.

APPENDIX "A"

ALLOCATIONS TO RESEARCH AND TECHNICAL SERVICES

	Department of Mines and Technical Surveys	Department of Agriculture	National Research Council
1957-58	$20,167,414	$25,016,853	$20,494,051
1958-59	23,260,842	27,243,967	25,992,204
1959-60	24,566,205	30,090,724	30,133,580

APPENDIX "B"

PROJECTED STAFF INCREASE IN THE DEPARTMENT OF MINES AND TECHNICAL SURVEYS

over the next five years

	Continuing Employees	Seasonal Employees
Dominion Observatory	35	—
Geographical Branch	15	—
Geological Survey	200	175
Mines Branch	150	—
Surveys and Mapping Branch		
Geodetic	25	60
Topographic	40	—
Legal	30	30
Map Compilation	100	—
Hydrographic		
30 Hydrographers		
60 Oceanographers		
100 Compilation and office staff		
300 Ships Officers and Crews	490	40
Departmental Administration	25	—
Mineral Resources	25	—
	1,135	305
Total	1,440	

APPENDIX "C"

PERCENTAGE INCREASE IN SCIENTIFIC AND TECHNICAL POSITIONS SINCE THE DEPARTMENT OF MINES AND TECHNICAL SURVEYS WAS FORMED IN 1950

Branch or Division	No. of Scientific and Technical Positions 1950-51	No. of Scientific and Technical Positions 1959-60	Change in Scientific and Technical Positions	Overall Percentage Increase or Decrease
Administration				
Mineral Resources Division and Explosives Division	26	33	7	27 %
Dominion Observatory	59	90	31	52½%
Geological Survey	191	264	73	38 %
Mines Branch	304	406	102	33½%
Surveys and Mapping	571	631	60	10½%
Geographical	14	35	21	150 %
Total increase in Scientific and Technical positions			294	

This represents an increase of 25.3 per cent over 1950-51 Scientific and Technical Positions or an average increase of 2.8 per cent per year.

INDEX

ESTIMATES
OF
DEPARTMENT OF MINES AND TECHNICAL SURVEYS
AND
DOMINION COAL BOARD

Proceedings Nos. 1 to 13 inclusive.

Pages 1 to 335 inclusive.

Item No.		*Pages*
	DEPARTMENT OF MINES AND TECHNICAL SURVEYS	
186	Departmental Administration	15–20 51–55
	Statement by Minister	15–19
187	Explosives Act Administration	55–59
188	Mineral Resources Division	59–71 79–85
189–199	Surveys and Mapping Branch	72–75 85–104 291–294
	see also	107
	and	133–144
	and	190
200–201	Geological Survey of Canada	24–47 308–317
202–203	Mines Branch	109–130 144–150 275–291 294–302
	Statement by Minister	109–110
204	Geographical Branch	150–154 317–323
205–208	Dominion Observatories	160–183 324–335
209	Purchases of air photography and the expenses of the Interdepartmental Committee on Air Surveys	187–199
210	Polar Continental Shelf Project	133–144 199–209
	see also	75
	and	107–109
	and	156–183
	DOMINION COAL BOARD	
211–213		213–269
	see also	79
	and	155–156
	Statements by: Mr. D. B. Young	213–216
	Minister	237–239
	Chairman, Dominion Coal Board	239–246

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 14

RECEIVED
MAY 8 1959
Library of Parliament

THURSDAY, APRIL 30, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESS:

The Honourable Alvin Hamilton, Minister.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21019-5—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

CORRIGENDA (*English Edition only*)

Minutes of Proceedings and Evidence No. 12, April 16, 1959

Page 292,

line 1: for "2,500" substitute "25".

line 12: for "2:50,000" substitute "1:250,000".

Page 293,

4th line from the bottom: for "1957" substitute "five-year".

Minutes of Proceedings and Evidence No. 13, April 20, 1959

Page 311,

7th line from bottom: for "lack" substitute "lag".

penultimate line: for "resources" substitute "reserves"

penultimate and last lines: for "mapping" substitute "petroleum".

ORDER OF REFERENCE

HOUSE OF COMMONS,
WEDNESDAY, April 29, 1959.

Ordered,—That items numbered 261 to 293 inclusive, and items numbered 476 and 477, as listed in the Main Estimates of 1959-60, relating to the Department of Northern Affairs and National Resources, be withdrawn from the Committee of Supply and be referred to the Standing Committee on Mines, Forests and Waters, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

Attest.

LEON J. RAYMOND,
Clerk of the House.

21019-5—1½

MINUTES OF PROCEEDINGS

THURSDAY, April 30, 1959.
(15)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Doucett, Fisher, Fleming (*Okanagan-Revelstoke*), Gundlock, Hardie, Korchinski, MacRae, McFarlane, McGregor, McQuillan, Muir (*Cape Breton North & Victoria*), Murphy, Nielsen, Robichaud, Simpson, and Slogan.—19.

In attendance: The Honourable Alvin Hamilton, Minister, and officials of the Department of Northern Affairs and National Resources.

The Clerk of the Committee read the Order of Reference of the House dated April 29, 1959, whereby the 1959-60 estimates of the Department of Northern Affairs and National Reseources were referred to the Committee.

On motion of Mr. Fisher, seconded by Mr. Doucett,

Resolved,—That there be printed 1,000 copies in English and 250 copies in French of the Committee's Minutes of Proceedings and Evidence relating to its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

The Committee commenced its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources. Item 261, Departmental Administration, was called.

The Minister made a brief opening statement. He then made a statement on oil and gas policy.

On motion of Mr. McQuillan, seconded by Mr. Fisher,

Resolved,—That the Committee call representatives of the oil industry to appear at a subsequent meeting to express their views on the oil and gas regulations.

On motion of Mr. McQuillan, seconded by Mr. Fisher,

Resolved,—That the Committee call representatives of the independent mining organizations to appear at a subsequent meeting to express their views on the oil and gas regulations.

The Committee agreed to certain revisions being made to Issues Nos. 12 and 13 of the Committee's proceedings relating to its consideration of the estimates of the Department of Mines and Technical Surveys. (*For detail of the said revisions, see Corrigenda at the beginning of this issue.*)

At 11.00 o'clock a.m. the Committee adjourned until 11.00 o'clock a.m. on Monday, May 4, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

THURSDAY, April 30, 1959.
9:00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

As you know, yesterday the estimates of the Department of Northern Affairs and National Resources were referred to this committee for study. I would like to say that I hope, and I am sure we all expect, that we will do as good a job in respect of this department as was done by the Committee on the estimates of the Department of Mines and Technical Surveys. I think I can say without any hesistancy, having served on many committees, that the work done on the estimates of the Department of Mines and Technical Surveys was "par excellence".

I will ask the Clerk of the Committee to read the terms of reference, and then we will proceed.

The CLERK: The Order of Reference of the House, dated April 29, 1959, is as follows: "Ordered that items numbered 261 to 293 inclusive, and items numbered 476 and 477, as listed in the Main Estimates of 1959-60, relating to the Department of Northern Affairs and National Resources, be withdrawn from the Committee of Supply and be referred to the Standing Committee on Mines, Forests and Waters, saving always the powers of the Committee of Supply in relation to the voting of public moneys".

The CHAIRMAN: You will find these estimates on page 54 in your book of estimates.

When this committee discussed the estimates of this department at the last session we had provision for the printing of 750 copies in English and 250 copies in French of the Minutes of Proceedings and Evidence. Later, owing to the demand, that was increased. At the time, someone might move that we start with 1,000 copies in English and 250 copies in French.

So moved by Mr. Fisher, seconded by Mr. Doucett.

Motion agreed to.

Mr. FISHER: At this time I wish to raise a point in respect of the meetings of the various committees. Next week we will have two select committees meeting. They are the Broadcasting Committee and the Railways, Airlines and Shipping Committee, which latter committee will study the report of the Canadian National Railways and other matters. This committee in respect of the C.N.R. will run all the way through Tuesday and Wednesday. Would it be possible for those of us who are interested in this committee and the other committee to avoid a clash in the meetings of these committees and, if possible, could this committee meet at some other time?

The CHAIRMAN: Some time ago, in order to avoid the predicament which you expect, the chairmen of all standing committees met with the Government Whip and worked out a schedule which it was hoped would be the most satisfactory to all members. The times allotted to us were eleven o'clock on Monday, eleven o'clock on Tuesday and nine o'clock on Thursday.

Mr. FISHER: The committee studying the C.N.R., etc., is to start at 9:30 and is to go through to 10 o'clock at night, which ties up our whole day.

The CHAIRMAN: This committee is one of the standing committees. I think we would ordinarily have preference over any other special committee. Furthermore, I am sure—and I hope the members will agree—we will have to have

more than three meetings a week in this committee. At present we are scheduled for three a week, but in order to get through we will have to have more.

Mr. HARDIE: How can we, with all the other committees?

The CHAIRMAN: The schedule already sets up three sittings a week for this committee.

Mr. HARDIE: That is plenty.

The CHAIRMAN: If we are to get through with this department before the end of the session we shall have to have more meetings; I expect that they will start next week.

Item 261. Departmental Administration .....$ 866,273

The CHAIRMAN: Today we have with us the minister, his deputy minister and other officials of his department. The minister will make a short statement and then a statement on the oil and gas policy of his department and, of course, of the government.

Hon. FRANCIS ALVIN G. HAMILTON (*Minister of Northern Affairs and National Resources*): Mr. Chairman, I am quite pleased to be back again before this committee. I think the work done last year was very helpful to the department. In the intervening time in the department a good deal of attention was paid to the recommendations made last year in this committee.

Last year I had the opportunity to make statements on the general philosophy of the policy of national development, which I think were of some use to the members of the committee. This gives the members of the committee a basis for criticism on the work we are doing now.

I think also it is a recognition of the fact that all parties, and the people in all parts of Canada, are beginning to show an interest in the work we are doing in respect of northern Canada. It is to the ultimate interest of the people of Canada that the estimates of this department be given a very searching review by the members present.

I have been reading the proceedings of the hearings of the committee in respect of the Department of Mines and Technical Surveys, and I was greatly impressed with the high level of questioning and discussion which went on at those hearings. I was very much interested in the statement made by my colleague, the Minister of Mines and Technical Surveys.

At this time, for a very obvious reason, I do not propose to make a full statement on my department. In the first place my department has several branches which bear little or no relationship one to the other. For instance, the National Parks Branch, which includes Historic Sites and the Canadian Wildlife Service, has very little direct connection with the Water Resources Branch. Likewise the Northern Administration and Lands Branch is an altogether different thing from the National Museum. The Forestry Branch does have some connection with the Canadian Government Travel Bureau and is, of course, one of the prime attractions. However, as far as the discussion of the estimates is concerned, they are not too closely related.

As was the case last year, I am prepared this year to make statements in respect of such special programs as the camp ground and picnic area program, and the roads-to-resources program. I intend to make a somewhat lengthy and detailed statement on the oil and gas regulations in the territories, and with reference to the situation which prevails there.

In the last two or three months, generally speaking, there has been an increasing interest, from an altogether different point of view, in the oil and gas play in the northern parts of our country, both in the mainland and the islands. Today, therefore, I am going to make a special statement in respect of the oil and gas regulations in order to attempt to clear up some of the

confusion which I think has arisen in the minds of the public across Canada as to what precisely is going on in that area.

In the meantime I believe it would be an efficient practice here in this committee if I made statements on each of these branches as they come up. Then we would be very glad to deal with all questions which members might wish to ask on these various branches. As I understand it this does not prevent any member asking questions on the whole general conduct of the department. This is not an effort to separate it entirely. I believe it might be proper, before we go through the first items, that there might be an opportunity to ask some general questions.

There are thirty-three votes in the estimates of this department, totalling approximately $85 million. This is quite an extensive program and is related to many other departments.

I think that with these comments I will wind up the general statement I have just been making. However, before I close off the general statement, I would like to invite members of the committee to visit one or two of our operations here in this city. In the last year we have opened up the new Forest Products Laboratories in Vancouver and in Ottawa. We cannot easily take you out to Vancouver but we can invite the members of the committee to take off a period of time in order to go to the laboratory located out on the Montreal road.

There is another operation here in Ottawa which is increasing in interest; that is the tourist bureau. We feel this tourist bureau is one of the finest in the world. At this time of the year you will see it at the peak of its operation, when it is handling hundreds of tons of mail every day. I would like you to go down there, if you would, in order to see how this is handled. You will see the thousands of inquiries which come in every day and you will see how they are handled in getting replies mailed out within forty-eight hours. It is quite a demonstration of a very small but efficient branch of the department.

At this time I would like to make my prepared statement on the oil and gas regulations. You will recall, gentlemen, that last year in the committee I stated one of the reasons behind the roads-to-resources program was the necessity of delineating our resources, and that one of the devices for opening up this unknown country was the technique of going in by road from the south and western part of Canada. One of the reasons why this road system in the territories was of interest to us was because in the last three of four years it was generally known there were oil and gas possibilities in this area.

One of the main costs of exploration is getting into an area. At that time I was speaking of the necessity of getting a road up through the centre of the Yukon to the Artic coast, so that it would be possible to bring up heavy equipment to encourage oil and gas exploration in that area. I mentioned that the Mackenzie River was a natural artery. I also mentioned the possibility of going up through the Fort Simpson and Fort Nelson area. When I was speaking of that last year we did not know, as we do now, that the exploration would move swiftly in that area.

You will notice in the map behind me the coloured areas in blue and red, which indicate on the mainland areas of our country the permits which have been taken out for exploration. On that map you will see two white squares in the centre of the Yukon. They are separate because they are reservations given some years ago to a Canadian company to explore for a period of time in that area. You are able to form an idea of how exploration tends to go along the lines of communication; first of all, there is the Mackenzie River, which gives access to Alberta from the south, and it

carries on right down the Mackenzie valley; and, secondly, if those two white squares were filled in, you would see that this route would lead up to the Mackenzie River delta.

With these preliminary remarks, together with the information which was given last year, I think this statement will now be correlated.

It has been thought for some time that large areas north of 60 degrees in Canada may have large oil and gas possibilities. Over 250,000 square miles of the mainland and the Arctic islands may be favourable for oil and gas. In addition the area of the Arctic continental shelf may add an additional 100,000 square miles but this area is not yet accurately known. This is a great potential public resource since all these lands are crown lands.

As you have heard, permits under the Territorial Oil and Gas Regulations covering large acreages have been issued for oil and gas exploration in the last year and a half. An oil exploration program which, I believe, in terms of land area is one of the largest in the world, is now under way.

Active exploration is taking place over many millions of acres. In face of these great developments, those who a short while ago were saying that northern development was a pipe dream and nothing would happen, have now shifted to another attack. They imply we are giving away this public resource to promote development. They suggest we are cheaply selling out our birthright of northern resources. Others indeed are suggesting, for other motives, that there is no foundation to the probability that oil and gas may be there at all. Some of these are serious charges. I take them particularly seriously because of my strong personal feelings on the importance of protecting the public interest. I assure you these charges are not true. I would like to lay before you a number of facts which will show that they are false.

The government has two bases for its policies toward northern resources. We want firstly, to encourage their early exploration, later their development, and eventually their exploitation; and secondly, we are determined to protect the public interest in them. Our policy in northern oil and gas should be judged on these bases. Let me give you some thoughts which illustrate how our policy meets these criteria.

First of all, we realize that northern exploration is very costly, and since relatively little is known of the geology, exploration risks are very great. No doubt, this is one of the more costly areas in the world to explore. Large amounts of capital are needed to carry on this exploration and development and private capital has been invited, in partnership with us, to join in this program on terms which we consider are fair and equitable. The fact that such large scale exploration is actually taking place suggests that our policies of encouraging investment, of maintaining close and continual discussion with the industry, have produced a climate in which people are prepared to invest in northern oil and gas exploration. As an illustration of what the government is doing in this regard, I might mention the geological and hydrographic programs whose efforts will be doubled over the next five years.

I would like to interject at this point that this doubling is very necessary to this department.

As an indication of the need for increased activity in these fields, I might mention that at the rate at which hydrographic surveys have been carried on in the past, it would take some 250 years to bring the charting of Canada's northern waters up to the standards which are now required for southern waters.

But if we are encouraging investment and exploration it can be asked—are we giving away our resources to do it?

Let us look at the facts of our policy. Although there are over 100 oil laws active in the world today, these may be generalized into two main systems of oil and gas disposition. One is the concession system. It is a system

common in the Middle East, for example, and with modifications in parts of South America. It applies in some of the world's most prolific producing areas. Under this system large blocks of land are licensed to a single operator or group of operators, and these operators retain complete control from exploration through to production and marketing. Single large companies can completely control many oil fields. It can be argued that this system could endanger the public interest; and, of course, it is argued.

It may surprise you, and indeed it shocked me, that a modification of this system was in effect in the Northwest Territories and the Yukon when I came into my present office. I immediately set about revising it.

The exact date of revision was September 3, 1957.

In my opinion, the public interest was not sufficiently protected. I shall go into more detail on this in just a few minutes.

The other main system is the public reserve system, or the crown reserve system. It is used in parts of the United States and in our western provinces. Under this system, a permit is given to an operator to explore an area for oil and gas, and should he make a discovery at least half of the land in the permit in a certain specific *pattern* reverts to the crown.

I have underlined the word "pattern" for very important reasons. This is to assure that on the discovery of an oil pool a percentage of the productive acreage will return to the government to dispose of as it sees fit. This is the system in our present regulations.

Let me show you how this works, and how it compares with the system in force in 1957 when I came into office.

Mr. Palmer, who is present, is going to put on the board a picture of typical grids in northern Canada. On top of these grids he is going to put on, in blue colour, examples of various types of pools that to date have been discovered in western Canada. The pool at your right is an average type of pool which was actually taken from one or two examples in Alberta.

Now, this is what happened under the old regulations. Under those regulations any company which discovered oil on its permit, which gave them the right to explore, had the right to take 35 per cent of the total acreage in a solid block. Under the old regulations this is what would happen if they knew something of the formation. The discovery company would receive 35 per cent of the total acreage in land, but in practice would get almost all of the productive area in that grid. Now, if Mr. Palmer took that typical oil pool and spread it across into another grid, then I think you could say with complete accuracy that by putting two solid blocks of 35 per cent acreage in the two grids, the discovery company would get all the oil. Mathematically, the chances are very small of an oil pool being on a single grid alone; actually it would extend possibly over one or two grids. If Mr. Palmer could show us two 35 per cent blocks in adjoining grids, you could block out that whole area.

This is what shocked me when I looked at these regulations. When I began to put this whole thing down on paper, using this 35 per cent block all the time, over and over and over, it came out, in connection with the various pools in western Canada, that the discovery company received back as a reward for its discovery almost all the oil and gas. I consulted people in the oil and gas industry to verify this opinion and without exception they agreed this is what would happen.

Therefore, on September 23, 1957, in a letter to the Canadian Petroleum Association, the government gave notice that no future permits would be granted unless it was conditional on their accepting new regulations which we would work out. During the winter of 1957-58, with the advice of the leading men in the oil industry, the leading men on the government side

working with the oil industry and the man I brought down here to help and advise us, Mr. Somerville, the Deputy Minister of the Department of Mines of the province of Alberta, and with our departmental officials and myself, we worked out the new regulations.

Now, let us see how those new regulations work. We set up a different arrangement, one which was similar to the arrangement in the western provinces and parts of the United States. This system is most familiarly known as the crown reservation system. Under these regulations we said to the exploration company: as a reward for your exploration work and the great risks you have taken you have a right under the crown reservation system, which is a custom pattern now, to take, not 35 per cent but 50 per cent of the grid of land, but you must take it in a series of small blocks. These blocks are shown in red, and when Mr. Palmer puts them on, this assumes that the discovery company is drilling on an anomaly and if they do hit production of a commercial quantity they are forced under the regulations then to take certain blocks; but they must leave corridors around them.

Here is a sample pool action: they would immediately try to block out, so far as they could with the size of the blocks we have allowed them, some form of a pattern that would give them most of that oil. However, they would not know for sure what is down there. This is an example here, which covers an area of about four grids. It shows the most typical thing that could happen to them but, mathematically, it is like "blind man's buff". Generally speaking, it works out that the company that finds the oil, and the crown, end up with 50 per cent of the oil pool. Sometimes the company makes a good guess and will get a higher percentage of production; sometimes they make a poor guess, or the forms run off in different directions, or thin out, and each end up with 50 per cent of the oil pool.

Mr. HARDIE: Do you mean this pattern is set down before they go to work on that anomaly?

Mr. HAMILTON (*Qu'Appelle*): No, all we give them is a statement that they may choose rectangular blocks and the largest one they can take is four by four or four by three.

The CHAIRMAN: What do you mean by "four by four"?

Mr. HAMILTON (*Qu'Appelle*): Four miles by four miles, or four miles by three miles. They are limited to these blocks. If they could draw a diagram with all the indentations in it, and knew the formation, they could probably go back and get most of the pool. But this was a system worked out in the United States when they were trying to protect the public interest, and it was adopted in Alberta, British Columbia, Saskatchewan and Manitoba. It is a device whereby the crown, or the people, can preserve the maximum ownership in the oil pool.

The discovery company is given encouragement in the fact that they can get a certain proportion of the oil pool for spending all their money in this risk enterprise. In the department we have spent hours on mathematics, looking at the possibilities of these pools. Mathematically, the figure will fluctuate between 45 per cent and 65 per cent; but it works out, generally speaking, that the odds are it will be a fair split. Sometimes we get the most; sometimes they get the most. That, in essence, is the difference between the regulations.

Mr. Chairman, I wonder if we could perhaps go back to that for questioning on the details, because the detailed regulations are many pages long.

Mr. FISHER: Mr. Chairman, may we ask questions now?

The CHAIRMAN: Let us finish with this statement.

Mr. HAMILTON (*Qu'Appelle*): I would like to revert to one thing. On the chart there is a great mass of blue pool. This is the largest known pool

that we have in our country. It is Redwater. This Redwater pool, is so broad that if the blocks were in there, the full blocks would be pretty well all productive. This is an example of where they would get more. But with regard to the ordinary pool, the smaller pool, and any pool that takes an odd shape—and so little is known about our geology—taking the knowledge of experience, the 50-50 rule is mathematically sound.

Anyone who wishes to explore for oil and gas in these areas may obtain a permit to do so. A permit, however, grants the right only to explore—I would like to emphasize that—and to obtain a lease later, on a certain part of the permit area if oil or gas is discovered. At the permit stage no right is given to oil or gas. The permittee must actively explore his permit, by the expenditure of at least $3 per acre during the permit term. He must post a bond with us to assure he will carry out this work or he loses his permit and deposits. On the basis of permits issued on the northern mainland to date—not going to the islands on the continental shelf at all—permittees must spend approximately $175,000,000 in the next five years to hold their acreage, and during the same period applicants who have already applied for the right to explore for oil in the Arctic islands, and the continental shelf, will spend an additional $25,000,000. They cannot simply "sit" on their permits.

This anticipated expenditure—not by the government, but by private enterprise—is based on the acreage for which permits have actually been issued or firm applications made and which now exceeds 171,000,000 acres. This was three or four days ago. This is more than seven times the area now under disposition in Saskatchewan and 2½ times the area now under disposition in Alberta.

The administration of this resource will require careful handling and a much larger staff than we now have for this purpose. When I took over the department there was only one qualified officer in the oil administration section, and I have already added a second officer. So we have multiplied by 100 per cent. It is one of these statistical bits of evidence. The next sentence will show the incongruity of that.

This still compares very unfavourably with Saskatchewan which has a total oil and gas staff of over 100, and Alberta with a staff of 165, exclusive of the employees of the Alberta Conservation Board.

If a permittee discovers oil or gas, he may obtain a lease on up to one-half of his permit area. This lease allows him to produce oil or gas on the area for a term of 21 years—the lease period.

On each acre under lease, the lessee must pay an annual rental of $1 per acre which will assure continued income to the crown for the land which is leased.

This is the point I want to stress—that 50 per cent of the permit area returns to the crown as crown-reserve. This 50 per cent is in such a pattern over the permit that the crown will likely hold land over any possible oil or gas pools. We have been illustrating this on the diagram.

Let me illustrate the 35 per cent lease system which was in force in 1957 and which was the policy of the former administration. All, I repeat, all, of an oil pool could be blanketed by the lessee. This would have resulted in the same effect as the concession system and the protection of the public interest that can be achieved by the crown reserve system was not possible. I would suggest that the public interest is certainly protected more today than it was in 1957. In fact, I would go further. The apathy of the previous administration, which failed completely to develop a policy for the protection of the public interest in the oil and gas resources of northern Canada, will rank as one of the greatest examples of economic ignorance and failure to protect the public interest that the world has ever experienced.

How does our crown reserve system protect the public interest? It is very likely that, in any oil and gas field discovery in the north, the crown

reserve will contain a substantial portion of such oil and gas. Who gets the oil is what counts.

The crown may grant leases on any areas of this crown reserve in any judicious way it thinks fit. It might, for example:

(1) lease the rights to the highest cash bidder;
(2) lease the rights to any person bidding to pay the highest gross royalty on production from the area. This system would not require large amounts of cash on hand by bidders and would permit them to pay as production went on and thus encourage investment by smaller scale investors;
(3) set a high basic royalty, say 50 per cent royalty, and accept the tender of the highest cash bidder based on this royalty (that is, fixed royalty plus cash bid); and
(4) have regard to the financial responsibility and financial structure of the bidding companies and take into account the extent to which Canadian capital will have an opportunity of participating.

If I may digress for a moment, Mr. Chairman: This, when read slowly, gets at two great dangers in the oil and gas business. First, the purely speculative promoter can be watched, in the public interest, under this phrase "financial responsibility"; second, the great wish of the Canadian people to have an opportunity to share in ownership of the wealth of their nation can be given ample opportunity and encouragement if, in considering a bid, we require each company to demonstrate the opportunity for Canadians to have ownership and, of course, eventual control in these companies.

The crown reserve system gives the crown a dynamic role in protecting the public interest.

The public interest is also protected through the return of revenue from a public resource. Under our policy, revenue can be gained in a number of ways—through the sale of crown reserves, through a royalty on all production which compares favourably with royalty in the provinces, and also through general corporation and income taxes. All these measures assure us a fair return to the public.

One of the most important basic steps in our national development policy is a program to obtain a complete inventory of our resources. Our policy requires complete return of information and data to the crown from exploration. As exploration goes on a complete picture of our northern resources will be compiled which will assist us in planning and policy decisions.

Mr. Chairman, I have one more digression. Even though that paragraph does not sound as important as other paragraphs, from a government point point of view—from the people's point of view—this question of information is probably, I believe, one of the most important things that we have estabilshed in our own policy. I will be glad to answer questions as to why. Going back to the statement:

Public interest will be protected through prevention of waste in production. We have strong conservation legislation on prevention of waste, control of well-drilling and spacing, production of oil, and management of oil and gas reservoirs.

In all ways I have cited, we have now for the first time modern effective oil and gas legislation which protects the public interest by making opportunity available for Canadian participation, by assuring fair revenue return to the public, by maintaining important policy decisions in the hands of the crown, by assuring complete information and data returned to the crown, by good management and by prevention of waste. I do not think that there is any oil legislation anywhere in the world that does any more to protect the public interest.

You have heard about the proposed revisions to oil policy for the area north of 70 degrees—the Arctic islands. The same basic policy as I have described will apply there. There will be only one important difference, and that is the length of the permit period. Recognizing the fact that this is perhaps the most difficult area of the world to carry on exploration and production of oil and gas, particularly with an extremely short summer season, we are proposing that the initial exploration period will be extended by three years.

Let me revert back to my original statement of basic policy—to encourage exploration and development and to protect the public interest. In these remarks I have attempted to show that exploration is under way in areas where the pessimists were saying it would not get under way for a long time. Our policy is encouraging exploration and this exploration is going on within the framework of modern strong oil and gas legislation that does protect the public interest.

We have a good oil policy and if necessary, it will be modified from time to time in careful consideration of all interests to assure that it continues to meet our basic policy. We have our legislation under continual review and study by our own staff and by the industry. Officers of my department and the Canadian Petroleum Association will be meeting in May to discuss well-spacing, timing of well-drilling, unitization of oil pools, release of information to the public, and other matters which may assist in the best management of oil pools and the most economic production of oil when it is discovered.

The implied criticism that we are giving away northern resource rights is without basis. We are getting exploration and development and we are getting them under a very sound national development policy.

In conclusion, Mr. Chairman, I think the members here will recognize, not only my strong personal feeling on this subject, but also my concern over the fact that confusion has arisen, because of several reasons, on this subject of oil and gas regulations.

Recently we had questions raised in the House. One question was from the member for Mackenzie River. He asked about an oil sale that took place north of the boundary of British Columbia—Mr. Palmer is pointing it out on the map—where 3½ million acres were put up for sale and permits for less than 3 million acres were taken up. The newspapers and radio reports have not helped the public realize the tremendous difference in the various areas of northern Canada.

This led an honourable member of the house, the Leader of the Opposition, into confusion. He took the figures of my answer to the honourable member for Mackenzie, as indicated in that particular sale, to mean that, because one company got a big block of land, it indicated that this was the percentage all through the area.

A question was asked yesterday in the House by another honourable member which allowed me to state what was happening in the area of the Arctic islands, where there are now 86 million acres under permit. In this area it so happens that 68 per cent of the companies are Canadian, another 13 or 14 are Canadian subsidiaries of American companies, 14 per cent are American, and three per cent are British.

Figures are not the answer. The right to explore is not the final thing. What does count is who owns the oil when it is found and developed. That is where I feel that we, as a committee, and I myself as minister, have to be very careful that we examine into all the ways of doing this, and that we have protected the public interest. That is where we, as a committee, and this department, must examine carefully into this very simple rule, or into this very simple fact, that we have to follow a line which encourages exploration but which at the same time gives to the people who own these reserves the maximum return in protection.

This line is never constant; it varies from time to time. If costs rise, maybe a whole area will be uneconomic and not developed. But if deep pools are found, and gas at high compressability at very efficient production costs, we can move the line a bit further. But this department must be constantly on the alert, not only to see that we have all the information we can get on the subject and also the best thinking we can get, but also to bring them to bear on this subject of protecting the public interest.

Having said these things, I think the committee is now in a better position to question me on matters of policy and details of the administration.

The CHAIRMAN: Before you begin, may I tell the committee that, just as we did last year, we will allow the members considerable latitude, of course, in respect to all questions and observations which are relevant.

Mr. FISHER: Mr. Chairman, as you know I have just recently come on the committee. I read all the evidence on the Mines and Technical Surveys part of it, and I was tremendously impressed with the job the committee has done. I cannot get over the fact of how much improvement there has been and how deeply they went into things. I must say, however, that I was somewhat disturbed by the statement read this morning, because of its political overtones. Why did the minister feel it was necessary to come here with a statement as strong as he has made today, in the light of the past record of this committee? He is starting out with a very sharp political attack. Why does the minister feel that this is necessary.

Mr. HAMILTON (*Qu'Appelle*): That is a very good question, Mr. Chairman, and for this reason: I had intended simply to bring in a statement of our policy, without even mentioning too much about what happened before. But this last month there developed a feeling of concern across this country in the minds of many people, through articles in the newspapers and other statements, which implied that we were giving away these tremendous resources of the north to companies which came in there and took out those permits.

Any person who knows public opinion in Canada over the last ten to fifteen years will know how strongly the Canadian people feel about this matter of Canadian participation and ownership in those resources. This government was elected on its pledge to do what it could to preserve the public interest in these matters. I am not ordinarily a type of person who wants to start out in a committee with a statement of this sort; but quite frankly I was shocked at what happened in the house last Thursday night.

Mr. HARDIE: Mr. Chairman, may I suggest that the proper place to answer such statements is in the House and not in this committee. Here we are assembled to deal with the estimates of the Department of Northern Affairs and National Resources, and we are happy to deal with them. If the minister wants to answer speeches which were made in the House, I respectfully suggest that the proper place to answer them is in the House. Moreover, if I should go about answering speeches in that fashion in this committee, we would be here until next December.

The CHAIRMAN: The minister is quite within his rights in a discussion of these estimates to refer to what has taken place in the House as well as outside the House.

Mr. ROBICHAUD: Is this the place to make political statements of that kind? Is that the purpose of this committee?

Mr. NIELSEN: I think we are getting a bit emotional here.

Mr. ROBICHAUD: If so, it is for a good reason, Mr. Chairman.

Mr. NIELSEN: If we "hold on to our hats" for a moment we will realize that emotion is not going to find any expression of reason. I trust Mr. Hardie will permit me to finish my remarks.

Mr. HARDIE: We always allow it 75 per cent of the time.

Mr. NIELSEN: In my view Mr. Fisher's opening remarks were very much in point. But in reviewing last year's proceedings I came to one conclusion: that the work of the committee was not nearly as effective as it could be perhaps because of our lack of knowledge of what the Department of Northern Affairs and National Resources was doing, and perhaps because of lack of incentive among the members of this committee.

This year there has been a marked improvement, as Mr. Fisher has already pointed out. I feel it; the chairman feels it, and I think we all feel it.

One of the most evident things about last year's work in this committee was the flabby nature of the end result. It seems to me that only by calling a spade a spade, regardless of political overtones, discussion without emotion; only then may we criticize neatly and precisely without getting upset.

I suggest that if hon. members of the committee feel that these statements are wrong, and that past policy was better, they should proceed to ask questions in order to bring out those facts if they exist. If they are right, I feel they should be heard.

Mr. FISHER: Mr. Chairman, let me point to one example which I consider to be nothing but sheer hyperbole. I refer to page six of the minister's statement where he said:

> The apathy of the previous administration—

I hold no brief for the previous administration, but the statement goes on as follows:

> ...which failed completely to develop a policy for the protection of the public interest in the oil and gas resources of northern Canada, will rank as one of the greatest examples of economic ignorance and failure to protect the public interest that the world has ever experienced.

You have asked me not to be emotional, but if that is not sheer emotionalism, then I do not know what is.

Mr. NIELSEN: If the statement is incorrect, I suggest that the members of the committee should go about introducing facts to show that it is incorrect.

Mr. FISHER: Who, including the minister, is an expert to say whether this is one of the "greatest examples of economic ignorance and failure to protect the public interest that the world has ever experienced"?

Mr. NIELSEN: Perhaps that question should be directed to the minister.

Mr. HAMILTON (*Qu'Appelle*): Now that the interruptions are over! I was making a statement in answer to a question by the member for Port Arthur, Mr. Fisher, as to why I did this. The interruptions came, and I let them go on.

The answer is simple: that when you are in charge of policy in a department, such policy, in order to get acceptance across the country, must have the support of the people of the country. The minister must set out what the policy is. He must state very completely what the policy is and declare it in such a way that it gets through to the public that their interests are being protected. The statement which I made is based on the very simple fact that there has been a determined effort to discredit this northern program, not on the basis of its rightness or wrongness, but through an attack that we were, in fact, giving away the ownership in our resources in the north, and thereby diminishing our sovereignty.

When that feeling spreads through the country it is harmful to the public interest. So I took the first opportunity to put my views on the record. As your chairman, Mr. Murphy, well knows, in my letter to him discussing the order of procedure, I simply suggested that we should follow the same procedure as last year, and that I make a statement about oil and gas in its

proper turn. But the events of the last few weeks have made a difference. I am not going to back down in the face of a campaign which tries to discredit us in what I think is one of the best efforts that could have been made to try to solve this problem for Canada.

With respect to the statement quoted by Mr. Fisher about "the apathy of the previous administration..." I have known about this ever since I came into the department, but I never mentioned it because I did not want to stir up a partisan issue in connection with the development of our resources. But when this matter was brought up, I was personally disturbed, not only because it affected me personally, but because it also affected the confidence of the people in this program.

I think I have every right to take the first opportunity that occurs to make this type of strong statement.

The CHAIRMAN: Perhaps we can now proceed to examine the minister, and to make relevant observations concerning his statement.

Mr. HARDIE: With respect to the area in the northern sections of British Columbia and the northern Arctic islands, can the minister give us a breakdown about those areas, including the Peel plateau? I wonder if the minister could tell us what the blue areas on that map mean, also the red and the white?

Mr. HAMILTON (*Qu'Appelle*): The blue just indicates the time when these permits were handed out. The cut-off date was July 1, 1957. The blue areas represent permits taken out up to June 30, or July 1, 1957, with a total of 34 million acres.

The red indicates the areas given out to permit since that time. There are in addition the 86 million acres in the islands, which are not shown; and the white shows the reservations.

Mr. HARDIE: I want to know about the white spaces. These were given to Canadian companies, were they not?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: I would like a breakdown of the companies that were given permits that were covered by the blue in that map, as to United States, United States subsidiaries, Canadian and British.

The CHAIRMAN: With the acreage as well?

Mr. HARDIE: And the acreage, too.

Mr. HAMILTON (*Qu'Appelle*): As I said earlier, percentages do not mean anything; you cannot prove anything by them. Would you agree if we took, as well as we can, the percentage for the whole area?

Mr. HARDIE: I just want what is shown in blue. You can give me what is shown by the red afterwards.

Mr. HAMILTON (*Qu'Appelle*): Well, we will get to work on it. There are something like 600 companies.

Mr. HARDIE: I do not want it right now, but later on.

Mr. HAMILTON (*Qu'Appelle*): That is a fair way to get it. You know as well as I do that percentages are meaningless in these matters, because they change from day to day. I do not think the granting of oil permits is a final thing. The factor which counts is: who owns the oil when the oil is found?

The CHAIRMAN: Do you want the committee to have particulars in connection with the areas shown in white, Mr. Hardie?

Mr. HARDIE: We know that the areas shown in white are Canadian companies. All I want to know is the total acreage.

Mr. NIELSEN: May we be given the names of the companies? I would like to suggest that we obtain this information for the benefit of the committee, covering the whole of the oil and gas areas in the north.

Mr. HARDIE: That is what I have already asked for.

Mr. NIELSEN: Above the sixtieth parallel.

Mr. HARDIE: I want the blue separated from the red.

The CHAIRMAN: That is understood. We will have it for you at the first opportunity.

Mr. FISHER: Mr. Hamilton has made out a strong case for this particular policy. Suppose you were the "devil's advocate" for another point of view, are there any progressive features of this policy of reserves? Could it be a case of the government free loading upon the enterprises of other private concerns? Is it possible that your system of holding these crown reserves, which really cover a tremendous increment in value, might create more problems in government administration when finally disposed of? Is it possible the system may lead to very high-cost oil?

Mr. HAMILTON (*Qu'Appelle*): There is a series of questions there. The first and the last are very important. Might I take the last question first?

The question of high-cost oil is one of the most crucial questions in North America. We have developed in our North America pattern many features which lead to high-cost oil. I think the greatest of these cost factors —and it is an objective judgment—would be that we have tended to follow the United States pattern of not divulging information discovered by a private company.

To be very specific, an oil company goes out, spends considerable sums of money doing geological and geophysical work on a permit area or lease, then loses interest in that area and keeps the information to itself. Another company may later come along, go over the same area and do the same geological and geophysical work and also lose interest. All this is an added cost to the final production of a barrel of oil or an m.c.f. of gas. This is a practice which has developed, not by law, but rather by custom of United States companies. It is considered to be a matter of great danger by those of us in Canada who have been following the oil and gas development over the last ten years.

In the province of Saskatchewan they took the stand that, in the public interest, this information should be made available to the public. Under the Saskatchewan regulations there is a provision that after one year of dropping their interest in an area the government reserves the right to make public the information that the company has had to supply to the government during the period of its exploitation—and I use this term in its proper sense—of the leaseholding. The government then publishes maps containing all the geological and geophysical information. This avoids the necessity of the next company which comes along and looks at that lease spending the money which the previous company spent in that area.

For comparison, I think we have an example in Montana, where that state has been covered completely three times by the same type of exploration by private companies. All this adds to the cost of oil. This is a very involved subject and is one of the factors of high-cost oil.

Another factor in high-cost oil in North America is in the crown reserve system. In the early days in the United States the thinking was based on the farmers' holding of 40 acres, and therefore we have this unit of 40 acres in granting a permit to drill. Therefore when a company discovered oil a pattern was adopted under which the crown would put up for sale this adjoining area and ask for a bid on it by various companies. The companies would bid for these large sums of cash which did, in our estimation, affect the value of that oil. The highest bidder would get the property.

If it is a small block of 160 acres, then your actual program of developing, checking it, and the exploratory costs, are much greater than if it were a block on which they could obtain a maximum of efficiency. That is a second high-cost factor.

Mr. FISHER: In other words, the small units?

Mr. HAMILTON (*Qu'Appelle*): Yes. The crown reserve system is particularly susceptible to that weakness.

A third high-cost factor in North America is that we have not followed the unitized field principle. The unitized field principle is simply that, when a field is discovered, then the field must be produced on a basis which gives the maximum efficiency of production and, secondly, the maximum recoverability of the oil. The maximum efficiency of production I think would mean something like this. If you had an oil pool with a certain porosity, then you would space your wells on a basis which would give you the least cost of getting that oil out of the pool.

There have been some pretty bad blunders in this respect, not only in the United States but also to a lesser degree in Canada where we have let the area for wells be too small.

The second question is on conservation. As you know, if various companies own various parts of a pool they are all concerned with the next company taking oil from the adjoining 40 acres. Therefore, there is a careful watching going on, one of the other. If, however, the pool were handled as a unit then you could achieve a greater conservation and take away the incentive for one fellow to take up more than he should.

As you know, the Alberta government has a large staff looking after the pro rating so that each well will protect its conservation. However, the lack of unitization in North America has been another factor of high-cost oil.

I believe in the world today it is considered that the Middle East is the low-cost oil area. The reason is they have given these large concessions. One company, since it has control of the whole pool, can thereby achieve, without any fuss, proper conservation methods—if they are so inclined—and proper and efficient methods of drilling, with their wells one hundred yards apart instead of miles apart. They are therefore able to run that pool efficiently.

One of the great tasks is to improve the rate of recovery from a pool and it will be done more by cooperation than by any technical device.

Mr. NIELSEN: This leads to a question I have.

Mr. HAMILTON (*Qu'Appelle*): There is one question which I have not yet answered, and I think it is the main one. Without going into any other high-cost factors, such as drilling wells and all the rest of it, we think on the question of freeloading that if we let the industry know we are thinking in terms of helping them work out ways of reducing the cost of efficiently drilling out an area, and also of exploring the resources of that area efficiently, and all the conservation principles, they will cooperate with us in helping bring in some techniques, with the advantages of the unitized field principle. Therefore the argument used by the oil companies who do not like the crown reserve system can largely be dissipated.

I do not think, however, that the people of Canada, or in any other country which is watching this thing very closely, would stand for the concession system.

Mr. FISHER: Let us return to the high-cost question. What disturbs me on reading this book on Canada's energy prospects put out by the Gordon Commission, and others, is how high our oil costs are compared with United States, Venezuelan and Middle East oil and gas. Venezuelan and Middle East oils seem to be able to hold certain markets in Canada, in which our oil cannot compete. Are you satisfied that the particular policy you are following will

enable us to get low-cost oil out of these regions? There may be other factors involved in putting this oil on the market which are against it. There is the problem of the large transportation haul, and the difficult living conditions during the exploration and development period.

Mr. HAMILTON (*Qu'Appelle*): I think, with the present factors which we have, such as the long distance and so on, that our chances of taking over world-wide leadership in the sale of oil are not going to be too good. The Middle East and Venezuelan oil are relatively cheap because of the pools they have, and the access to the seaboard. However, that does not mean we should throw up our hands and allow all these high-cost factors to continue, because I think—and I hope the concept will grow—that we look on the resources from a different point of view than, for instance, the Department of Trade and Commerce might look on them.

Many persons look on oil and gas purely as export commodities. In this department—and I hope this view will pervade more of the Canadian thinking—we look at this as an energy resource, which is an altogether different product from something which is renewable. This energy resource must be husbanded in a manner consistent with the long-term interests of the country.

For many years to come we certainly will have to export vast quantities of oil and gas, (a) because we have to maintain a flow of investment money in that industry and (b) because we are developing the capital by which Canada can carry the investment load. That is the great problem in looking for final effective control and overnship of this resource.

In the financial end of it we have to think in terms of finding ways and means of funnelling the wish of the Canadian people for ownership, or a basis for sharing in this resource.

Mr. FISHER: You do not believe that the logical step in this would be to have government ownership of a considerable portion of these reserves and government exploitation—and, as you say, using the word "exploitation" in the proper sense.

Mr. HAMILTON (*Qu'Appelle*): I do not see any advantage in thinking of government oil companies or anything like that. In Saskatchewan, my home province, the government, which was once theoretically inclined to public ownership and development, today shies away from that for a very obvious and clear reason.

One of the primary reasons, as expressed by the provincial treasurer, is that the risk is too great for any public body to take. A private corporation, however, with interests in many parts of the world can afford to take the risk.

Mr. FISHER: Is not one of the other arguments that if you get into marketing also there tends to be monopoly and cartel situations there which make it very difficult?

Mr. HAMILTON (*Qu'Appelle*): I am not going to go forward into that field of conjecture because I think everyone knows the world oil picture.

Mr. NIELSEN: I would like to ask a question along the line of the second point brought up by Mr. Fisher; it is in connection with the cost of production. The minister has mentioned the disadvantages of having too small units, upon which wells are drilled in areas, and one of the disadvantages is that perhaps this gives rise to a certain rivalry, with one company drawing off the pool and another company next door drawing off the same pool and, perhaps, trying to exceed the other's production. What restrictions, if any, are contained in the regulations as they now exist which would control, if at all, this undersirable situation? Is there any production quota over which these companies cannot go?

Mr. HAMILTON (*Qu'Appelle*): There is one thing I like about the member from the Yukon; he is really optimistic. What we are doing—and we are as busy as we can be—is trying to work out regulations at this stage for the oil exploration period. We are working with industry as fast as we can in order to get at these problems, and we have a meeting with them in May. My great concern from an administrative point of view—as a Canadian—is that if there was a major discovery in the northern areas in the next few months, we have not worked out a final set of regulations for these things. We have tremendous volumes of rules and regulations concerning well spacing and so on, but we have not completed our work with the Canadian oil industry on this. If you would like to read what our latest thinking is on this matter, it is in regulations 75 and 76 at pages 24 and 25 of the Oil Regulations dated September 23. Incidentally, would the committee like to have copies of these regulations?

Some hon. MEMBERS: Yes.

Mr. HAMILTON (*Qu'Appelle*): I think we could provide those. These well-spacing regulations leave it nice and broad for me at the moment.

> 75. (1) The minister may, having due regard to good operating practice, establish well spacing in any area.
>
> (2) Before establishing any spacing in an area, the minister shall have regard to all the circumstances which appear to be relevant and shall consider the interests of all permittees and lessees in the area.

—and that includes all people in the area.

> 76. Whenever a stratum penetrated in a well, stratigraphic test hole or structure test hole is capable of producing gas, the licensee, permittee or lessee shall take all reasonable precautions and confine such gas to its original stratum until such time when such gas can be produced and utilized without waste.

As a lawyer, I think you can recognize the generality of clause 75. It gives me the power to make the decision which circumstances dictate to me. I have given to the committee some of the thoughts in our minds that we will be discussing with the oil industry next month, in order to get the details of this worked out.

Mr. NIELSEN: In the light of these pending discussions with the industry, would it be premature to ask you now what the stand will be with regard to any restrictions to be placed on production?

Mr. HAMILTON (*Qu'Appelle*): Well, this is a subject on which I will have to be a little wary, because when you are entering into negotiations different things can happen.

Mr. NIELSEN: My question is premature?

Mr. HAMILTON (*Qu'Appelle*): I think so.

Mr. NIELSEN: My other question concerns royalties. The royalties you mentioned in your statement, Mr. Minister, are over and above—

The CHAIRMAN: Would you speak louder, please.

Mr. NIELSEN: Perhaps I should word it in a different fashion. The royalties in the minister's statement are royalties that will accrue to the government from the approximate 50 per cent which will go to the company that has explored and brought in a well. Is this correct?

Mr. HAMILTON (*Qu'Appelle*): Yes. When the exploration company takes out its half—and we assume on the average it is half of the pool—then they get that half, subject to whatever royalty we put on.

Mr. NIELSEN: And taxes?

Mr. HAMILTON (*Qu'Appelle*): Of course, if they make any profit, the federal government always collects corporation and income tax.

Mr. FISHER: I have a supplementary question. In connection with licensing, royalties and that sort of thing: why could you not issue a monthly statement as to just where you stand? Repeatedly in the House and in this statement you have placed emphasis on the fact that things are happening very quickly. Why could we not get a monthly picture of this in statistical terms which would be available to the public and might protect you from what you feel are exercises in mischievousness on the part of other politicians?

Mr. HAMILTON (*Qu'Appelle*): This was a subject raised by the petroleum association last spring when they came to see me; and one of their requests was that we set up a statistical section which would make information available, as it has been made available in the provinces. The province of Saskatchewan has a statement which comes out every two weeks showing footage drilled and so on, in which they quote from the reports of the companies. But in my statement I said I had one man in the oil department, and last spring he needed "more arms than the Indian goddess, Siva"; he was like a one armed paper hanger trying to handle the industry.

I have brought in now a very capable young man in the person of Mr. Davidson, one of the assistant deputy ministers from Saskatchewan; that brings us up to two. We borrowed another person half-time from another department, so that brings us up to two-and-a-half.

Mr. FISHER: Can you not move more quickly and more powerfully than this?

Mr. HAMILTON (*Qu'Appelle*): I am putting up a battle, Mr. Fisher, but I am going to be very frank about it. We have to go before an establishment review by Treasury Board, and before they assent to new positions they immediately ask what is the amount of work being done. If you have not any oil discoveries and no oil activity, they look on our requests very dimly. We have done this: in the three months Mr. Davidson has been with the department, we have drawn up a "plan of battle" in case a break comes. Now certainly we are going before the Treasury Board this summer and will ask if they would not give us consideration to help us meet some of these very serious problems—because they are dangerous problems.

I would like to take you back to last year and point out that at that time I think there were about 75 million acres out; but all the companies were moving rather steadily on an exploration program. We are getting the reports in from the Peel Plateau and Eagle Plain. They were experiencing difficulty. There was no looming gas or oil boom on the horizon. They were engaged in a slow, careful development program along these lines of communication which we were projecting.

However, the situation has altered in the last three months—I might say going back to November—and the altering was brought about by two reasons. The order of these reasons is not a key factor. The first thing that happened was that the various companies approached me particularly, and asked for an explanation of a speech I made in Edmonton on September 17, I think it was, when I talked about the development of the resources of the north by roads, railroads and water from the south and west and, air and sea from the north and east. Our resources over the next 100 or 200 years would be approached from two directions rather than one. I spoke of what a year ago seemed like a dream; that is, this business of transport to ice areas, both under the water and on the surface. The companies which approached me did not consider this either visionary or a dream, and they came with their studies of what they had on this question of logistics in the northern area.

Mr. FISHER: You are not admitting the vision was a dream?

Mr. HAMILTON (*Qu'Appelle*): I do not think there is much difference between a dream and a vision, as long as you work hard to make them come true. This is the point I would like to emphasize to the committee. This was a very substantial approach last September. Those fellows are going into this with a hard-boiled attitude. They showed me their plans and talked about their position. But the thing that was interesting was that the oil companies did recognize that our northern islands were closest logistically to the peak markets in Europe or any market in the world. In rough round figures the distances from the northern islands across this way to Europe is 3,000 miles; the distance from the Middle East is 8,000 miles; the distance from Venezuela is also fairly substantially greater than our distance. If these difficulties of transportation can be overcome and if—there are two "ifs"—there were two pools, this is one reason why they were interested. Of course, in regard to the second reason, I could not add much to this discussion, except to say we were looking at this and that. But they had gone further in their planning. And the second reason, in answer to your question as to why the situation is different, is that in the provinces of Alberta and British Columbia this oil play that is going on above Fort St. John shifted into the Fort Nelson area late last fall. Of these wells which came in the one in Alberta on the Berland river was the largest gas well in the world and, on the open flow figures, was sufficient to supply all the gas needs of Ontario and Quebec out of the one well itself. In fact, it would supply one-and-a-half times the needs of all Ontario and Quebec. So far as they can see, this one well would supply all the needs of Ontario and Quebec for the next twenty years. You can imagine the tremendous interest which was exhibited all of a sudden by the oil companies in Saskatchewan and elsewhere. Then this interest shifted into the Fort Nelson area; and, no doubt, three weeks ago you read reports in the financial pages of a well on the Petitot river, which was south of this area where this big play took place. This well is one-and-a-half times larger than the one at Berland. You can readily see the significance of this to the oil industry throughout the world. There is a great need for gas as an energy source. Here it is coming up at tremendous rates of flow, much greater than anything they have in the southern parts of Alberta, or any place in the world.

Now, in regard to that region—and I do not think there is any secret about this—these forms they are drilling in extend across into the Northwest Territories. This situation is putting our department "under the gun" because suddenly this is not a case of moving slowly, as you do ordinarily, to work out regulations for handling an oil program—it is actually a drilling and conservation program—which is coming on us in a matter of months. Therefore, that explains why they can obtain for a nominal sum a permit in a few days. These companies and other huge Canadian companies come in, not for the right of ownership, but for the right to explore. In one sale the figure was $6½ million. Before the sale took place I did a little rough calculation on my own, and appraised the wells that took place in the Kotcho lake area, and I said that twenty miles away our price should be roughly the same. I calculated that for the 3½ million acres we had under option, we would get $7 million. Some have put bids in on 3 million acres and got exactly that proportion because they paid the same price in that territory as they paid south of the border. These wells are substantially ten and twenty miles away from the territories, and from what little information we can get, it looks as though the structure will run up into the territories.

Mr. FISHER: Is it not inconceivable when you have this $7 million coming in, and with this tremendous impetus that is going on that you should still have trouble with Treasury Board to extend your work? It almost seems ridiculous.

Mr. HAMILTON (*Qu'Appelle*): I do not want to leave that impression. Let us put it this way. Last year when I made my request to Treasury Board for an increased establishment this was not pressing; we were preparing our plans. At that time I was more conscious of trying to get one top-notch man to come in. Last summer we met Treasury Board on establishment. My thought then was to try and build up an oil and gas department and get a top-notch man in. As you know, the man I did get was Mr. Davidson. That started in November. This previous interest in September was because I realized that, in going further north, we had to move a great deal faster.

We started to draft the plans, and they were only completed a couple of weeks ago. The battle plan shows when the discovery took place. When we go before the Treasury Board next time I think we will have a case for building up on the nucleus of this staff. If I have left the impression that Treasury Board turned us down last year, I want to correct that. We did not even press it last year, because these Arctic islands and continental shelf projects, and this rush, had not yet occurred.

Mr. FISHER: You certainly left the impression that there was a lack of sensitivity to need because of this development. At least, that is the impression you left with me. I just wondered if there is not some quicker way in which you can adjust to need.

Mr. HAMILTON (*Qu'Appelle*): Yes, there is a quicker way. The department is cannibalizing other areas and moving men in to this job at the present time. I think we have five going in presently, in addition to the two and a half we have. We are doing this to get the right type of person, and this will carry on until we can bring the matter up for establishment review.

Mr. MCQUILLAN: With regard to these permit holders, I take it that none of them is yet aware of the rules and regulations under which they will have to operate. Are they aware of your policy as set out in this statement?

Mr. HAMILTON (*Qu'Appelle*): What was the last part of your question, again?

Mr. MCQUILLAN: Are they aware of the policy as set out in your statement here?

Mr. HAMILTON (*Qu'Appelle*): Yes. First of all, they helped us. When Mr. H. H. Somerville drafted the regulations, they were put before the petroleum association. The association went over them and made some counter proposals. We had some discussions, and we finally agreed on the regulations.

At the present time they know that the regulations on the mainland are in effect, and they know that we have been considering some adjustment in the regulations with regard to the Arctic islands and the continental shelf. At the present time I think they know—on the basis of my statement—that the only suggested change in the regulations is that we have lengthened, by three years, the period in regard to the Arctic islands and the continental shelf, because of the difficulties.

They are also aware that the oil regulations for working out the difficulties in the Arctic islands will probably have to be different from those we have on the mainland. But they are as completely in the dark as we are as to what the situation is going to be there. So for the moment they have been given what you might call a temporary permit, valid for one year, to give us time to work out with industry the regulations that will meet the conditions, at least as we know them now.

Mr. MCQUILLAN: Supposing that when those regulations come out they are too tough to operate under: what happens to the deposit?

Mr. HAMILTON (*Qu'Appelle*): If the regulations are too tough—and that is a very valid point—I imagine they would withdraw their permit, and at this time we have no legal claim in regard to that. All this does is establish

a priority for them and, if they accept the regulations, they can go forward and explore. But at the present time I think they are pretty well aware of the fact that the only change is that they will get three years longer.

Mr. McQUILLAN: How many test wells do you anticipate are going to be drilled this coming year?

Mr. HAMILTON (*Qu'Appelle*): I am informed that ten is the expected number of test wells this year.

Mr. HARDIE: That is not talking about the Arctic islands?

Mr. HAMILTON (*Qu'Appelle*): There is nothing on the Arctic islands at all. This is on the mainland.

Mr. McQUILLAN: Mr. Chairman, there is one suggestion I would like to make to the committee. In view of the policy statement given to us, I think at the earliest opportunity we should have a representative from the oil industry here in order that he could express their views, and we could examine him.

Mr. FISHER: Mr. Chairman, I second that, if it is in the form of a motion. I would like to add that, if it is possible, the committee should have more than one representative.

Mr. McQUILLAN: Well, "representatives", I will say.

The CHAIRMAN: Gentlemen, let us finalize that now. Moved by Mr. McQuillan, seconded by Mr. Fisher, that at a subsequent meeting we have some representatives from the oil industry to explain their position, relevant to what the minister has already said.

Motion agreed to.

The CHAIRMAN: Have you any other questions, Mr. McQuillan?

Mr. McQUILLAN: No.

Mr. NIELSEN: Mr. Chairman, I am following up the same line as Mr. McQuillan. If you have a representative of the oil industry appearing before the committee, I feel—for the same reasons—that we should also have in attendance a representative of the independent mining fraternity. I am thinking of the various mining organizations, both in the Northwest and Yukon territories, and particularly of some representative from the British Columbia and Yukon Chamber of Mines. I do not think you should have one without the other.

Mr. FISHER: Would you explain a little further what point of view they will have.

Mr. NIELSEN: They may have—and they often do—the point of view on the opposite side of the fence to those engaged by companies and industries. I do not think you can have one side represented without the other. We did the same thing, I think, with the coal industry last year when we were considering the Dominion Coal Board estimates. I wonder if Mr. McQuillan would amend his motion to include that?

The CHAIRMAN: Mr. Hardie, would you like to second that motion?

Mr. HARDIE: Yes.

Mr. NIELSEN: I wonder if Mr. McQuillan would amend his motion to include someone from the British Columbia and Yukon Chamber of Mines?

Mr. McQUILLAN: I was dealing with the oil industry alone.

Mr. NIELSEN: Then I will make that motion.

The CHAIRMAN: We have a motion from Mr. Nielsen, seconded by Mr. Hardie, that we have representatives from the independent mining industry appear before this committee.

Mr. NIELSEN: From independent mining organizations.

Mr. HARDIE: What do you mean by "independent mining organizations"?

Mr. FLEMING (*Okanagan-Revelstoke*): What is the relationship between the mining industry and the oil industry in this particular respect?

Mr. NIELSEN: They are concerned with oil and gas regulations. The people who form the membership of these organizations feel they should have the right to express some views in so far as the regulations may affect the operations of individuals, as opposed to companies.

Mr. FLEMING (*Okanagan-Revelstoke*): I am trying to get the relationship between a mining group and an oil industry. What is it?

Mr. NIELSEN: To my mind, mining, mineral exploration, includes hard rock as well as liquid.

Mr. FLEMING (*Okanagan-Revelstoke*): Well, it was the Mines Branch that was opening up the Athabaska tar sands, so I suppose there is a relationship. But I want to know whether we are going to get ourselves involved in a very complex discussion of the mining and oil regulations and get entirely away from oil policy. That is the only thing with which I am concerned. Is there an exact relationship here?

Mr. HAMILTON (*Qu'Appelle*): I think, Mr. Chairman, it would certainly be less confusing for the department if we could keep the two separate. We have the oil and gas regulations which are matters of great urgency to the department at the present time, whereas the quartz mining legislation for the Yukon and Northwest territories is now under very active study, and has been these last few months. I think it would be a very good idea to get the views of the mining people; but on the quartz mining legislation—

Mr. NIELSEN: With all deference to the minister, I am not thinking of hard-rock mining in connection with this matter. Mr. McQuillan brought it out specifically in relation to oil and gas exploration in the territories, and I am making my suggestion specifically with regard to that development. It has nothing to do with hard-rock development at all. Individuals in the territories —particularly individuals comprising these organizations—are very vitally interested in, and concerned with, this type of development. In fact, some individuals hold permits up there now.

Mr. HAMILTON (*Qu'Appelle*): All I can say to that is this: In the oil industry it would be a fair statement, I think—and one with which every oil company would agree—that whether on a mining company basis or on an oil company basis, every company has a different view with regard to these regulations. The Canadian Petroleum Association is coming down to visit the department some time in May, and I certainly think it would be in their interests if we arranged for them to appear before this committee during the period of their discussions with us on the regulations. They could give their evidence at that time.

The Canadian Petroleum Association has a committee on northern oil and gas regulations, and they have been working all winter long—the same as we have—trying to get their ideas worked out. I think they have an even more difficult task than we, because every company has a different point of view. Whoever gets on this committee has to try to get the feeling of all the oil companies and put it before the government as a joint industry point of view. They have a very difficult task in arriving at this point of view. We, on the other hand, are thinking only the very simple principle—how to protect the public interest and at the same time encourage exploration, and follow that line that exists all the time between them.

The CHAIRMAN: Gentlemen, the motion is that the committee hear representatives of the independent mining industry.

Mr. FISHER: Could Mr. Nielsen spell out to us, say at the next meeting, just what he has in mind—or can he do it now?

Mr. NIELSEN: To have representation from the British Columbia and Yukon Chamber of Mines. The person concerned in that organization, or the chairman of any committee in existence which concerns itself with oil and gas exploration should be called.

Mr. FISHER: And you will sign a certificate for the calling of such a person? I would like to express my approval of the idea. I think the committee should have the opportunity of bringing in people who, they think, have relevant statements or criticism on this.

The CHAIRMAN: It is understood, gentlemen, that these representatives will discuss the oil and gas regulations?

Mr. FISHER: Yes.

Mr. NIELSEN: Before we vote on the motion, Mr. Chairman, I am of two minds on this matter. First of all, the reason for my motion was that I thought we should not have representation from the companies without having some independent representation: the representation should be equal. I am in some doubt as to the necessity for calling either of them.

Mr. MCQUILLAN: Mr. Chairman, I think it is most essential that we hear from the petroleum industry.

Mr. NIELSEN: I am in doubt as to the necessity for calling either of them at this stage, when negotiations are still being conducted with the petroleum industry within the department.

Mr. MCQUILLAN: We are asked to form an opinion here, and we are only going to hear one side of the question. I always want to hear at least two sides before I form an opinion.

Mr. FISHER: Mr. Chairman, we already have the motion, and it has been carried.

The CHAIRMAN: Yes. All in favour of the second motion, gentlemen?

Motion agreed to.

The CHAIRMAN: Did you wish to ask a question, Mr. Gundlock?

Mr. GUNDLOCK: No, Mr. Chairman. I did not agree with that last motion.

Mr. HARDIE: Mr. Chairman, I have a question in connection with permits. A company takes out a permit for five or nine years, depending on where it is, whether it is on the mainland or the Arctic islands. Can the company revert any portion of that acreage back to the crown at any time during that period of five years, or nine years, in the Arctic islands?

Mr. HAMILTON (*Qu'Appelle*): Yes, they can drop it any time they like. There are two ways of losing an acreage. One is, if they do not do the amount of work the regulations require. The other is, just by voluntarily giving it up in which case they give up the deposit.

Mr. HARDIE: When they voluntarily give up part of this acreage, is the remainder then based on this 50-50 split, or does that part of the acreage that has reverted to the crown wipe out part of this 50-50 split deal?

Mr. HAMILTON (*Qu'Appelle*): If they give up a permit they give up the whole area.

Mr. HARDIE: They give up a certain part of the acreage?

Mr. HAMILTON (*Qu'Appelle*): You mean, when they are going to lease?

Mr. HARDIE: No—at any time? For instance, suppose a company took a permit of, say, roughly 5,000 acres, and they started off on one section and drilled that one section—which may be 1,000 acres, roughly—and then they

decided they did not want it. They drilled it, and it was no good. Then they went on; but before going on, they said to the crown: all right, you can have this back.

Mr. HAMILTON (*Qu'Appelle*): There is a rule for that. I think it is a half permit. Yes, it is rule number thirteen of the territorial oil and gas regulations, and it reads as follows:

> A permittee who holds a grid area under permit may surrender the whole or the north half, south half, east half, or west half of the grid area, and a permittee who holds part of a grid area under a permit may surrender that area, and if in either case he has made expenditures for exploratory work in the period in which he makes the surrender, he is entitled to a return of his deposit or a portion thereof not exceeding the amount of such expenditures.

Mr. DOUCETT: He would take the western half of it.

Mr. HAMILTON (*Qu'Appelle*): He does not have to do anything. Mr. Hardie asked: suppose he voluntarily decides that he is not interested any longer in half of his permit of, let us say, 60,000—under regulation 13 he can give up half of that permit.

Mr. DOUCETT: Does it have to be a half that he gives up?

Mr. HAMILTON (*Qu'Appelle*): Yes; it has to be in a block, either north, south, east or west. But if he has done sufficient work to protect his deposit, he will get his deposit back.

Mr. DOUCETT: On the whole area?

Mr. HAMILTON (*Qu'Appelle*): No, on the area he gives up or a fraction thereof.

Mr. HARDIE: What happens then to the rest of his permit if an oil pool is found in the other half of the permit? How would you interpret your regulations then? Does he get 50 per cent of the other half?

Mr. HAMILTON (*Qu'Appelle*): No.

Mr. HARDIE: Does the crown get 50 per cent of the other half if they find an oil pool?

Mr. HAMILTON (*Qu'Appelle*): If I understand your question correctly you are describing a situation where the permittee has given up half a grid, and then they find oil in the other half.

Mr. HARDIE: Some place in the other half.

Mr. HAMILTON (*Qu'Appelle*): He therefore has a right to half of the grid, under the block system. Your question is: does he get half of the oil which is found in the other half? He has no claim at all to anything that he has given up. But we get it back 100 per cent in that area because we own it.

Mr. HARDIE: What is the crown's claim on what he has, then?

Mr. HAMILTON (*Qu'Appelle*): Under the crown reserve system the crown gets one half.

Mr. FISHER: When the Geological Survey officers were before this committee, the point was made that this tremendous rush in the north was putting a heavy burden upon them, and it was also revealed that they feel they are very far behind in this particular area. Can you confirm that the Geological Survey, with its present staff, is not able to keep up with the pace of development? I think this would be an important point in any recommendations we may make with regard to the expansion of geological survey work in that area.

Mr. HAMILTON (*Qu'Appelle*): Mr. Fisher, our department in this type of work could not operate without information supplied by the Department of Mines and Technical Surveys. The Geological Survey is in tremendous need of greater speed in many aspects of its services. I can judge that now, because I have seen it. I understand that they have done a tremendous amount of field work, but they have not had the staff to put it into maps where it would be of some use to industry.

Secondly, with the rate of mapping in the north far behind what is needed now to meet this situation of interest in the north, our department has been very pleased to cooperate with the Department of Mines and Technical Surveys in working out a program which, over the next five years, will have the effect of doubling the pace of the Geological Survey.

Mr. NIELSEN: That is provided the program is accepted by Treasury Board?

Mr. HAMILTON (*Qu'Appelle*): Yes, if the program is accepted by the government; then I think the Geological Survey would be in a position, staff-wise at least, to carry out more activities and at least to double the pace at which it is operating now. I have no way of knowing whether that doubling of the pace will meet conditions at the end of the five years. But I do think it is a step forward.

In fact, it is exactly in conformity with representations which were made to us by the Geological Society of Canada and the Royal Society of Canada, some time last fall. I was present when representations were made by this very distinguished group of gentlemen. The Prime Minister, and the hon. Mr. Hees, Minister of Transport, were also present, and I was given the task of discussing this matter with the Department of Mines and Technical Surveys, to see what we could do to meet it.

Needless to say we did collect the information, and we have the data now, awaiting a plan such as this which has been developed in this committee by the officers of the department. When it is carried through, I shall be very happy to say that this program is moving forward fairly satisfactorily.

Mr. FISHER: You made the point in connection with oil and gas that one of the main results of this information—of course underlining the fact that the Geological Survey would be behind it—will be that it will create a cost factor in the picture of northern oil.

Mr. HAMILTON (*Qu'Appelle*): Yes. At the present time we hope to gain from the private interests, the people who are doing this expansion work, a tremendous volume of information which otherwise would have to be obtained by the Geological Division of the Department of Mines and Technical Surveys.

We hope, if anybody drops his interest in an area, to make that information available to the public, as a device for reducing the cost of expansion to the companies.

The CHAIRMAN: We shall carry on with this subject at our next meeting. Before we adjourn, there are some changes to be made in the evidence of April 16. At the request of Mr. Gamble the director of Surveys and Mapping Branch, of the Department of Mines and Technical Surveys, on page 292, line one, the figure "2,500" should be changed to read "25"; and in the fourth paragraph on that same page, the figure of "2:50,000" should be changed to read "1:250,000"; and on page 293, the fourth last line, it should read "this five year period", instead of "this 1957 period".

Is it agreed that these changes are to be made in the next printing?

Agreed to.

Mr. NIELSEN: I have three changes. On page 311, seven lines from the bottom of the page, the word "lack" should be changed to read "lag", and in the second line from the bottom of that same page the word "resources" should be changed to read "reserves", and in the same and the last line the word "mapping" should be changed to read "petroleum".

Agreed to.

The CHAIRMAN: The next meeting will be on Monday morning, May 4, at 11 o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 15

RECEIVED
MAY 12 1959
Library of Parliament

MONDAY, MAY 4, 1959

Estimates 1959-60 of the Department of
Northern Affairs and National Resources

WITNESSES:

The Honourable Alvin Hamilton, Minister; Mr. A. T. Davidson, Chief, Resources Division, Northern Administration Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21110-2—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.
Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, May 4, 1959
(16)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Doucett, Fisher, Fleming (*Okanagan-Revelstoke*), Gundlock, Hardie, Korchinski, Kindt, MacRae, Martineau, McFarlane, McQuillan, Mitchell, Muir, (*Cape Breton North & Victoria*), Murphy, Nielsen, Roberge, Ribichaud and Simpson.—(21)

In attendance: The Honourable Alvin Hamilton, Minister, and officials of the Department of Northern Affairs and National Resources.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources. The Minister was questioned on the statement on gas and oil policy which he had made at the meeting on April 30th. Mr. A. T. Davidson, Chief Resources Division, answered questions specifically referred to him.

During the proceedings Mr. Arthur Smith, M.P. (*Calgary South*), not being a member of the Committee, by agreement of the Committee, sat at the table and took part in the questioning of the Minister.

At 1.00 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Tuesday, May 5, 1959.

Eric H. Jones,
Clerk of the Committee.

21110-2—1½

EVIDENCE

MONDAY, May 4, 1959.
11 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. At the last meeting you heard a statement from the minister. We are still on item 261. I think it was agreed that we would carry on at this meeting from where we left off at the last one.

Mr. ROBICHAUD: Mr. Chairman, I feel that before we proceed with the first item we should have some clarification and an explanation from the minister on the statement he gave at the last meeting. However, first I would like to ask a few questions. In the first paragraph the minister mentioned that it has been thought for some time that large areas north of 60 degrees in Canada may have large oil and gas possibilities. Could the minister tell this committee for how long or since when this thought that there are large oil and gas possibilities north of 60 degrees has been prominent in Canada? How many years would that go back?

Hon. ALVIN G. HAMILTON (*Minister of Northern Affairs and National Resources*): In the early stages I think it goes back to when explorers went into the north country in the twenties and the thirties, and certainly during the war period and shortly afterwards they, if they were company geologists, came back with fairly optimistic reports to their companies. This would be the first example in connection with the knowledge of oil in the northern areas. To be specific, I have heard reports of oil seepages in the northern territories back as early as 1921.

The second fact that would be of interest is the geological survey. Five years ago we had operation "Franklin", a geological survey on the Arctic islands, which has been of interest in developing this theme. But there was oil and gas in the territories. The third fact I would like to add is that a Canadian company went up into the Peel Plateau and Eagle Plain area and took out reservations there in 1952. In 1957 they drilled a deep well, which they abandoned in 1958. This well went down to over 9,000 feet. Now they have shifted their operations. But any operations like this would immediately bring the possibilities to the attention of the oil and gas industry.

The fourth factor that I think would add weight to the answer I am giving is that about two years ago we had the Suez episode, and it became obvious that to rely on the Middle East field would be very dangerous to the long-time interest of any western European country and, therefore, there was an interest in other reserves. Last September I tried to express this view in a speech I made to the northern development conference in Edmonton, in which I outlined what I thought was a possible program for the development of the north. I pointed out there would be a movement into the north in western Canada by roads and by railroads, if necessary, from the south, but that there would be an advantage on the basis of sheer logic and logistics of a movement into our northern areas from the east and north by sea and air. The government has moved quite quickly, in so far as northern development is concerned, to push this arm of the development program forward. This program has to do with research; it has to do with marine transport; it has to do with aerial transport such as airfields, weather stations and so on. My speech received considerable

publicity not only in our country but abroad. I was approached by several British companies who pointed out that the northern islands of Canada were only 3,000 miles away as compared to 8,000 miles from the the Middle East and roughly the same distance from the South American source. So you have this crescendo of interest in our northern areas.

I would like to finalize my answer by reminding the committee that for many years many Canadians have said this ultimately would be one of the main reserve areas for oil and gas in the world.

Mr. ROBICHAUD: The minister stated the area of the Arctic continental shelf may add an additional 100,000 square miles, when this area is not yet correctly known. Now, are there any government or official reports to the effect that this area offers the possibilities, such as stated by the minister?

Mr. HAMILTON (*Qu'Appelle*): As an individual coming into this department, one of my main complaints was that there was no information available for a minister to make any assessment or evaluation of the potential resources of this northern area. That is the reason why in 1957 we moved the supplies up into Resolute. This was done so we could start our scientific exploration which would run along the Queen Elizabeth islands.

Mr. ROBICHAUD: You say you did this in 1957?

Mr. HAMILTON (*Qu'Appelle*): I am sorry: 1958. We moved the supplies in last year, and this year a full-scale scientific operation is starting. Now, this is really the second big move by Canada to get some knowledge of this area. The first large-scale exploration took place between 1912 and 1917 and this is the first effort on the part of the Canadian government scientifically to find out what does exist. The general theory is that if there are minerals on the land mass and if there is oil on the land mass, and if that same geological formation stretches out underneath the water, it is completely logical they would have the same resource reserves.

Mr. HARDIE: The minister stated in answer to a question that he was approached by British companies, particularly in regard to oil possibilities in the Arctic islands. How then can you explain in regard to the last group of permits issued in the Arctic that, although permits were issued for 85 million acres, British companies picked up only 2,777,000 acres?

Mr. HAMILTON (*Qu'Appelle*): Well, all I can do is surmise.

Mr. HARDIE: Surmise the interest?

Mr. HAMILTON (*Qu'Appelle*): I know the interest was there, because they came to see me. All I can do is surmise and I would think that it would be a reasonably good guess if one were to say that the news of this interest by the British companies got out and other people found out about it—because this oil play in the Arctic islands developed over a week preliminary to the rush down here. I recall that there were discussions going on in many offices long before the rush developed. Spontaneously this rush hit us and in this rush the British companies which were discussing the question with me have taken a share of the acreage.

Mr. NIELSEN: Would I not be correct in saying that the interest in oil reserves in the Arctic islands, particularly over those areas which now have been taken up by way of exploratory permits by these various individuals and companies, was first spiked by the information that was made available as a result of preliminary reports released by the Department of Mines and Technical Surveys personnel who conducted surveys up there a very short time ago, within the last one-and-a-half years?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: Yes, but the surveys were done in 1955 and 1956.

Mr. NIELSEN: I do not think that is correct.

Mr. HARDIE: To come back to the minister's statement, he tried to leave the impression with us in the committee and, I am sure, with the Canadian people, that until he took office there was no oil or gas policy and nothing was done in regard to oil and gas prior to his shock. He was shocked last year and shocked this year, and he was shocked over authorization of the travel on the DEW line. Of course, he "boobed" on that one. I am coming to the conclusion the minister is in a state of shock most of the time. In any event, to come back—

Mr. NIELSEN: We are all shocked.

Mr. HARDIE: To come back, that so we will have a clear picture of what has happened, during the week-end I read the minister's statement and went through the reports of the Department of Northern Affairs and National Resources since 1951, when it was at that time known as Resources and Development. I found that even going back prior to that time, the Norman Wells oil field was found in 1920 and today they have a reserve of 64 wells, with a total capacity of some 60 million barrels. During the war they carried out exploration to extend that field.

In 1951 and 1952 the oil boom in Alberta spilled over from the Alberta boundary into the Northwest Territories, and in 1951 and 1952 we find that 60 permits were granted. Two wells were drilled at Fort Providence, and there was also diamond drill testing done along the west shore of Great Slave lake. The reports of that time do not give the accurate acreage; but in 1952-1953 255 permits were issued for 15 million acres. Twelve wells were drilled and abandoned as dry holes. I mention that 12 wells were drilled, because the other day the minister said he expected 10 wells to be drilled this year.

In 1953-54, 63 permits were issued for 3,425,016 acres, and a total of 17,135 feet was drilled in that year. At the end of 1953-1954 there were 396 permits in good standing, covering 23,166,660 acres in the Northwest Territories, 67 permits involving 3,761,666 acres in the Yukon, and two reservations totalling 3,066,880 acres, or a total in the two territories of approximately 30 million acres.

In 1954-1955, there were 57 permits issued for 1,646,939 acres. During that year ten new wells were drilled. Nine were abondoned as dry holes. There were also 33 structural test holes drilled.

In 1955-1956, there were 91 permits issued for a total of 5,352,523 acres. Seven new wells were drilled that year. One was abandoned as a gas well and the other six as dry holes.

In 1956-1957, there were 94 permits issued for a total of 4,784,918 acres. Eight wells were drilled that year in the Northwest Territories alone. There were no figures in the reports for what was drilled in the Peel Plateau.

In 1957-1958, there were 404 permits issued covering a total of 19,607,947 acres, and applications for permits for a further 18,746,290 acres were on file.

My contention is that the reason most of this acreage was taken out, or applied for, at that time was because of the oil exploration spilling across from northern British Columbia, along with the information that had been gathered by the two Canadian companies working in the Peel Plateau reservations and for no other reason—the minister did mention this fact, this morning, for once.

The report of the Department of Northern Affairs and National Resources for 1957-1958 bears this out—and I quote:

> In the Yukon Territories one well was drilled to a depth of 8,400 feet in the Eagle Plain reservation, and in the Northwest Territories

a total of five miles were drilled. However, commercial production was not attained in any of the wells drilled during the 1957 season, although...

This is the important part of this sentence:

...all the wells succeeded in providing considerable information on potential oil strata.

This is the information that went out, and since that time applications for permits have been made surrounding the Peel Plateau area, as shown in red. The two white spots there on the map are the Peel Plateau area worked by two Canadian companies. The blue was taken out prior to this government moving in. What is shown in red there has only been taken out because of the information that was supplied by the private companies on the Peel Plateau reservation, not by any act of this government.

The same report said:

During the summer 18 surface geological parties, two aeromagnetic survey parties, one surface gravimetric party and one seismic party were active in the Yukon and Northwest Territories. Geological parties,...

And notice this—

...directed by oil consultants, worked for individual permit holders as well as for some of the major oil companies conducting exploration activities.

In any event, we can conclude that up until the present administration found, with so much shock, that the policy of the former administration was so detrimental to exploration, permits were issued for 59,745,388 acres, plus applications for 18,746,290 acres; or a total acreage of 78,591,678 acres. Using the figures given by the minister the other day on page 5 of his prepared statement, there are at the present time permits or firm applications for 171 million acres. From this figure we must take away 85 million acres which are covered by applications in the Arctic islands, leaving a total of 92,408,322 acres on the northern mainland. So, since this "shock treatment" they have dispersed 14 million acres of a total of 92 million on the northern mainland.

This is due—as I said before—to the interest sparked by the information coming out of the exploration programs of private companies in the Northwest Territories, Yukon, British Columbia and Alberta. The government cannot claim one bit of credit for this interest. I repeat, it is because of the huge expenditures that have been made by a private enterprise over a period of six to eight years that this oil interest has expanded to what it is today. To go back to the Arctic islands, the figure of 85 million acres in the Arctic islands—

Mr. NIELSEN: I wonder if the member will allow a question?

Mr. HARDIE: A large portion of the 85 million acres which has been applied for in the Arctic islands are really only options. As the minister said a few days ago, these people apply for permits in the Arctic islands; and, as my hon. friend from Yukon said a while ago, this was because of the results of the geological survey that was carried out in 1955 by the Department of Mines and Technical Surveys.

Mr. NIELSEN: I did not say that.

Mr. HARDIE: Yes, you did—in any event, read your evidence when it is printed. In any event, these are just options. It is going to be interesting for all of us to see how many of these acres will still be held under permit when the additional 25 cents per acre becomes due under section 18 of the regulations.

There is another question with regard to the Arctic islands about which I would like to ask the minister. The other day, in answer to a question asked by the hon. member for Ottawa West, he gave the names of the various oil companies who had applied for permits in this area, and the names of individuals or agents.

Section 10 of the new regulations deals with exploratory permits. It says, in subsection (1), "Where the minister is satisfied that exploratory work of value will be undertaken, he may issue to an applicant a permit to do exploratory work for oil and gas in a grid area or in any half of a grid area as described in section 35".

I would like to know if the minister is satisfied that all these people listed here are going to do exploratory work, and how did they satisfy him: in what way was he satisfied?

Mr. HAMILTON (*Qu'Appelle*): Has the hon. member finished?

Mr. HARDIE: I am all finished; you can have the floor now.

Mr. HAMILTON (*Qu'Appelle*): Mr. Chairman, I think the committee will be grateful to the member from Mackenzie for showing this sensitivity on the matter of oil and gas regulations in the northern areas, because the thing that strikes me about most of his statement is that the hon. member is trying very hard to cover up—

Mr. HARDIE: Cover up what?

Mr. HAMILTON (*Qu'Appelle*): —the charge that I made at the opening meeting of this committee, that the previous government did not pay any attention to the public interest in looking after the oil and gas resources of this area.

Mr. HARDIE: I am going to deal with that later.

Mr. AIKEN: You were not interrupted when you made your speech.

Mr. HAMILTON (*Qu'Appelle*): If you will recall the statement of the hon. member, you will remember that the main point of the first part of his remarks was quoting the figures of acreage in each of these years from 1951 to 1957. In the house, the other day, in answer to an oral question by Mr. McIlraith, the member for Ottawa West, I stated that up to July 1, 1957—I used that as a cut-off date; not June 22—the number of permits and reservations granted—which are shown in blue and in white on the map in front of you—cover 35 million acres, approximately.

Since that time, to a large degree because of the announcements that we are building roads up into this area, there has been an increased interest in permits along this area. As I pointed out in my opening remarks, it is very obvious, from looking at that map, that the permits tend to follow a line of communication or transportation; in one case, the Mackenzie river, and in the other case, the road that is going up from the centre of the Yukon north to the Arctic coast. But that is not the main point. The main point of the hon. member's remarks was that this indicated that the previous administration had done a great deal to encourage this exploration and work of development in the north.

My statement last Thursday dealt with an altogether different point. The point I dealt with was that the oil and gas regulations in existence on September 23, 1957, did not take into consideration the public interest to the degree that any modern state handling its resources should do.

Look at that map again. Under the theory of handing out those oil and gas permits for exploration prior to September 23, 1957, in all those areas marked in blue and white—that is, the Peel plateau and Eagle Plain reservations—if this government was held to its commitments under the oil and gas regulations then in effect—if oil or gas were discovered—the law of averages

would be such that the discovery of the oil or gas would receive almost all the oil pools.

Since September 23 there have been all those areas shown in red and, of course, all the areas in the islands to the north, another 86 million, in which, under the new regulations, the crown not only gets its additional 12½ per cent royalty, but also it brings back to the crown 50 per cent in crown reservations.

Therefore, all that the hon. member has done today is to demonstrate, and to underline even more forcibly than I could possibly have done it, the charge that I made here on Thursday, that the previous government was remiss in its duty, and that all this interest spills over from the provinces of British Columbia and Alberta into the territories, and that they did not move in there and change the regulations to protect the public interest.

If I were to take his figure of 80 million odd that he added up, that is, under the previous administration, and if all these acreages that he quoted were under the old regulations, Canada would be even worse served than it is today. I would like to say to this committee that, not only on these areas shown in red—the 50 million acres in addition to those which are shown in blue—but also on the 86 million acres across the northern islands which come under the new regulations, the crown gets 50 per cent of the possible oil and gas pools. That was not in the previous regulations.

As to his statement about its being detrimental to exploration, I would agree with the hon. member that if you can have a situation in your regulations where almost all the oil and gas goes back to the company which discovers it, it is a big inducement for exploration. I want to drive home the fact—and if the hon. member would just accept this fact he would be a better Canadian for it—that the really important thing is who owns the oil and gas when it is discovered; and I want to repeat that under the previous regulations the crown would not have got very much.

Now under the new regulations we do at least get 50 per cent. I think that answers the allegations in the hon. members statement.

He mentioned something else which shows, I think, his lack of information and knowledge of how the oil and gas industry has been working in the northern areas. He mentioned that it was because of information made available from the Peel Plateau and the Eagle plain explorations.

One of my big tasks—

Mr. HARDIE: And I also said the operators in British Columbia and Alberta.

Mr. HAMILTON (*Qu'Appelle*): As I was saying, one of my big difficulties with the gas industry has been that they have been following the American custom of not divulging information to their competitors.

Mr. HARDIE: Under the old regulations did they not get that information?

Mr. HAMILTON (*Qu'Appelle*): They did give information to the government; but we are not allowed under these regulations to divulge that information to other companies. Now, on this point I think the committee will be interested in knowing we are now taking the position with these companies with old permits, shown in blue and in white, that under the new regulations, if they do discover oil and gas, 50 per cent of it will return to the crown.

You will all be happy to know that in respect of any information as to the Peel Plateau and the Eagle Plain reservations that has come about as a result of this exploration program, an agreement has now been made by my department that, not only will they share with us under the lease basis, but under the new regulations they are now permitted to divulge all their information to their competitors the moment they are free to do so, which, I think, is immediately after they get it.

This was a bargain arrived at between the two of us, because of public interest in reducing the cost of oil by making that information available in these northern areas where the expense of exploration and development is very heavy. They will make this information available quickly. It will be made available by the first company which does the exploration work, so that other companies can take that same information and apply their own criteria to see if they do not come up with a different result. This has been one of the high cost factors of oil on the North American continent, this refusal by private companies to divulge information.

I do not know how successful our department will be in persuading all these other companies to permit this information to be published after the company has provided it. But I certainly can promise that we will work with them in an effort to persuade them to depart from their traditional custom, which they have followed in the United States, and to make this information available, not only to the government but to private companies and private enterprise.

If this were looked into, I think you would find that no information has as yet been published by Western Minerals Limited with respect to these two reservations. Now they have agreed with our department to publish this information. Therefore on that point I do not think the hon. member showed that he was too much aware of the actual facts.

There was a question asked near the end of his remarks which I think was as follows: would I explain to the committee what we have done that will encourage exploration—more than was done by the previous administration?

In the first instance, the previous administration did very little as far as the inducement of exploration is concerned; they did provide a type of oil and gas regulations which gave almost all the oil and gas to the discovering company. This was a tremendous inducement which we will not give. We have taken that inducement away. What we are doing is to keep one half for the public use.

Another inducement is that we have made some changes in the survey regulations that were in the old regulations. Under the old regulations the survey requirements, based on the experience of companies operating in northern Alberta and British Columbia would have cost them about $3 an acre for their leases. We have taken this out. We are substituting for it a different form of regulation, using aerial maps and coordinates, which give us reasonably accurate corners for their leases, and so on.

A second thing we have done—a more important thing than that, I think—is that we have announced a policy of building roads into the resource areas, which include the oil and gas areas. This has been a tremendous impetus to the oil and gas exploration of those areas.

A number of companies have spoken to me indicating that they consider this to be an inducement; as a further inducement, we have offered to build small temporary airstrips for exploration purposes. As to that I can only tell you what I was told by representatives of the Canadian Petroleum Association, who, for the most part, did not indicate any interest in such temporary airstrips. I thought it would be a help to them, but they said that they did not think the money spent would warrant the return on it, and they did not mind putting in their own airstrips.

In some areas we discussed roads with some of the companies, and they advised against roads because they were considering other methods of transportation which would have to be worked out.

Generally speaking, what we have to do is, in consultation with the oil companies individually, and with the Canadian Petroleum Association, covering the whole industry, to try to provide an inducement that would encourage exploration in those areas which would seem to be the most promising from

an economic point of view. That is the reason the first priority was given to this aspect, because recent logistics originally had in mind a pipeline which would give them access to markets. In relation to those areas these in the interior would have greater cost. That was the reason why it was considered to be an economic advantage for us to move in that area first.

I think I have said enough to indicate the fact that my statement which I made on Thursday still remains completely true as to what this committee has to face up to.

Mr. NIELSEN: There is one point which the minister has not covered, and which I would like to bring up because of its importance to this committee in its future investigations with respect to the estimates. The hon. member for Mackenzie attempted to make the point that the activities over the last six to eight years were "spiked" by private industry.

I think it is recorded in the evidence of the last department which came before this committee, the Department of Mines and Technical Surveys, that this is the major indictment upon which past government policy must stand. Particularly I would like to recall to the committee the evidence given by Dr. Convey on April 16, when he said:

> ... but when we stand up today and regard the over-all mineral research picture in a country such as Canada, with our large mineral deposits, we are not lagging; we are not even in the race.

The point that was attempted to be made by the hon. member for Mackenzie is precisely the objection which most members of this committee seem to have taken to, in respect of the failures of the last administration. The government should keep in the lead in matters of basic research and basic services, and any fundamental data which would allow more efficiency and more accelerated exploration and development of these resources in Canada. This is something which the government has not been doing as they should have been doing.

Mr. AIKEN: May I ask the minister a question in connection with the regulations which were placed in our mail boxes today? Have these regulations just been adopted? I mean the Territorial Land Act regulations?

Mr. HAMILTON (*Qu'Appelle*): The regulations which you got as a result of the request made in the committee, deal with the mainland of the territories, and they are made under the Territorial Lands Act. The law will be promulgated shortly to deal with the area north of seventy, mostly the Arctic islands and the continental shelf. The only difference that we see in these regulations will be that the term for exploration in the first period will be extended by three years.

Mr. AIKEN: Are these amendments to previous regulations?

Mr. HAMILTON (*Qu'Appelle*): The original regulations were made in approximately 1950, or maybe 1951.

Mr. ROBICHAUD: Were they not amended in 1954?

Mr. AIKEN: Have they not been amended since then?

Mr. HAMILTON (*Qu'Appelle*): I am informed that they were amended in 1954, 1957 and 1958.

Mr. FISHER: Would the minister agree that the imbroglio in the Middle East with the uncertainty about the shipment of oil from the East, and the developments made in the atomic submarine were factors in the tremendous interest in the Arctic islands development as far as licences are concerned?

Mr. HAMILTON (*Qu'Appelle*): I think they would be some of the major reasons.

Mr. FISHER: I want to underline that, because I do not see how the former administration could have said that these did not have an effect upon their policies and administration.

Mr. HAMILTON (*Qu'Appelle*): We would certainly agree that we are not an island unto ourselves as far as these oil resources are concerned, and that they do have to be looked at in the light of world markets.

Mr. FISHER: Might I go on to the question of inefficiency on the part of the previous administration? How many changes have you made in your senior administration in your department?

Mr. HAMILTON (*Qu'Appelle*): I do not know how widely you want me to go into this matter.

Mr. FISHER: My question is this: if the previous administration, in respect to this question of regulations and leases and inducements, had fallen behind, we generally assume that the minister would have oil and gas experts giving him advice from time to time, and officials of his department; and it seems to me that much of the minister's statement, by inference, was a criticism of the senior administration of his department. Would he like to make a statement on that point?

Mr. HAMILTON (*Qu'Appelle*): I do not mind at all. This is not a criticism that my department has not already heard. The department, as I saw it, when I came in was largely an administrative department of northern affairs and, to a much lesser degree than in my opinion it should have been, a department concerned with formulating plans for the use of national resources. This is not anything to do with the departmental officials, because if you were to go through the records in the department you would find, insofar as what had to be done and what should be done on this whole development program, that the officials had put forward their points of view and that these points of view had not been acceptable to the previous government.

As I said when I first met this committee last year—I said it very flatly, and Mr. Hardie emphasized it—that when I came into the department and asked what was their program for opening up this country, they were able to hand me submissions made by the commissioners of the Yukon and the Northwest Territories to the Gordon Commission. I am not above looking at a plan already prepared, and adopting it.

The chief difference I have had to make in this program was as a result of the fact that their plans just started at the sixtieth parallel and went north, and there was a great gap between the territorial areas and the provinces. I added the roads-to-resources program to fill this gap. We have had to adjust this program which was originally put forward by the commissioners in their report to the Gordon Commission in 1954-1955. There is no use remaining in a static position. You have to move with the trends.

I mentioned last year in the committee, in respect of the road program, that we had considered going up towards Great Bear lake. However, at the present time there is an interest aroused in the geological information in the area around Great Slave lake, and the question now in our minds is as to whether or not we should complete a survey of Great Slave lake and move in there with a higher priority than at Great Bear lake. The program is amended to suit the situation as it develops.

Mr. FISHER: Mr. Nielsen put on the record Dr. Convey's comments. The senior officials of the Department of Mines and Technical Surveys must have been very much aware of the situation. I will not comment on the representations to cabinet by the minister. However, in effect, you are saying the senior officials in the department were aware of the inadequacies of the program and had brought this to the attention of the previous minister and the previous administration?

Mr. HAMILTON (*Qu'Appelle*): I think that is a fair statement of the situation. In some cases I think these officials of the department even carried it to a higher level but did not get by that hurdle.

Mr. FISHER: This is a much more serious charge than your general statement, insofar as regulations are concerned. Does it apply insofar as the regulations are concerned, and these inducements which you say are now being put forward? Was it suggested to the minister of the previous administration?

Mr. HAMILTON (*Qu'Appelle*): No. We had one oil man in the department handling this matter of taking permits, filing them and seeing that the regulations were followed. There was no conception at all in the department of the potential of the oil and gas industry of the Northwest Territories. That is wrong in this day. There was an awareness that there was an oil potential, but in the department, generally speaking—I have only been able to discover one theory put up by the departmental officials on this oil and gas development in the north. To be fair to the department, however, I would say they were not too knowledgeable about the oil and gas industry in the west.

Mr. FISHER: I think this is a very serious consideration. I know memoranda forwarded to ministers very often are confidential. However, I wonder if the members of the committee would consider that at some later time it would be possible for us to have a look at some of the material which would indicate that the government was informed of the situation.

Mr. HAMILTON (*Qu'Appelle*): I cannot bring forward the papers from the civil servants because they are matters of privilege within the department. I can, however, bring forward statements made by the minister in which he said it was not the purpose of the federal government to engage in resource development and that the resources belonged to the provinces. He recommended cooperation with the provinces in respect of the forestry agreements and so on, but beyond that there was nothing the federal government could do.

Mr. FISHER: May I ask whether or not the Liberal members of the committee who, in a sense, have a defendant's brief here, would be agreeable to having filed here these matters which might have been drawn to the attention of the previous minister?

Mr. HARDIE: Any time!

Mr. ROBICHAUD: On page 5 of this prepared statement the minister stated he had already added a second officer in the oil administration section. He compared his department with that of the provincial government of Saskatchewan which has a staff of over one hundred, and with that of Alberta with a staff of 165. The minister, however, must admit that before 1950 the staff of the Saskatchewan government was much smaller, in fact practically nil, as compared to what they now have, since development has taken place. The same situation would apply to Alberta prior to 1945. If developments that have taken place are that important, how is it that all the minister was able to do is to add one more officer in the oil administration of his department?

The CHAIRMAN: Is it agreed that the minister will put on record statements by the former minister, as was requested by the member for Port Arthur?

Mr. HARDIE: All statements.

Agreed to.

Mr. NIELSEN: I have a supplementary question with which perhaps the minister could deal at the same time he deals with Mr. Robichaud's question. Would not the difficulty seem to have been—and this is something I intend to follow up at a later stage—would not the difficulty seem to have arisen because of what I might, for the lack of a better term, call a preoccupation with social development in these areas? I do not say anything against the desirability of and the necessity for this type of development. However, was it not a preoccupation almost to the exclusion of policies directed toward the

very important and basic problem of research in respect of resources in these particular areas?

Mr. HAMILTON (*Qu'Appelle*): I do not think there is any serious quarrel with that last statement of the hon. member for the Yukon. The previous administration, I think, should be given full marks for having set up the Department of Northern Affairs and National Resources, and for having directed our attention to the social problems in that area.

I think it was the leader of the government, Mr. St. Laurent who, in his speech at the time the establishment of this department was announced, used the expression that the whole administration of the north up until that time—1953—had been done in a continuing state of absence of mind.

Therefore, in the setting up of this department and the adminstrative machinery to get at these problems, such as education of the children in the north and the social welfare services, it was realized that this is a business which will take many years to complete. I think the previous administration should have full credit for having embarked on that program. I think it is also fair to say that they, as an administration, had not realized the actual things which had to be done to take full advantage of the resources in this area. I think that possibly in their minds this was just surmise, that they thought the development would be slow and would come from the south.

Mr. HARDIE: The Northwest Territories Council brief to the Gordon report said twenty-five years. You claimed you were going to crowd it into five years.

Mr. HAMILTON (*Qu'Appelle*): That was the Gordon Commission recommendation; but any person who looks at the Gordon Commission report will find how much emphasis they put on the north, when you see that they combined it with the maritimes. Not only were the personnel of the Gordon Commission unaware of how important these resources were, in terms of twenty-five years from now, but they were also completely unaware of the overriding problem of who is going to make certain there is effective occupation of this area.

Mr. HARDIE: Completely aware or unaware?

Mr. HAMILTON (*Qu'Appelle*): Unaware.

Mr. HARDIE: You mean the persons who presented the brief were unaware, or do you mean the Gordon Commission?

Mr. HAMILTON (*Qu'Appelle*): I think the criticism I am making is this; it is the fact that the Gordon Commission relegated this northern problem to part of a page, and also the fact that the government did not even accept the limited recommendations of the Gordon Commission. The government itself was not even thinking in terms of the rapid development of this area, but was waiting for the gradual movement up into the north from the south. I think this was shown in the election platform of 1958, when the speakers in referring to the roads-to-resources program spoke of it as a program of "roads from igloo to igloo". They had no concept of the value of the resources in that area. I think it will take a great many decades to get over that attitude of mind.

On this question concerning tariff, I think the hon. member for Port Arthur hit on something which is very important, because this thing has caused me a great worry. I reported to the committee the story of how I came across this situation in respect of oil, and the defects in the regulations. Coming from western Canada, one of the first things I did as a new member was to study the oil and gas regulations. I asked that these be brought in to me and they were put on my desk. I had a chance on September 15th to look as these regulations—this was in 1957.

I am not a lawyer, but it did not take me long to realize that this was somethting that had been left behind for a long time. It was a modified form of the concession principle. I do not want to pose as an expert, because I am not. However, I showed it to a few of my friends who do understand oil regulations, and I have been very watchful of the work of committee in dealing with this subject. I asked them if these regulations meant what I thought they meant, and that a lot of the oil and gas would go to these companies. They said, "Yes".

Therefore, on September 23rd, I sent out to all the oil companies a notice saying that from then on no permits would be accepted unless they were on the basis of the companies accepting new regulations, which we would work out. That is what happened.

We were working on the oil and gas regulations and on the roads program. I think most rational people would think that in starting on a roads program which would last over five or seven years there would be a lag in time before the companies would move in and take up oil permits along these roads and railways, and other means of communication. Much to my surprise the rush for oil permits was much faster than could have been expected. Therefore, I had the new worry of how to get a staff to meet this situation.

The attitude of Treasury Board, developed over the years—and which probably is wise—is that you cannot succeed in the matter of an increase in staff unless you can show a work-load and a job to be done. I warned Treasury Board that this was coming and that we would have to get our thinking ready to meet a large-scale exploration development program, if it arose afterwards. Then I began to look around, and had the department looking around, for people so I could start "beefing up" my oil and gas division. Now, quite frankly, we asked a deputy minister from Alberta, Mr. Somerville, who has had more experience than anyone in government circles in handling oil and gas permits and leases, to join our department. We looked around further and got a man who was assistant deputy minister of resources in Saskatchewan, to come down. He came here and started working on February 1st of this year. His first job was to work on revised regulations and, secondly, to draft for me a plan of expanding his section, from the experiences that had been gained in Alberta and Saskatchewan. I knew he had been part of that growing experience in Saskatchewan because that province suffered the same way as we suffered. There was a period of uncertainty and they had to find men who knew something of the oil and gas industry as opposed to the mining industry. Therefore, we are now in a position to say we have a plan of expansion ready. I am borrowing people from other divisions in the department and putting them into this division. When the next review by treasury board takes place we will put our plan of expansion before them and build up on this nucleus of staff. I would like to say that in a practical way there is no use in building a tremendous staff on expectation. There has to be tangible evidence that the work load is going to be there. Our first job is to build up a framework of knowledgeable people who can expand when the need arises.

Mr. HARDIE: At the opening of the meeting I asked the minister a question in regard to the applications for exploratory permits in the Arctic islands, and I asked him how he satisfied himself that these people would abide by section 10 of the regulations, which says that the minister may issue a permit when he is satisfied that explorotary work of a value will be undertaken. What method did he use in finding out the work these people were going to do?

Mr. HAMILTON (*Qu'Appelle*): Well, the procedure is something as follows: an oil company takes out a permit to explore. They usually come in and divulge their plans to the department. Sometimes they come to me direct; but more

often they come to my officials and I receive a memorandum saying such and such an individual or company representative was in and their plans are so and so, and these plans are indicative of a certain amount of exploratory work they are to undertake.

In the case of the Arctic islands, we go a step further. We try to get them to correlate more carefully their activities with us. Because of the question of logistics, we have suggested two or three airfields halfway up, that could be used as jumping-off places for Resolute, which will be the main centre of their operations. I think in at least one case two or three companies are working as a group for the purposes of acquiring transportation into that area. We had meetings two months ago and since with the Department of National Defence and, particularly, with the Department of Transport, in regard to regulations for aircraft in that area. We have been discussing the question of putting in gasoline, food and shelter on a temporary basis in order to accommodate them. There is a very close knowledge between the companies and our department as to what our plans are at all times.

Mr. HARDIE: I wonder if the minister would table for the committee the proposals as to the amount of work they will do on these twenty-seven permits that were issued in the Arctic islands. The minister said he is satisfied the work is going to be done and, if he is, he should not object to tabling the papers dealing with the amount of work the permittees committed themselves to do.

Mr. HAMILTON (*Qu'Appelle*): Well, this is the answer I was going to give to that. I am not allowed to divulge the plans of one company as opposed to another company; but the only thing I could do is get them to work out in dollars and cents the value of the work they are going to be doing.

Mr. HARDIE: Well, if you have that information, I think you should supply to the committee the amount to be spent in connection with the twenty-seven permits—not the amount covered by the five-cents deposit, but the value of the work they will do over the three-year period covered by the first permit.

Mr. HAMILTON (*Qu'Appelle*): Now, with this one reservation: all the companies are submitting them one after the other; they have three years to do this work, and if they have not submitted anything, I cannot give it to you.

Mr. HARDIE: Yes, but the regulations say that before the exploratory permit is issued the minister has to satisfy himself that a certain amount of work will be done.

Mr. HAMILTON (*Qu'Appelle*): Well then, if you do not want that information until the permit is issued, I will have to wait until it is issued, because all they have is a firm application at the present time, and the permits cannot be granted until an Order in Council is passed putting new regulations into effect.

Mr. HARDIE: You yourself think that these twenty-seven people—I think you have stated this—will get permits?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: If they agree to the new regulations?

Mr. HAMILTON (*Qu'Appelle*): Yes, and they are giving information—

Mr. HARDIE: If they came to apply for permits, I think they must have had something to tell you concerning the amount of work they were going to do; otherwise you would not have considered the application.

Mr. HAMILTON (*Qu'Appelle*): I will try to get as much information as I can.

Mr. ROBICHAUD: How can the minister reconcile the statement he has made with regard to staff, that the department would not be justified in building up

staff on expectation alone, with the statement he made on page 2 of his statement of last Thursday:

> Active exploration is taking place over many millions of acres. In face of these great developments . . .

In connection with the building up of his staff this does not agree with the statement of the minister.

Mr. NIELSEN: That is because there is no inconsistency.

Mr. HAMILTON (*Qu'Appelle*): I fail to see what the question means. They can explore as many millions of acres as they like, but my impression of staff relates to the amount of work-load this entails.

Mr. ROBICHAUD: Well, according to your own statement, large sales or options are taking place and these are called developments, according to your statement.

Mr. HAMILTON (*Qu'Appelle*): By "development", I refer to the drilling of wells and that sort of thing. There are three stages: the exploration stage, the development stage and the exploitation stage; and there is exploration and development going on at the present time.

Mr. NIELSEN: The sense in which that word was used was not in respect of what is physically possible, but in respect of the factors which are involved.

Mr. ROBICHAUD: The minister carried on by saying:

> They imply we are giving away this public resource to promote development.

Who are "they" who are implying we are giving away this public resource? I am now referring the term "giving away".

Mr. HAMILTON (*Qu'Appelle*): I am glad you asked that question. I believe it was a week ago Thursday that the Leader of the Opposition was speaking on the budget; it was the last night of the budget address.

Mr. ROBICHAUD: Was not the budget voted upon on Wednesday night?

Mr. HAMILTON (*Qu'Appelle*): What subject would it be then? In any case, Mr. Pearson was speaking, and I think it was the last speech of the budget before the vote was taken—I am sure it was. Suddenly I heard the Leader of the Opposition say that these 75 million acres in the Arctic islands mentioned by the Prime Minister were a great part of our effective occupation in the north; and he went on and quoted figures to us taken from an answer to a question I had given to Mr. Hardie some time before, applying to a sale in which ten permits were optioned and available in the area north of British Columbia, which we showed on the map on Thursday. He went on and quoted these figures, and said only 5 per cent of all this territory had remained in Canadian hands. This is not true.

Mr. ROBICHAUD: Has he used the term "giving away"?

Mr. HAMILTON (*Qu'Appelle*): You would have to get *Hansard* and look at what he said.

Mr. ROBICHAUD: I would like you to show us where that term had been used and by whom.

Mr. HAMILTON (*Qu'Appelle*): I told you by whom. I said this statement was not in accordance with the facts. I asked that my answer to the question be read, and it was not read. At the end of his speech Mr. Speaker gave me two minutes to explain my point of privilege. This is the point I want to make absolutely clear. The statement made by the Leader of the Opposition was reported all across this country in a Canadian press dispatch, saying that 5 per cent was all that had been retained by the Canadians, and asking how this was maintaining Canadian sovereignty. My correction on this important matter did not appear in any paper across this country. As I told you in the

meeting on Thursday, the reaction I got by telephone and by letter was such that I knew that a great deal of harm had been done to the development program in our northern areas, and the first opportunity that I got to make that statement was on Thursday. I made that statement as clearly as I could.

Now, search your Canadian Press dispatches across this country for the answer I gave to Mr. McIlraith in the house last Wednesday. Two sentences appear giving the percentages. There was no statement in there tying the significance of this answer up with the false information the Canadian Press sent across this country the week gefore, that only 5 per cent had been retained by Canadians—and the figure of 86 million acres for this area was actually 68 million or 69 million. Let me impress upon you that percentage is not the main factor in these oil and gas exploration permits. The thing that does count is who owns the oil when it is discovered; who has the ownership and control of the oil and gas when it is discovered. And, therefore, in my mind, it is immaterial whether the percentage is 75 per cent or 50 per cent; the big thing is what control and ownership has the country over the reserves when they are found.

Mr. ROBICHAUD: I have just one more question. The minister will agree that the statement made by the Leader of the Opposition, followed the statement made by the Prime Minister himself in a nation-wide TV broadcast about maintaining Canadian sovereignty in the selling of these oil permits, was justified; and following the minister's explanation, which he has just given, I think you will agree that the term "we are giving away" was not used by anyone, because he has not shown where it has been used, or by whom. This is why we are objecting to the minister using this term in his statement. Now, furthermore—

Mr. HAMILTON (*Qu'Appelle*): Hold it a moment, Mr. Robichaud. I think I have made my position very clear. I am not a lawyer and I do not quibble over the words "giving away"; but if you read that statement from the Leader of the Opposition you will find that the suggestion or allegation was there. This is the point. As I see it, the Leader of the Opposition made a mistake in his facts. He assumed because there was one sale for 3 million acres that this same percentage applied throughout. In my answer last Wednesday and again on my point of privilege, I made it absolutely clear that this was a mistake in fact; and he went on and tried to run away from that correction. I think he has to stand ready to be responsible for having made that statement, and back it up. He was trying to give the impression or make the allegation we were giving away these resources. I am pointing out as bluntly and forcibly as I can that if that type of misinformation is allowed to continue, great harm will be done to the northern development program.

Mr. ROBICHAUD: At no time has the Leader of the Opposition stated that we are "giving away".

The CHAIRMAN: I think the minister has answered your question, so far as he can.

Mr. HARDIE: Further to questions on the Arctic islands—

The CHAIRMAN: Mr. Hardie, Mr. Fisher has been trying to get the floor. Before you ask a question, Mr. Fisher, may I say, Mr. Art. Smith is here. As we all know, he is very much interested in oil and gas, and he would like to participate in the questions. With your permission, I have asked him to take a seat at the table.

Mr. FISHER: I certainly agree with the minister down the line regarding the inadequacy of press coverage on most things. But I do not think inadequacy of the press is in question here: I think we can all take that for granted. I think we can also take for granted super-sensitivity on the part of the

minister. But when he says Mr. Pearson made a mistake in his facts, does he not also mean that his department has failed, or has made a mistake, in putting the information forward so that we are all aware of it?

I think I am a fairly alert member of this committee and of the house, and I have never had an exposition of the factual part of this statement here. That would indicate to me that if Mr. Pearson made a mistake in his facts, he was misinformed and some of the responsibility must fall upon the minister or the officials of the department for not getting this information out.

Mr. HAMILTON (*Qu'Appelle*): I think that criticism is true to some extent. We are not very good at getting out the many things that we are doing for the development of this country. We have been so busy doing these things that our public relations has perhaps been not as good as it should have been. But we have made individual statements, and they can all be added up. Several times I have stated, both in the house and out of the house, the acreages out, and so on. The oil regulations are there, available for everyone to look at.

Thirdly, I said in the house two or three times that as soon as this committee met I would be making a full statement. I said that once in the house to show you that the public interest was being protected, because I was quite conscious of the concern across the country over this very vital question of ownership and control of our resources.

Mr. FISHER: It seems to me there has been a failure of the minister or his officials to anticipate the very kind of criticism that has been made, by not giving a clear statement of policy, of the regulations, or where they are going.

Mr. HAMILTON (*Qu'Appelle*): If I had made that statement outside the house, would you not have been the first one on your feet to say that I was abusing the rights of parliament by not making it in committee or in the house?

Mr. NIELSEN: Mr. Chairman, there is another possibility in regard to the point raised by Mr. Fisher; that is, that it could have been the person who made the statement of 5 per cent—or whatever the figure was—which could have been an isolated selection from the bulk of information released for the purposes of making this particular statement.

Mr. FISHER: To me, the whole field has been cluttered by a grandiose statement, and exaggeration, and I can pick examples that the minister knows of. One of his proposals on the roads-to-resources program, as I told him, was ridiculous to me. But I cannot see any advantage to us in this committee going around in a sort of "party hassle", backwards and forwards, as to who said what and who did what.

I would like to come back to the point insofar as administration is concerned. Am I correct in assuming that if we had a number of senior officials, that would pressure away most of these problems, and that we are frustrated by a lack of knowledge and imagination on the part of the ministerial gentlemen?

Mr. HAMILTON (*Qu'Appelle*): You are saying in effect, that—

Mr. FISHER: I am saying, in effect, that the Civil Service was adequate all the way through; it was a failure on the ministerial side. This is a key-point to me, because many members of this committee who are not on a partisan basis are very concerned about these two departments and their adequacy.

Mr. HAMILTON (*Qu'Appelle*): I am going to answer this in this way, and you can question my objectivity. I do believe that you cannot put all the blame on one individual, whether it is the party or the government on the one hand, or the officials on the other.

My own department, for instance, was so busy with the limited funds they had on these programs of social adjustment that they had to take over in this vast area, that there was not that attention given to planning and

development of these resources. The great difference that has occurred is that with the change of government—and this is still trying to be as objective as any person in my position can be, I suppose—a revolution took place in the directions coming down from the top, which had an impact upon the official thinking. They began to turn their attention more to these problems than they had before.

I do not think it is entirely fair to say that it is just because of an attitude on the part of the previous administration. But I do think that in the department—it is the position that they would take in defence of themselves—they were so busy with their limited funds, trying to make this adjustment in the social field in the northern areas and tackling these problems of administration, that they just had not planned any great amount in connection with a resources development concept. I think that was probably the contribution that we made to the thinking; we did raise this national resources part of it up to the level where I think it should be.

Mr. NIELSEN: Mr. Chairman, we are overlapping into the main item now, so I suggest that we move into the main item.

Mr. HARDIE: Let us get on with the regulations. I have a question with regard to the Arctic islands.

Mr. FISHER: Mr. Chairman, we are at a stage where we have had some generality and comment on the situation. We have all been disturbed about these two departments and their inadequacy, or their failure, to rise to a challenge to any extent.

What is the solution for this kind of "deadness" within the administration? What can we do, as Members of Parliament or as committees, to try to encourage a "break-through" in these particular fields, so that we do not have officials coming here and saying, "We have no particular program at all; we are not in the race"?

Mr. HAMILTON (*Qu'Appelle*): I can understand the type of evidence to which you are referring; but I do not want this word "deadness" to be associated with the Department of Northern Affairs and National Resources. As a new department, it has been "full of beans"; it has been full of life. I can illustrate by figures what we have done, if you like.

This is in defence of the departmental officials. In 1954-55 my department was given less than $4 million for northern administration. This year it is $45 million. It makes a little difference when you get ten times the amount of money to spend on your operations. In 1957-58 it was $18 million.

Mr. NIELSEN: Mr. Chairman, I might say that the Department of Mines and Technical Surveys is not dead either. It is a question of their ideas being allowed to surface.

Mr. FISHER: I do not want to make a positive statement that they are "dead". We have had a bit of redress from the minister today on that, with the suggestion that these civil servants were aware of many of the problems. But it seems to me that we have, as Members of the House of Commons, to make sure that there is no more of this inability to "break through".

Mr. HAMILTON (*Qu'Appelle*): That is what you are doing in this committee. My impression, on reading the evidence of the earlier proceedings of the committee in dealing with the Department of Mines and Technical Surveys, is that the committee has done a wonderful job of making Canadians aware of what has to be done. I know my department cannot function as a resource department unless we have a tremendously efficient Department of Mines and Technical Survey: they are the eyes and ears of this department.

I know that I have been throwing many problems to them and overburdening them, with their present facilities; but I feel that we cannot move

along at the same pace at which we were moving in 1927. It means a doubling of the efforts of the technical surveys part of the department. As administrators, if we find what the task is, we move towards it. We have done it on the hydrographic survey; we are doing it on the geological survey; we are doing it on forestry in the department.

Mr. FISHER: Not nearly enough.

Mr. HAMILTON (*Qu'Appelle*): I know. Also, we are moving along in the metallurgical field. This is an area where I just cannot say, "Double it"; I have to know why we are doubling it, and what form the doubling takes.

We, in the government, are interested in moving up this research activity at a pace that is not wasteful and extravagant. It is not a "crash program", but a steady build-up to the results we want as quickly as we can get them with the money which we have to spend.

Mr. FISHER: The focal point of requests for money goes, I imagine, to the Minister of Finance and Treasury Board as the key?

What can we do to reinforce your need here, to really make a case that these expenditures are necessary; that this expansion just cannot be ignored? I understand your thinking of the annual budget as it is—that you have got to view the future, and it is essential in the future to perhaps make extraordinary expenditures.

Mr. HAMILTON (*Qu'Appelle*): I think this question is one that bears right on the usefulness of this committee. We have had our little political differences here in the last two meetings, and I personally regret that I had to do it; but in view of what happened to me in the last two weeks, I had to move.

But if you continue questioning this department in the way you questioned the Department of Mines and Technical Surveys, and let the officials —and they will be given complete freedom to answer—answer these questions as to what they need, it will be the best information that we could get, I think, to Treasury Board level of what the needs are.

I think that if you, as members of this committee, question these various departmental heads, or branch heads in the department, and question them along the lines of "What do you think should be done?", they will be able to give you the answers. That does not mean they are going to get everything, because we have to balance it off; we still have to tie everything in between the Department of Mines and Technical Surveys and the Department of Northern Affairs and National Resources, within the fiscal framework of government. As you know, you can serve the interests of the people of Canada by questioning us thoroughly here.

Mr. HARDIE: With regard to the Canadian companies versus United States and British companies: I notice there were nine private individuals who applied for permits. I was wondering what guarantee the minister has that these people are acting for Canadian companies.

Mr. HAMILTON (*Qu'Appelle*): This is one of the most difficult questions to answer in the oil and gas business that one could possibly be asked. If a Canadian or American company gets a permit, there is nothing—under our rules of private enterprise in Canada—to stop that company or that individual transfering its interest over to another. I have no plans in mind for interfering with that right of private enterprise. All I am focusing my attention on is, that when they go to lease—which gives ownership; not just the right to explore—I want to make certain at that time that as far as we can possibly manage it, every opportunity and encouragement will be given to the participation by Canadian people.

Mr. HARDIE: In other words, you do not know who these people are acting for; you do not know what companies these individuals are acting for or if they are acting on their own?

Mr. HAMILTON (*Qu'Appelle*): To be completely honest, I do know in some cases. I see a certain name of a company, and it is a Canadian company, and I know that they are the exploration arm of a British company.

Mr. HARDIE: I am speaking about the individuals. For instance, Mr. Haley of 19 Perkins street, Ottawa—whom does he represent?

Mr. HAMILTON (*Qu'Appelle*): I do not know.

Mr. SMITH (*Calgary South*): Could I, first of all, thank the chairman and the department—

Mr. ROBICHAUD: Mr. Chairman, on a point of order, before Mr. Smith proceeds, I think we should clarify the position. This committee is sitting under the terms of reference which have been given to the committee by the House of Commons. I have no objection whatsoever to the hon. member for Calgary South asking questions in this committee; but I think the usual procedure of the house should be followed. He should be made a member of this committee, to which there would be absolutely no objection.

The same thing applies to the gentleman sitting at the end of the table there. Is he a member of the committee? He has interjected once or twice during this committee—

Mr. NIELSEN: On a point of order, Mr. Chairman; I have been sitting next to Mr. Faibish, the private secretary and special assistant to the minister, and I have not heard him speak once in committee. He may have passed notes up to the table, but he has not spoken.

The CHAIRMAN: I think your point is well taken, Mr. Robichaud. As a matter of fact, our two friends over here to whom you refer do not really belong at the table, but they could be in close proximity to it.

Mr. ROBICHAUD: If it is regular and if it can be done, then I have no objection.

The CHAIRMAN: Would it be all right—since I expect that Mr. Smith will become a member—if we opened up the subject at another meeting?

Mr. ROBICHAUD: I just wanted to point it out, the irregularity of the committee.

The CHAIRMAN: I appreciate that fact.

Mr. SMITH (*Calgary South*): Mr. Chairman, I was about to ask for the privilege of asking a question. It is my hope to become a member of this committee, but other duties have not permitted it. May I proceed to ask my question?

The CHAIRMAN: Yes, go on.

Mr. SMITH (*Calgary South*): The point which concerned me is this: if I may go back to the reference you made concerning the divulging of information by companies competing one with the other. I may have misunderstood you to say that the department would expect these competing companies in their several exploration and development works, to divulge to you and to other competing companies certain information. May I suggest that perhaps this is a departure from the practice not only on this continent but abroad.

Certainly the conservation acts in Alberta and Saskatchewan require information which deals with the pure survey measures. But do I understand you to say that a company which has spent a great deal of money in a resource area, and has information which passes to it by right of the lease shall turn it over to a group which was developing that general area—a procedure which I think is hardly accepted in a competitive world? Perhaps I misunderstood you—or is that the point you made?

Mr. HAMILTON (*Qu'Appelle*): Let me repeat it quickly. We have held consultations with the Canadian Petroleum Association at which I proposed this

concept of divulging information at a certain time which would be agreed upon after they had dropped interest in an area, so that money spent by one company would not have to be spent by another.

As the Canadian Petroleum Association represented the great majority of the interests, they opposed the idea. They followed the traditional practice of not divulging information derived through direct occupancy or lease or permit, or even afterwards, because they say they would like to have it as something for the money which they have spent.

I have taken the view that it would be to their advantage and to the advantage of the people of Canada as a whole if we could reduce these high costs of exploration in an area where high costs are going to be very noticeable.

Their official attitude was that they could not accept it. Since that time, however, in negotiating with various companies we have had one success with a Canadian company operating in the Peel Plateau. This company has agreed in the interests of the Canadian public to divulge their information not only after they are finished within that area but immediately they get it. This is done because they recognize that millions of dollars may have been spent drilling in one area, and that it would save the industry a tremendous number of millions of dollars by not having to repeat that same work where it is not necessary, if their information is helpful to others.

Naturally enough they would have to get enough information about development in a particular area to make it an economic venture and to get the project going. So in that area we have scored what I think is a great step forward in getting acceptance of that principle. As I said to the committee, I would continue to make a great effort to bring about more and more acceptance of this idea with respect to this information. I asked them to accept one year after the giving up of their interests in the area. They have not accepted yet, but I shall keep at it

The other point is that we expect after some discussion to work with them cooperatively as in a unitized field.

Mr. SMITH (*Calgary South*): A unitized field in itself is a different subject. What specific information would you insist that they divulge? Would it be in the geological, geophysical or scientific field, or would it be purely in the generality of a partnership check? Would it be in the geological or geophysical field, or would it be purely the makeup of the leases?

Mr. HAMILTON (*Qu'Appelle*): If you will look at page 33 of the regulations, section 109, you will see that all information furnished under these regulations by a licensee, permittee, or lessee, shall be kept confidential and shall not be released. What would be made public I certainly do not know, because at the present time the oil companies, such as the Canadian Petroleum Association have not agreed to publish any information at any time.

Mr. NIELSEN: Not on any basis, whether classified or not?

Mr. HAMILTON (*Qu'Appelle*): On any basis, both basic and seismic.

Mr. NIELSEN: Or whether it may be confidential?

Mr. HAMILTON (*Qu'Appelle*): We have to keep it confidential. I have tried to get them, after they have given up a permit, to let me take the information which they have submitted to the government on a confidential basis, and one year later to make it public in the interest of having additional exploration made by these other companies.

Mr. HARDIE: So there is no change being made in the regulations under 109 as compared with the old regulations except as to the wording?

Mr. HAMILTON (*Qu'Appelle*): That is right.

Mr. HARDIE: You have done nothing about the information?

Mr. HAMILTON (*Qu'Appelle*): Yes I have.

Mr. HARDIE: It is just in the wording?

Mr. HAMILTON (*Qu'Appelle*): No, in the regulations I have been talking about.

Mr. HARDIE: You left the inference the other day, and again this morning, that by regulation you were now going to release information which the companies gave you.

Mr. HAMILTON (*Qu'Appelle*): I certainly did not. When you read the evidence you will get it straight, and you will find what I said stated very clearly.

Mr. HARDIE: I read your statement the other day and I got the same inference.

Mr. HAMILTON (*Qu'Appelle*): The statement I made was the same that I gave to the member from Calgary South. We have one company that has already agreed.

Mr. HARDIE: With all the other companies?

Mr. HAMILTON (*Qu'Appelle*): Six million acres of oil.

Mr. HARDIE: Did they agree to release this information to the public?

Mr. HAMILTON (*Qu'Appelle*): To the public, yes. These regulations deal with permits and leases. We have worked out an agreement with a particular company which now holds a lease of land on a reservation, that when they come to the period of the permits, they will make this information public. At the present time this company owns this land on a reservation, which is different from a permit. They are now, under the new agreement, making their information public, and there will be some bargaining back and forth in getting other agreements. This is special with this one company, and it does not apply to the rest of the companies. We will take this up with them when they come down to discuss the matter with us.

Mr. SMITH (*Calgary South*): Might I ask the minister a specific question; is it his intention to require a company to disclose, not only to the government, which of course would be the ordinary practice—just as it is with the conservation boards in the provinces—but to disclose to a competing company an evaluation it has made from a core taken from a hole?

Mr. HAMILTON (*Qu'Appelle*): No.

Mr. SMITH (*Calgary South*): Even after a one year period?

Mr. HAMILTON (*Qu'Appelle*): No. After a year, when they would have reported to us on the area, the crown would make available basic information, with an interpretation of that information, and people could get that information.

Mr. SMITH (*Calgary South*): Would you give the result of a core taken from this area as an analysis to determine the factors of the structure? Is that correct?

Mr. HAMILTON (*Qu'Appelle*): I would say so. We hope that they will accede to that regulation, to reduce our costs of exploration.

Mr. NIELSEN: And also to induce more companies to get in there, because of the reduced cost?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: What is the reason for the grouping section? Why has the grouping section now been extended to 187½ square miles, whereas the old regulations allowed a group of 35 square miles? What is the reason for it?

Mr. HAMILTON (*Qu'Appelle*): I was privy when the discussions took place as to the actual theory behind it, but I would like to pass your question

over to Mr. Davidson, chief of the Resources Division, Northern Administration Branch.

Mr. HARDIE: I want to know the reason for the change in the regulations concerning the grouping of areas. Under the old section you could group a number of permits up to a maximum of 35 square miles; but under the new regulations the number has been increased so that you may now group a number of permits up to an area of 187½ square miles. What is the reason for this?

Mr. HAMILTON (*Qu'Appelle*): Perhaps I should start the answer off by saying the theory behind it was this: we were looking for devices to reduce the cost of exploration in the north. If there are great geological structures which extend for scores of miles instead of just a few miles, then it is in the interest of the crown to get this information and to encourage deep structural drilling.

We have worked in several devices, one of which is to encourage the expansion of an operation like that to spread it over an area which is much greater than it would have been under the previous regulations; but that area must be demonstrated to the Department of Mines and Technical Surveys who handle this aspect of our work, to be in the same general geological area, as proof that that information will be useful in preventing the need of a general geological survey of the whole area.

Mr. HARDIE: I understand that part of it. But why is it that one company may now group permits to a maximum of 187½ square miles, whereas under the previous regulations the maximum was 35 square miles? Why is there this large grouping?

Mr. A. T. DAVIDSON (*Chief, Resources Division, Northern Administration Branch*): I think the simple answer is that it promotes wider scale exploration.

Mr. HARDIE: By one company?

Mr. DAVIDSON: Yes.

Mr. SMITH (*Calgary South*): The minister made reference to a possible unitizing. I have not had an opportunity to read his regulations, but may I assume that this would be incorporated in a separate statute? Have you made any plans to take in units when you have not discovered oil beforehand? Have you given any thought at all to the unitization plan?

Mr. HAMILTON (*Qu'Appelle*): We have had some discussion about it among ourselves. The Canadian Petroleum Association is coming down this month, and we will discuss it with them. Even with the crown reservation system in the northern areas, we would want to discuss it with them, as to how we will get advantages through the unitized handling of the field in order to reduce their costs, and to get some advantage of zoning in far distant areas; because in the Arctic islands particularly we have to get in there with the advantage of a single operator field, if we are going to reduce their exploration costs.

Mr. SMITH (*Calgary South*): You are speaking of the unitization of oil, and I assume that it would protect the companies concerned and would act as an inducement, if you had a unitized plan before enforcing regulations, as the provinces would not be able to do it.

Mr. HAMILTON (*Qu'Appelle*): If they can come up with any idea to reduce costs, we would be for it. We take that view. We have been discussing the advantages and the disadvantages if it were applied to companies operating in

the far north. Your special committee of the Canadian Petroleum Association will work on the problem with us, with respect to those areas beyond 70 degrees.

Mr. SMITH (*Calgary South*): Who are the promoters who are talking about unitizing oil?

Mr. ROBICHAUD: In his statement the minister referred to oil legislation. Would he agree that there has been no change in the legislation, or is there any new legislation to be introduced? Is it not true that only regulations have been changed or amended?

Mr. HAMILTON (*Qu'Appelle*): Just the regulations.

Mr. HARDIE: In the Peel Plateau reservation what are the conditions under which the companies operate? How much money do they have to spend, and how much money have they spent?

Mr. HAMILTON (*Qu'Appelle*): I will have to turn this question over to one of my officials. They tell me they will have to look up the information. At this time all I can say is there is a scale they have to follow and they are following it.

Mr. HARDIE: In one of the sections I noticed an amendment in respect of deep-drilling where, if you put down a deep hole, you are credited with double the amount you have spent over your entire permit area. Will this amendment also apply to the deep-hole drilling done in the plateau?

Mr. HAMILTON (*Qu'Appelle*): It actually applies right now. We have made an agreement with them. They have expressed their willingness to take some of the advantages of the new system, if they will take some of the disadvantages of the new system in turning it back to crown reservation, and so on. This advantage of the double credit for deep-drilling applies in Peel Plateau and Eagle Plain.

The CHAIRMAN: Gentlemen, are there any further questions?

Mr. ROBICHAUD: The minister also stated that, due to the fact that such a large-scale operation is actually taking place, it is suggested that our policies are encouraging investments. Could the minister elaborate on that? What actuel increased investment did take place? Is he referring to the applications? How much actual work is really taking place?

Mr. HAMILTON (*Qu'Appelle*): Under the regulations in the permit stage they have to do a little bit of work in the first eighteen months; then it is stepped up. What we did in this statement was to take the minimum amounts they would have to spend over, I think, a five-year period, and that came to $175 million.

Mr. ROBICHAUD: Provided they wished to retain their permits.

Mr. HAMILTON (*Qu'Appelle*): Yes. There is nothing to stop their spending more. I understand that Western Minerals have spent well beyond their minimum in Peel Plateau.

Mr. ROBICHAUD: The minister has no assurance that those who have applied for permits will spend the amount of $175 million. It is only speculation.

Mr. HAMILTON (*Qu'Appelle*): That is absolutely true.

Mr. HARDIE: Then the Peel Plateau concession did encourage investment. The minister said many millions of dollars more was actually spent than is laid down by the regulations. I think the concessions did encourage investment in the area. A while ago I said when the government gave those concessions there were no real oil interests. The concessions were given to these companies to encourage investment and now the results of their work have expanded the whole area.

Mr. HAMILTON (*Qu'Appelle*): I have talked to these persons and their only reaction was, "If the government had come in and built those roads you are speaking about now, it would have cut our costs". Their major costs have been the transportation costs to get into that area. After they have spent those millions the government comes along and builds the roads and it means that the new companies, the "johnnies-come-lately," are able to take advantage of these transportation facilities.

Mr. HARDIE: How many development roads will be completed before the permit period is up on these new leases which are marked in red?

Mr. HAMILTON (*Qu'Appelle*): Are you speaking about the road through to the Arctic coast?

Mr. HARDIE: That is one. How many of these will be completed by the time the permit period is up?

Mr. NIELSEN: Do you not agree with that road?

Mr. HARDIE: Listen: I agreed with it in the first place. In the second place, I say that if any of those in red are closer to the Mackenzie river than Dawson city the Mackenzie river system will be used, and not the road.

Mr. HAMILTON (*Qu'Appelle*): The whole program is designed on about a five to seven year program. It is our hope that things will go well and the program will be completed in five to seven years. These exploration permits last for a period of six to nine years.

Mr. HARDIE: If at the end of six years they feel they want to get out of an area they will turn back the permits. There is no guarantee.

Mr. HAMILTON (*Qu'Appelle*): No. However, there is no guarantee about anything in this world. Do not be pessimistic.

Mr. HARDIE: I am not pessimistic.

Mr. SMITH (*Calgary South*): As the minister knows, in the province of Alberta they have a situation which has developed where a vast area under reservation is held by a limited number of companies. That situation was brought about by a necessity which I think a little foresight and commonsense might have avoided. There is a regulation which says that at the discretion of the minister under certain terms the lease can be extended for an additional period.

In view of the experience in Alberta, might I ask the minister if he is satisfied that we are not perhaps getting ourselves into a situation which might be similar, and that the discretion of one minister may not be the discretion of similar ministers in the future and, as a result of this discretion, large areas may be turned over. I am wondering whether or not the minister thinks there is the full control we should have?

Mr. HAMILTON (*Qu'Appelle*): I think the member has raised a good question. In the west we learned that there is no point in turning back the clock. The land has fallen into the hands of a few companies. It was with that thought in mind that I began to look at these regulations long before I discovered the fact that they handed over almost all the pools to the discovering company. I do admit that much will depend on the attitude of the department administering this, as to whether or not we fall into the same situation into which Alberta fell.

This comes down to the fact that if you have a certain regulation, and if a company comes in for a special concession, if you weaken and give way without being absolutely sure that the arguments they put forward are sound, then you open the dyke for a continual aggression on all the regulations which affect the public interest.

Without saying anything which will cause trouble to another government, I think it is a matter of general regret to all of us in Alberta and Saskatchewan, and so on, that so much of this land fell into the hands of so few companies. I think we should learn from that situation. I think the governments in Saskatchewan and British Columbia are trying to prevent that. I hope this government will always take the attitude that our regulations affecting the public interest should be watched and guarded, because if there is any break in the dyke by the minister or his department it is hard to correct the results.

Mr. SMITH (*Calgary South*): Would I be correct in assuming the basic assumption is that a lease will be extended greatly similar to that in Alberta? That is, it will be extended if the company has shown good faith and the only thing which has prevented their carrying on their operations is perhaps climatic conditions and problems of moving equipment and so on. Otherwise, there would be no extension.

Mr. HAMILTON (*Qu'Appelle*): Yes. We will be as fair as we can. They will have to show, however, good evidence that there are factors beyond their control.

Mr. HARDIE: In the old regulations after the initial six-year period the minister could, at his discretion, if the company had not spent the amount of its deposit in that period, give them another permit for three years. Under the new regulations they have extended the permit period to nine years but, at the minister's discretion, he can continue to renew these permits forever. Under the old regulations, after the ninth year that was an end of it. Under the new regulations the term is extended to nine years, but thereafter at the minister's discretion he can renew these permits for any length of time.

Mr. HAMILTON (*Qu'Appelle*): What regulation are you quoting there? I have it here. It is on page 8, clause 16 of the Territorial Oil and Gas Regulations.

Mr. HARDIE: That is right. Clause (3) says:

> The minister may, in his discretion, grant such other renewals for such periods and upon such deposits, terms and conditions as he may deem expedient.

Mr. HAMILTON (*Qu'Appelle*): I think that is in order to give some flexibility. If you have a company acting in good faith, which has spent all the money required—

Mr. HARDIE: This refers to a company spending less than the amount required. Then you may at your discretion give an extension, and you can do this for three-year periods thereafter?

Mr. HAMILTON (*Qu'Appelle*): I know what this means. In the northern areas if a company, either through accident or weather, is unable to get its equipment in, or for some other reason cannot spend the money it has pledged, if there is real evidence it has tried to spend this money, I have the option of extending that for a further period.

Mr. HARDIE: Personally, I think this amendment giving the extra three-year permit period was a good thing. I think, however, in the case of extensions there should be the one extension as under the old regulations. That would give them twelve years in all to work that property. I think they should be able to do it within twelve years.

Mr. HAMILTON (*Qu'Appelle*): I do not think the twelve-year period is mandatory. You can extend it for another season.

Mr. HARDIE: You can extend it forever if you like.

Mr. HAMILTON (*Qu'Appelle*): Yes.

The CHAIRMAN: It is one o'clock. Our next meeting will be tomorrow morning at 11 o'clock. I know all of you are busy, but we would all appreciate it if you would try to arrange it so that we had a quorum tomorrow morning promptly at 11 o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 16

RECEIVED
MAY 14 1959
Library of Parliament

TUESDAY, MAY 5, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. R. G. Robertson, Deputy Minister; Mr. A. T. Davidson, Chief, Resources Division; Mr. J. C. Palmer, Resources Division; and Mr. G. W. Rowley, Secretary, Advisory Committee on Northern Development.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21113-6—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.
Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Latour,
Leduc,
MacInnis,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, May 5, 1959.
(17)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Coates, Doucett, Drouin, Fisher, Fleming (*Okanagan-Revelstoke*), Hardie, Kindt, Martineau, McFarlane, McGregor, McQuillan, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Roberge, Robichaud, Simpson and Stearns—19.

In attendance, of the Department of Northern Affairs and National Resources: Messrs. R. G. Robertson, Deputy Minister; A. T. Davidson, Chief, and K. J. Christie, and J. C. Palmer, Resources Division; G. W. Rowley, Secretary, Advisory Committee on Northern Development; G. M. Carty, Chief Administrative Officer; H. Fischer, Legal Division; T. R. Reid, Assistant Chief, Personnel Division; G. H. Davidson, Chief, Purchasing Division; and M. A. Currie and A. Martin, Administrative Officers.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

On Item 261, Departmental Administration, Messrs. Robertson, A. T. Davidson and Palmer were questioned on recent revisions to the Territorial Oil and Gas Regulations.

During the proceedings Mr. Arthur Smith, M.P., (*Calgary South*), not being a member of the Committee, by agreement of the Committee, sat at the table and participated in the questioning.

Continuing on Item 261, Messrs. Robertson and Rowley were questioned briefly on the objectives of the department under its over-all policy of national development and northern development.

At 12.53 o'clock p.m. the Committee adjourned until 9.00 o'clock a.m. on Thursday, May 7, 1959.

Eric H. Jones,
Clerk of the Committee.

21113-6—1½

EVIDENCE

TUESDAY, May 5, 1959.
11:00 a.m.

The CHAIRMAN: Gentlemen, I see we have a quorum. I have just been advised that the minister will be 20 minutes late in arriving. If it is satisfactory to you we could proceed with the discussion of the oil and gas regulations. The deputy minister is here with his officials and I am quite sure they will answer any questions you may wish to ask.

Mr. HARDIE: I think that the committee is interested more in the changes than in going through the whole of the regulations, clause by clause, and I would suggest that we start out with the order in council dated August 27, showing the changes.

The CHAIRMAN: August 27?

Mr. HARDIE: August 27, 1958.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): August 7.

Mr. HARDIE: It is dated August 27. August 7 then. Let us just take these changes.

Mr. ROBERTSON: The date of publication was August 27, and I think the order in council was on August 7.

Mr. HARDIE: To save time, I think we could take this clause by clause.

Mr. MCGREGOR: Are there any copies of this document?

Mr. HARDIE: There are of the Territorial Lands Act. I have the number of the clause.

Mr. A. T. DAVIDSON (*Chief Resources Division*): There will be more copies available.

The CHAIRMAN: There will be more copies of the revisions available very shortly, gentlemen.

Mr. HARDIE: I notice in clause 1 there are some amendments in the interpretation section. I wonder if the deputy minister or Mr. Davidson could tell us the reason for the amendments in clause 1 of the schedule?

Mr. ROBERTSON: Mr. Chairman, with regard to the insertion of "'Chief' or Chief of the Mining and Lands Division;" this was in substitution, as I recall it, for the branch director in the previous regulations. This was simply for administrative convenience. It was thought that with the growing activity in this field it would be more efficient to have the chief of the actual operating branch take over a good many of the functions.

With regard to the technical points, perhaps, I could ask Mr. Davidson to deal with the reasons in those things.

Mr. HARDIE: "Cubic foot of gas" is the first, I think.

Mr. DAVIDSON: I would think it is a standard definition of "cubic foot of gas".

Mr. HARDIE: As a matter of fact, is it any different from what it was before, except those additional words in the paragraph?

The CHAIRMAN: It should not be.

Mr. HARDIE: I think it is the very same thing, is it not?

Mr. DAVIDSON: I am sure the intent would be much the same, anyway.

Mr. COATES: Mr. Chairman, would it be possible to have the minister explain the amendments to the regulations; let us go through them, and then, afterwards, we can have general questions asked of him or his officials as to why it was considered these amendments should be made?

The CHAIRMAN: Mr. Coates, Mr. Hardie is inquiring about each revision. I am sorry you have not yet got copies of these revisions, but you will receive them presently. However, you will find in the original oil and gas regulations which have been distributed, pretty much what Mr. Hardie is referring to, except for the changes.

Mr. COATES: I felt it might speed up the matter if they were all dealt with in that way.

Mr. HARDIE: I think it would speed up matters a great deal more, if taken paragraph by paragraph. That is the reason I suggested this way of doing it. As far as the definition of "cubic foot of gas" is concerned, the only change is that in the new regulations the word "absolute" is used after the words "square inch" in that definition. That is the only change.

Mr. DAVIDSON: This appears to be just a technical change.

Mr. HARDIE: A technical change?

Mr. DAVIDSON: Yes.

Mr. HARDIE: Paragraph 2(r), "Grid area". Is there any change in that, except just a change in the wording? Is the meaning any different now of "grid area" from what it was under the old regulations?

Mr. DAVIDSON: This was just drawn up by the surveyor general to clarify it somewhat. There is no basic meaning change; there is no change in meaning.

The CHAIRMAN: Gentlemen, this is on the second page of the oil and gas regulations.

Mr. ROBICHAUD: I understand there is no change in the definition outside of the wording "shortest conformable chords" in the fourth line.

Mr. DAVIDSON: There is no change in meaning, as I understand it.

Mr. HARDIE: In item 1(4), paragraph (s) is revoked?

Mr. COATES: What is the reason for that?

Mr. ROBICHAUD: Mr. Chairman, I think it is paragraph (s) of section 2 which is being revoked, according to the change.

Mr. HARDIE: "Prescribed form" is the wording in the schedule. That is changed or revoked, apparently.

Mr. ROBICHAUD: Revoked?

Mr. DAVIDSON: I think you are speaking of section 2 subparagraph 1(s).

Mr. HARDIE: In this order in council, P.C. 1958-1101, it is No. 4.

Mr. DAVIDSON: Yes.

Mr. HARDIE: Paragraph (s) of section 2 of the said regulations is revoked. Could you give us the reason for that?

Mr. DAVIDSON: This applies to the half grid area.

Mr. HARDIE: No, no, "prescribed form". As a matter of fact, I do not think it actually makes any difference.

Mr. DAVIDSON: Apparently, we are not reading from the same regulations.

Mr. ROBICHAUD: Before we proceed further, Mr. Chairman, is this an amendment to the order in council P.C. 1954 dated November 18, 1954?

Mr. DAVIDSON: This applies to the section on half grid area. It was revoked because it was not necessary for the purpose of clarity of meaning.

Mr. HARDIE: That is the half grid area?

Mr. DAVIDSON: Yes, and it was not necessary for the same meaning.

Mr. HARDIE: The same meaning?

Mr. DAVIDSON: According to the surveyor general, it was not necessary to provide the same meaning.

Mr. HARDIE: It makes no difference to the regulation?

Mr. DAVIDSON: No.

Mr. HARDIE: In regard to No. 5 I do not think there is any change to speak of there.

I think we can move on from that. That refers to the monument, post or peg around the leased area. I do not think there is any real change there.

Mr. ROBERTSON: No, there is no real change.

Mr. HARDIE: "Oil and gas lease", section 2 of the regulations:

> A licence to search for and to win, oil and gas, but no accumulations of bitumen naturally occurring at or on the surface.

Actually there is no real change to the old regulation. They include bitumen, bituminous sands, shale and so on. They define it more particularly under the old regulations than they do now.

Mr. ROBERTSON: Mr. Hardie, I think Mr. Palmer of our oil and gas division could throw some light on this.

Mr. J. C. PALMER (*Head, Oil and Gas Section, Resources Division*): I think that refers to the section of the old regulations dealing with substance. It was changed by our legal division because of a decision by the Supreme court of Canada on what an oil and gas lease means. It is not a lease within the ordinary term; it is, rather a licence.

Mr. HARDIE: But it was actually in the old regulations?

Mr. PALMER: Not as an oil and gas lease, no; not as the term "oil and gas lease" is understood.

Mr. AIKEN: Would you say that apparently this particular change was a structural change in the meaning of what an oil and gas lease means?

Mr. PALMER: In the light of the Supreme Court decision, yes.

Mr. ROBICHAUD: Then it says that section 8 of the said regulations is revoked and there is a substitution therefor. Is that the only change in the wording—one says "may be", while the other says "shall be"? I am referring to section 8.

Mr. PALMER: The words following "waste", down to the little "i", were considered redundant by our legal division.

Mr. HARDIE: No change?

Mr. PALMER: No change. It just simplifies that definition of "waste".

Mr. HARDIE: Perhaps, to save time, the officials could tell us where there is a change. We will start from the first change. What are the real changes in the regulations?

The CHAIRMAN: You have already covered some, Mr. Hardie; you do not want those repeated. Will you carry on from where you left off?

Mr. HARDIE: Yes. There is no change up to there?

Mr. PALMER: No. There is no substantive change in section 3.

Mr. ROBICHAUD: There is apparently a change in subsection (1) of section 9. Just where do we stop?

Mr. HARDIE: Is there any substantial change in section 5?

Mr. PALMER: No.

Mr. HARDIE: Is there any substantial change in section 8?

Mr. PALMER: No.

Mr. HARDIE: Is there any substantial change in subsection (1) of section 9?

Mr. PALMER: No.

Mr. HARDIE: Subsection (1) of section 10?

Mr. PALMER: No.

Mr. HARDIE: It says it is "revoked and the following substituted". There is no real change?

Mr. PALMER: There is no real change. Two or three words have been taken out.

Mr. HARDIE: Subsection (2) of section 10?

Mr. PALMER: No; that was just taken from one place and put in another. There is no change.

Mr. HARDIE: Subsection (1) of section 14?

Mr. PALMER: No, there is no substantial change there.

The CHAIRMAN: Do you want any other changes, Mr. Hardie? Are you going to skip section 11?

Mr. HARDIE: I beg you pardon?

The CHAIRMAN: You were on section 10.

Mr. HARDIE: I was on section 10. There is no change in section 11, anyhow.

The CHAIRMAN: That is all right. I just want it on the record.

Mr. HARDIE: I am just taking the changes as they appear in the order in council.

Mr. ROBERTSON: Mr. Chairman, just to clarify this mateer: as I understand it, when Mr. Hardie refers to the numbered sections, it is the numbered sections under the old regulations that he is referring to?

Mr. HARDIE: Yes. I think they pretty well correspond with the new regulations until you come to section 33, or 34—something like that.

Mr. ROBERTSON: What I mean is, you are referring to sections in the substantive regulations and not to sections in the amended regulations?

Mr. HARDIE: Yes. Is there any change in subsection (1) of section 14?

Mr. PALMER: No substantial change.

Mr. HARDIE: Subsections (4) and (5) of section 14?

Mr. PALMER: Yes; in subsection (4) it says, "At least thirty days notice..." It was, "At least ninety days notice...". We have cut it to 30 days.

Mr. COATES: Why is there this limitation?

Mr. PALMER: To give us time to advertise, and for the companies to evaluate the land as they see fit. We did give them 90 days, but they complained because they said it was too long and they would lose interest in that period.

Mr. COATES: I see.

Mr. HARDIE: Is there any change in subsection (5)?

Mr. PALMER: Yes; it used to be that nobody could apply until 30 days after the date of the sale. Subsection (5) now says they may apply the next day.

Mr. HARDIE: They may apply for what?

Mr. PALMER: An oil and gas permit on any land that is not bid on at the sale.

Mr. DAVIDSON: This is in the case where oil and gas permits are put up for auction and there are no bids on certain ones. They may be applied for the next day; they can go in for exploration as quickly as possible, if no one bids.

Mr. COATES: This is subsection (5) in the former regulations?

Mr. PALMER: In the former regulations it was 30 days after the date of sale.

Mr. DAVIDSON: It is now the next day.

Mr. HARDIE: The next one is section 15. That is revoked. That is the survey of permit area. I think that is included in another section of the new regulations, is it not?

Mr. PALMER: Yes.

Mr. HARDIE: There is no change?

Mr. PALMER: Actually, a survey of a permit is not required; but part of those survey instructions are included in another section.

Mr. HARDIE: Section 16 is revoked and there is a substitution. What is the change in section 16, and why?

Mr. MCGREGOR: Mr. Chairman, are there any more copies of the order in council? The only one I have is the 1957 one, the old one.

The CHAIRMAN: Have you page 8 there?

Mr. MCGREGOR: You are looking at another document, altogether, to the one I am looking at.

The CHAIRMAN: There will be more copies available in a few minutes.

Mr. MCGREGOR: Evidently you are looking at the new order in council.

Mr. HARDIE: I think we all received it in the mail the first day the committee sat.

Mr. ROBERGE: We did receive the consolidation.

Mr. HARDIE: Yes.

Mr. DAVIDSON: The import of this revision to section 16 is that the term of the permit is extended for three years over and above what it was before.

Mr. HARDIE: Under the old regulations, a company receiving a permit put up 30 cents for the first three years. When they spent that amount of money, they then applied for another permit and they were given an additional three-year period; is that right?

Mr. DAVIDSON: Yes.

Mr. HARDIE: Under these regulations, he spends the 30 cents the first year, and the 30, 40 and 50 cents the following three-year period, in each year—30 cents the first year, 40 cents the second year, and 50 cents the third year; then 50, 50 and 50 cents for the next three years—that is, the seventh, eighth, and ninth years—and then he applies for a further permit. As you say, it extends it for three years. But as I understand it—and you may correct me if I am wrong—under this new section, after the ninth year, the minister may give an extension if the company has not spent the required amount of money; he can give extensions one after another for a number of years.

Mr. PALMER: That is in clause C.

Mr. HARDIE: That is right.

Mr. PALMER: At the end of the last year, if the permittee has not spent this money, the minister may issue further renewals up to a total of nine years. He may do that.

Mr. HARDIE: At the end of the six years?

Mr. PALMER: At the end of six years, under section C, if the permittee has not spent the money. Under section B he shall; but under section C he may give the company a further permit of three years.

Mr. HARDIE: He may; that is right.

Mr. PALMER: There is nothing mandatory. He may issue it if the permittee has not spent all his money; he may give him a renewal for one year.

Mr. HARDIE: It says in subsection (3):

> The minister may, in his discretion, grant such other renewals for such periods and upon such deposits, terms and conditions as he may deem expedient.

Mr. DAVIDSON: Assuming he may grant further renewals under clause C, they should be for the same period of the permit. If the permittee does not expend the money, the minister may renew; and under subsection 3, provided application has been made to the minister, he may still renew beyond the last year of the permit.

Mr. HARDIE: He can call for a further deposit, let us say, for a one-year period, and make certain conditions; he may say, "If you spend 50 cents an acre this year, we will give you an extension of one year"; and at the end of that year if the company has not spent it, he may do it again. Under the old regulations he could do this once; he could give a one-year extension, and that was it.

The CHAIRMAN: That is what the minister said yesterday.

Mr. ROBICHAUD: Subsection 3 of section 16 gives the minister powers which he did not have under the old regulations.

The CHAIRMAN: That was covered pretty well yesterday by Mr. Hardie's questions.

Mr. HARDIE: We really did not get an answer to that at all yesterday. Section B of the old regulations is the same as section C of the new regulations except that in the old regulations it provided that if the permittee has expended in the last three years of the permit, less than the amount of his deposit in the three years, the permit may, in the discretion of the minister, be renewed for a further three years; and that is it. He can extend it for three years. That is the length of the extension that the company can get. But under the new regulations the minister, in the same case, may renew it a number of times; he can renew it for 99 years.

Mr. COATES: Are the amounts to be expended by companies the same?

Mr. HARDIE: Why give the minister the power to continue the granting of extension after extension?

Mr. PALMER: This was brought up by the Canadian Petroleum Association at the last meeting we had with them. They said we ought to get tough with any oil company which wanted an extension beyond nine years. The association felt that nine years was long enough. But if they happened to have a big program under way, or if they were going into drilling, we could ask them to put up a deposit of $5 an acre on our own terms and conditions, not on the suggestion of the oil company.

Mr. HARDIE: The oil companies, as you stated, think that nine years is enough. They do not believe in further extensions.

Mr. PALMER: Not too much.

Mr. HARDIE: Under the old regulations that is exactly what it was, nine years, with no extensions.

Mr. PALMER: Six.

Mr. HARDIE: Six years, if they spent the money; but if they did not spend the money in the last three years they could get an extension for an additional three years, but that was all.

Mr. PALMER: Under the old regulations they got a term of three years. That was the first permit. Then under section 16(2)(a), if the permittee has expended during the three years an amount equal to the amount of his deposit for those years, his permit shall be renewed for a further three years. If the permittee applies, or if the permittee has expended during those three years an amount less than the amount of his deposit for those years, the permit may be renewed for a further three years.

Mr. HARDIE: For three years.

Mr. PALMER: There is the word "or" in there; it shall be renewed for three years, or it may be renewed for three years, but no further than three years.

Mr. HARDIE: All right. But regardless of that, you said a minute ago that the oil companies think that nine years is enough. Under these amendments you are giving the minister power to grant extensions forever.

Mr. PALMER: The Canadian Petroleum Association did not look at it that way.

Mr. HARDIE: Well, I do. The minister may in his discretion grant such renewal for such periods and upon such deposits, terms and conditions as he may think expedient.

Mr. ROBERTSON: I think in principle and theory that Mr. Hardie is right. This does provide a wide open discretion. But as I understand it the purpose is simply to give greater realm for discretion. Particular requirements may arise under peculiar circumstances such as where particular operations are under way, or major exercises are going to be carried out, which cannot be carried out within, let us say, three years, because of the problem of transportation, climate and the short time of the work season. It is simply to give a kind of flexibility which requirements in certain areas in the north seem to make necessary; but it does not mean that any minister would ever consider giving indefinite extensions. In theory it may be right, but in practice it would not happen.

Mr. HARDIE: To be sure that it did not, why could not the minister be given a discretion after the nine year period, to give an extension of three years, and that is it. I think three years should cover it.

Mr. ROBERTSON: In some cases three years might not be adequate.

For example, the people having concessions in the Eagle Plain and Peel Plateau areas which have been referred to, have made the point—and we are convinced, so far as validity is concerned—that in a particular year or season, possibly a movement cannot be made, such as during the summer, or when the ground is not frozen. In view of the problem of moving at certain winter seasons because of the nature of the ground or other reasons which might intervene, there may actually be a very short time within which a move may take place to carry a program one stage further. And having in mind the fact that oil and gas areas are so likely to be found in the far north, in the Arctic islands, it was felt that a rigidity even of three years, which may sound like a long time, might be too great a rigidity in some cases.

Mr. HARDIE: Is the department considering an amendment to the regulations to look after everything north of seventy degrees?

Mr. ROBERTSON: That is right. It will give an additional three-year period; but it was felt that this rigidity might operate unfairly in some cases.

Mr. COATES: In order to give further protection to the lessee, having regard to the extenuating circumstances?

Mr. ROBERTSON: Yes, and provided that the minister will satisfy himself that the requirements are being carried out by the lessees.

Mr. COATES: And in the best interests of the country?

Mr. ROBERTSON: That is right.

Mr. COATES: There would not be any question of oil companies being granted these extensions in perpetuity?

Mr. ROBERTSON: Oh no.

Mr. COATES: Thus we are discussing hypothetical matters which may or may not arise.

Mr. ROBERTSON: That is correct.

Mr. MARTINEAU: Are these amendments to be made following representations made by the companies or representations made by the officials of the department?

Mr. ROBERTSON: These were adopted following an examination by the minister in August or September, 1957, as he indicated. Before they were put into effect there were discussions with the Canadian Petroleum Association. Throughout this it has been the practice to closely enter into discussion with the industry in order to be sure the changes in the regulations are realistic.

Mr. NIELSEN: Is it the intention to have further discussion with the Canadian Petroleum Association in respect of these regulations?

Mr. ROBERTSON: Yes. In fact, as the minister mentioned at the opening day, we expect to have discussion with them later on this month.

Mr. NIELSEN: And as a result of those discussions is it possible the regulations may be again altered before they are finally acceded to?

Mr. ROBERTSON: Yes. I would think we are not likely to arrive at complete finality on these at any point. The north presents particular problems which cannot all be known in advance.

Mr. ROBICHAUD: In other words, this is just a continuation of a revision of existing regulations, which has been done in the past, is being done now and will be done in the future? It is a continuation of the revision of regulations?

Mr. ROBERTSON: There certainly will be revisions from time to time.

Mr. ROBICHAUD: As there have been in the past?

Mr. ROBERTSON: Yes; there have been in the past.

Mr. NIELSEN: When was the last revision?

Mr. HARDIE: April 24, 1957. That was the last one before August 7, 1958.

Mr. COATES: Mr. Chairman, should we not let the officials give the answers?

Mr. PALMER: The last one was August 7, 1958. There was one prior to that on April 11, 1957. The one prior to that was November 18, 1954.

Mr. ROBICHAUD: Mr. Palmer, a while ago you mentioned that the permittee may be asked for a further deposit of $5 if he wants a further extension. Is this shown anywhere in the regulations?

Mr. PALMER: No. That is under subsection 3. It is hypothetical. The minister can ask for what he wishes as a deposit:

> The minister may, in his discretion, grant such other renewals for such periods and upon such deposits, terms and conditions as he may deem expedient.

Mr. ROBERTSON: I think what Mr. Palmer meant is that, in the case of a discretionary extension, in a particular instance the minister might impose very extensive conditions if he wished to. It is an open-ended discretion.

Mr. HARDIE: He can charge 5 cents or $5?

Mr. ROBERTSON: Exactly.

Mr. HARDIE: On this permit business, suppose a company over the nine-year period had grouped its permits and had spent, say, five times the amount of money that was laid down in the regulations; say it was supposed to spend $3 an acre in nine years but actually spent $9 an acre in nine years, could it still hold those permits after the nine year period?

Mr. PALMER: No. He gets a lease at the end of nine years.

Mr. AIKEN: Before we leave this matter of the term of the permit. I would like to be sure I am reading it correctly. The previous regulations provided for an initial permit period of three years, but it could be extended for a further three years under two different conditions, (a) where he had expended the amount of his deposit, in which case it must be renewed; and (b) where he had not, in which case it could be renewed. In any case, however, the total term of the permit under the previous regulations was six years.

Mr. PALMER: That is true.

Mr. AIKEN: Is the combined effect now of section 16 (2) (a), (b) and (c) that it can be extended for a total of nine years?

Mr. DAVIDSON: That is right.

Mr. HARDIE: Section 17 is revoked, but I think it is included in another section?

Mr. PALMER: Yes.

Mr. HARDIE: The only change in it would be that the fee of $100 is now reduced to $25?

Mr. PALMER: Yes. It is changed from $100 for a transfer of eight permits to $25 for each permit.

Mr. COATES: What is the reason for the change?

Mr. PALMER: There were individuals holding a single oil and gas permit, and on transfer they were paying $100, whereas somebody holding eight permits could also transfer for the same amount of money. In order to equalize that it was changed to $25 a permit.

Mr. HARDIE: Section 18 is revoked.

Mr. PALMER: There is the addition of the words "for the succeeding period of eighteen months".

Mr. HARDIE: In section 20 the only change is that after the second renewal, that is in the seventh, eighth and ninth year, the company will spend 50 cents for each acre rather than 30 cents for the first year and 40 cents for the second, and 50 cents the third year.

Mr. PALMER: It just carried on the same deposit as was in the sixth year—50 cents.

Mr. COATES: That would be a material change.

Mr. PALMER: The period was extended for three years and the deposit is carried on for each year.

Mr. COATES: It would guarantee a much larger amount of money being spent in the area.

Mr. ROBERTSON: There is a firm amount of expenditure over a further three years.

Mr. SMITH (*Calgary South*): Mr. Chairman, I wonder if I might be permitted to ask a question. I expect to be put on this committee today; at present I am not.

The CHAIRMAN: Is it agreed? Agreed. Go ahead.

Mr. SMITH (*Calgary South*): May I ask whether or not you have as yet invited any of the representatives of the industry to attend these committee hearings? Has an invitation been extended? If it is not to be extended to the Petroleum Association, will we have representatives of the industry before us?

Mr. NIELSEN: That was Mr. McQuillan's resolution of the other day.

The CHAIRMAN: Yesterday, on behalf of the committee, I extended an invitation.

Mr. SMITH (*Calgary South*): So we can be assured there will be some representatives of the industry here, whether or not we have the C.P.A.

The CHAIRMAN: If they wish to appear they may do so.

Mr. SMITH (*Calgary South*): May I ask whether or not there is any sizable disagreement, between the industry and yourself under the terms of the permit, which has not been compromised? Are we now reasonably close to them? If not, what are the differences? Are the differences in respect of the extension of the term of the permit?

Mr. DAVIDSON: There are no recent differences of which I know between the industry and ourselves regarding the length of the permit.

Mr. HARDIE: Section 23A is self-explanatory. The actual expenditure on a deep test well now can be developed and applied against the whole of the permit area.

Mr. PALMER: That is correct.

Mr. HARDIE: Is there a substantial change in subsection 1 of section 24?

Mr. PALMER: There is no substantial change. It is just reworded.

Mr. HARDIE: Is there any substantial change in section 30?

Mr. PALMER: We added in the words "final years" in order to get the reports after the ninth year.

Mr. ROBICHAUD: Is there a change in the wording of section 31?

Mr. HARDIE: The word, "chief" instead of "minister".

The CHAIRMAN: Mr. Robichaud, would you be sure to obtain an answer from the witnesses when you make an assertion?

Mr. PALMER: There is no substantial change except the word "Chief" for the word "Minister".

Mr. ROBICHAUD: Subsection 2 has been added. That is new?

Mr. PALMER: Yes; that has been added.

Mr. ROBICHAUD: What about subsection 3?

Mr. DAVIDSON: This is a standard provision in oil and gas regulations which requires that they obtain a lease before the actual proving up of a field.

Mr. HARDIE: Before the actual proving up of a field?

Mr. DAVIDSON: Yes.

Mr. SMITH (*Calgary South*): In other words, in the terms of the permit you also then go into the question of well spacing after the lease has been granted and operation has commenced? That is simply all it amounts to?

Mr. DAVIDSON: Yes.

Mr. COATES: Is this different to what it was in the former regulation?

Mr. DAVIDSON: It appears this question had not been taken care of in the former regulation—the question of drilling further wells once a discovery had been made.

Mr. HARDIE: Was this not provided for in the section dealing with drill spacing?

Mr. PALMER: That is section 75 in respect of well spacing. Actually the minister has discretion as to well spacing under that section. That is for development costs. There is a difference in that and in a discovery well; then there is the further operation of an extension of that discovery.

Mr. HARDIE: There was nothing on that in the old regulations?

Mr. PALMER: No.

Mr. COATES: I am wondering whether or not it could be explained? What is the difference in the position of a company under the old regulations and the new, in respect of this section?

Mr. DAVIDSON: It appears there was an oversight in the old regulations and it was not provided for. Normally we would not want a permittee to make a discovery of oil and gas and immediately go ahead and drill wells around that discovery because it might not be developing the reservoir the way we wanted it.

Therefore there must be a provision that certain wells will not be drilled within a certain distance of the first well until the field spacing is set.

Mr. COATES: This would be a very important aspect.

Mr. DAVIDSON: When you get to the question of developing a field, this matter was apparently overlooked.

Mr. AIKEN: This had nothing to do with section 75; and section 75 has not, in fact, been amended.

Mr. DAVIDSON: No, it has to do with the different stages of development in the field.

Mr. HARDIE: The next section seems to be the one where the big change is—section 33 to, I think, section 41. I think it has to do with the 50 per cent as against the old 35 per cent. The other day Mr. Palmer had a description of two oil fields on the board. He had two blue cards made up.

Mr. DAVIDSON: Do all the members of the committee understand what grid areas mean? The grid areas are simply a survey method. Since there is no survey in the Northwest Territories, it is a method of applying a type of grid to the land to get something very close to sections on the prairies. There is no actual survey on the ground, but the grid is supplied by maps and by aerial photographs to provide a basis similar to the grid in the prairies by section surveys. The grids are not always exactly sections in size; some will be slightly larger than sections.

Mr. HARDIE: What is the maximum?

Mr. DAVIDSON: Around 800 acres,

Mr. HARDIE: That is the maximum grid area?

Mr. DAVIDSON: That is the maximum area of a section in a grid. A maximum grid area is about 63,000 acres.

Mr. ROBERTSON: As Mr. Davidson has said, the grids are based on map coordinates. There are so many sections in each meridian, and as they converge, they get smaller going farther north, and adjustments are made.

Mr. DAVIDSON: There are no correction lines as in the prairie survey, which permit all sections to be the same size.

Mr. HARDIE: The other day we had that one and another one. I think one was called a normal or an average oil field.

Mr. ROBERTSON: I think that is the smaller one which Mr. Palmer is putting on now.

Mr. HARDIE: That is the normal size?

Mr. ROBERTSON: Yes, the average pool.

Mr. HARDIE: What is the area of that pool?

Mr. PALMER: It will cover about seven miles by two miles.

Mr. DAVIDSON: Approximately fifteen square miles.

Mr. HARDIE: Now, what area would a company apply for, going to lease on that area? Say, they were going to lease now, would they take the whole grid area?

Mr. PALMER: Under the revised regulations they could get 50 per cent on a corridor basis.

Mr. HARDIE: I understand that part of it. I am not speaking of just the pool, because the company could not just take the pool; they have to take this in either a square lease or a rectangular lease. In the first place, what would he take, by choice?

Mr. DAVIDSON: He can choose a pattern of three by five sections; this is the largest. He would choose this pattern and attempt to apply it on this pool in order to get as much of the area in question as possible.

Mr. HARDIE: That is under the new regulations?

Mr. DAVIDSON: Yes.

Mr. HARDIE: He would take the choicest part he could, of course, and the rest would be returned to the crown. Will you show me what would happen?

Mr. ROBERTSON: He can get up to 50 per cent of the total grid area.

Mr. HARDIE: 50 per cent of the total grid area?

Mr. ROBERTSON: That is right, but leaving certain requirements in regard to corridor and so on.

Mr. DAVIDSON: He will choose his first three by five section in such a way as to blanket the most attractive part of the whole, if he knows it; but the next piece he picks may either be a corridor in width from the first one, or it must corner the first one. It cannot lay along the boundary. It may corner like a checkerboard. In this case cornering would not do him much good. He would leave the mile corridor and take his next piece, and the mile territory would revert to the crown.

Mr. HARDIE: What would be the percentage the government would get under this system?

Mr. DAVIDSON: It looks like approximately a quarter or a third.

Mr. HARDIE: About 25 per cent?

Mr. DAVIDSON: Yes.

Mr. HARDIE: That is under the new regulations. Now, under the old regulations he could take the whole pool.

Mr. DAVIDSON: He could take 35 per cent of the grid area, and he would choose that.

Mr. HARDIE: Let us see what that looks like.

Mr. PALMER: Under the old system you must understand he does not have to take the 35 per cent in a block, although he could if he wished. He could take the two sections and come down and take two more, and carry on until he blanketed the field.

Mr. HARDIE: But he could not take over 35 per cent of the whole of that map area?

Mr. DAVIDSON: No. The whole grid area is 60 sections, so he would have approximately 60 to 70 square miles in there, and he could take 35 per cent of that. We have figured a pool would be 15 square miles, and in that case he would get all the pool, if he knew where it lay.

Mr. HARDIE: He would still have to do it in rectangular sections?

Mr. DAVIDSON: Yes. He would jump back and forth and pick up as much as he needed.

Mr. HARDIE: Now, say, in these large pools that have the same size grid area—did you say 60 square miles?

Mr. PALMER: Nearly 100 square miles—63,804 acres.

Mr. DAVIDSON: This is a larger grid.

Mr. ROBERTSON: In the southern areas the grids are larger because the meridians are farther apart.

Mr. HARDIE: This just happens.

Mr. ROBERTSON: Yes, this is taken as an example.

Mr. HARDIE: You are not corresponding or trying to compare the small pool to the large pool in the same area, say north or south?

Mr. ROBERTSON: A small pool can lie in a large grid or a large pool could straddle two or three small grid areas.

Mr. HARDIE: All right; let us say it is 100 square miles. Under the new system we can take up to 50 per cent of the grid area in sections five by three or four by four.

Mr. DAVIDSON: As to how he would choose it becomes complicated.

Mr. HARDIE: Yes, but I would like to see how this works. It was not very clear the other day.

Mr. DAVIDSON: One reason they must be back is because there is a corridor around the edge of the grid; he cannot take that red line.

Mr. HARDIE: Do you mean in applying for leases he can choose the four by four in one case and the five by three in another?

Mr. ROBERTSON: As long as he is within 50 per cent of the total grid area and does not impinge on the corridor at the edge.

Mr. HARDIE: Personally, I thought when he chose the four by four, he had to go through with it.

Mr. ROBERTSON: No, he can choose the four by four and the five by three and he does not have to leave the same area between? Do you mean all he has to leave is a corridor? How wide is it?

Mr. DAVIDSON: A section wide.

Mr. HARDIE: That is a way out. Let us now see what would be turned back to the government in that area.

Mr. ROBERTSON: 50 per cent of the total grid area.

Mr. HARDIE: Now, under the old regulations what could happen? How much would you say the company could get of that pool and how much would be turned back to the crown under the old regulations?

Mr. DAVIDSON: It would seem about half the pool would revert to the crown.

Mr. HARDIE: At least half? I would say more than half, under the old regulations, would revert to the crown.

Mr. DAVIDSON: The major difference is he will choose the most prolific part of the field. He will choose the area in which the producing horizon is thickest and in which producability is greatest.

Mr. HARDIE: He could do that under the new regulations.

Mr. DAVIDSON: Yes, but if he chooses the highest of the producable area, crown land is liable to lie quite close. He is limited to the size of lot he can choose, and in the 35 per cent he is not limited, and therefore can blanket the producible area.

Mr. SMITH (*Calgary South*): I think, Mr. Chairman, we should also point out under either circumstance the risk that he undertakes in determining his pooly, because of the experience on the simple checker-board system that is practised. Invariably he may keep in mind the terms under which he has to go, but this is exploratory drilling, and it is such that he has only the roughest idea, under some circumstances, what that is the pool area.

We make it look much too easy by having a pool up on the board like that, and assessing the area that he can lease on, because it is quite conceivable, based on the time element we have, the type of drilling and the area that he is in, that he may make a very poor guess.

Mr. HARDIE: It is quite possible too, Mr. Smith, that a man working on a small pool could conceivably have spent as much as another man had on a big pool before he went to lease.

Mr. SMITH (*Calgary South*): The point is well taken; but you must, at the same time, remember that he is going to assess the area that he is going to take based on the geological knowledge that he has at the present time. For that reason, he will want to space his area to suit the area that is correct. I suppose there is going to be an element of guesswork under any circumstances.

Mr. HARDIE: Under either system I suppose there is that risk, the chance that he is taking in going to lease, and the area that he chooses.

Under the old regulations, that is being developed here on the board. In the case of a small pool he could, if his guess is right, cover a large portion of the pool—if his guess is right. At the same time though, he could have spent, perhaps, as much money as may have been spent on the larger pool. For taking that risk he has a chance to guess at 35 per cent of the pool.

In the case of the large oil field, under the old regulations, the government received a large portion of that pool than under the new regulations, or just as large.

The CHAIRMAN: That is a question, is it, Mr. Hardie?

Mr. HARDIE: As a matter of fact, Mr. Davidson said a moment ago that he figured around 50 per cent, and I figure 60 per cent. However, in the case of a large pool there is no difference, and in the case of a small pool there is a chance that under the old regulations he could get the large portion of the pool, if he guessed right, as Mr. Smith pointed out.

Mr. ROBERTSON: That is correct.

Mr. HARDIE: His investment is as great.

Mr. SMITH (*Calgary South*): Mr. Chairman, this regulation is obviously going to be flexible, in a sense,—based on experience in the field,—because we are looking at an area in which we have not as yet discovered oil, and we do not know yet what we are talking about in sizes of pools.

Obviously if the department feel the crown has suffered in any way from being overgenerous, based on the history that we hope will eventually occur, you will certainly not be inflexible to make further amendments.

You have already conceded this is obviously going to be an experimental area, one in which you are looking at a completely new field.

Mr. HARDIE: As far as I see it, the public interest is really no more protected under these regulations than under the former regulations, regardless of what the minister may have said the other day.

Mr. SMITH (*Calgary South*): That is a matter of opinion.

Mr. HARDIE: That is right; that is right. I am taking this stand from the way in which the old regulations as against the new were put on the board this morning.

In respect of these sections 33 to 41 which were revoked, this was the major change? I do not think there was any substantial change in the other amendments that follow. Was there any amendment to section 36? Oh yes, I see they were all revoked. Is there a new section 36?

Mr. PALMER: The new section 36 takes care of the surveys.

Mr. HARDIE: Is there any substantial change in that section?

Mr. PALMER: They want to reduce the need for survey, and they are now surveying only a target area.

Mr. HARDIE: I see, instead of the whole grid area.

Mr. DAVIDSON: The only important thing is the site of the well. The boundaries of the leased area are not very important because oil migrates underground.

Mr. SMITH (*Calgary South*): It simplifies and reduces the cost of surveying.

Mr. DAVIDSON: It reduces your cost of surveying.

Mr. HARDIE: Section 37.

Mr. SMITH (*Calgary South*): Mr. Chairman, the minister made a reference yesterday to unitization. May I ask whether there has been any consideration of or any introduction into this legislation which may yet be ahead, or which includes a reference to, unitization?

Mr. DAVIDSON: There is no reference to "unitization" except as it is implied in the engineering sections. No, there is no direct reference to it in these regulations. We, of course, do not contemplate any changes in this until we have had full discussions with the industry. There have been some discussions with the industry. There have been some discussions which suggest there should be greater powers of unitization in the regulations, to require unitization at certain times.

Mr. SMITH (*Calgary South*): Perhaps you may agree, through the Chair, it would be difficult to have discussions until such time as you know the circumstances under which your pool area has been defined, and such other geological information. It is difficult to talk about unitization in something you do not have.

Mr. DAVIDSON: Our major concern is not with unitization itself; but our major concern is that we have a good understanding with the industry that well spacing should be as wide as possible in order to cut costs of producing oil. This is to their benefit, producing lower cost oil, and it is to the general benefit to get oil into the markets.

Mr. SMITH (*Calgary South*): This also applies to the need of some flexibility in the hands of the minister.

Mr. DAVIDSON: Yes.

Mr. HARDIE: We are up to section 36, and there is now a new section 37. Is that not covered in the old regulations, the new section 37?

Mr. DAVIDSON: This is simply a matter of survey.

Mr. HARDIE: Was it covered in the other regulation? There is a change, I think.

Mr. DAVIDSON: I think we covered this a moment ago, when we said this was an attempt to simplify the survey needs.

Mr. HARDIE: That is section 37(b)?

Mr. DAVIDSON: Yes.

Mr. HARDIE: Section 42 of the old regulation is revoked and there is this substitution. Is there a very substantial change in that section?

Mr. SMITH (*Calgary South*): Is that section 42?

Mr. HARDIE: Yes.

Mr. DAVIDSON: I understand there is one change in this, and that is the revised regulations provided that where oil was discovered and there was a lease, the lease fee should be reduced if there was no market for that oil, or the oil or gas produced from it.

Mr. HARDIE: I think the new regulations mentioned if there was no market. Under the old regulations it falls within the minister's discretion as to whether it was due to the market or any other reason. The only thing is that they define the discretion in these regulations.

Mr. ROBERTSON: There is no discretion: it says, "shall be".

No, Mr. Chairman, I do not think that is correct. I think under the old provision there was no scope for discretion, as I read it. Section 41 says, "the rental shall be".

Mr. HARDIE: This is the rental section?

Mr. ROBERTSON: Is it not section 42?

Mr. HARDIE: The old section comes under "rental". This is the same section, "rental". The old section said, "shall be", did you say?

Mr. ROBERTSON: Yes, whereas the new section introduces an element of discretion in cases where marketability is not immediate, is that not correct?

Mr. DAVIDSON: That is right.

Mr. HARDIE: But, at the same time, under the old regulations, in subsection 2 of section 42, it says:

> Where a permitee incurs during the life of a permit expenditures on exploratory work in excess of the total amount of deposits required to be made under these regulations in respect of his permit such excess may be applied on account of the yearly rental of a lease or leases taken out of that permit area up to fifty per cent of such rental, until commercial exploitation commences on such lease.

Mr. ROBERTSON: That is correct, but that would only be of assistance in cases where a person was meeting with excessive expenditure.

Mr. HARDIE: That is right—"until commercial exploitation commences on such lease".

Mr. ROBERTSON: That is right. But that would only help, again, if he made an excessive expenditure; but now it helps him where he is not in that position.

Mr. SMITH (*Calgary South*): I think the department's position is sound in not insisting on development where markets present problems.

I wonder if I may also ask if there is anything in the same area, other than on the lease or rentals, which would prevent what happens in the principal oil producing province, increasing or pressuring the lessee into development beyond a point and to the extent that he is creating an area of over-production. This is one reference that is very feasible. Is there any other situation in which you have taken that into consideration? One example would be in the crown's well and forcing the crown's well to the extent it is over-developed. That might make the lessee act, when the economics are such as to indicate it was not in the common interest to do so. Is this the one example?

Mr. DAVIDSON: Generally, these regulations are more flexible than the principal ones on forced drilling. As they read now they allow more discretion as regards when drilling is required.

It is our intention, in meetings with the industry, to discuss this further because it is argued that one of the principal reasons for high cost oil in the west is the requirement of excessive drilling, which forces prorationing and low productivity of the well.

Mr. SMITH (*Calgary South*): Thank you.

Mr. HARDIE: Is there nothing in the regulations concerning production?

Mr. DAVIDSON: In what regard?

Mr. HARDIE: The minister said that in the face of certain market condition he could not force the companies to produce if there was not a market for that oil. Was there not something in the old regulations which covered that, or was there?

Mr. DAVIDSON: I do not think there is any such reference. I think the general answer on some of these things is that when these regulations were drawn up, some of the questions concerning actual producing fields were not considered.

Mr. HARDIE: There is nothing in these as far as the producing field is concerned, except this one exception that the minister made, on account of market conditions?

Mr. DAVIDSON: In section 101 of the old regulations it said:

> The minister may in his discretion fix and regulate the production and allowables from all wells or pools in order to effect economic production and the conservation of oil and gas.

Mr. HARDIE: That is the section to which I am referring. I thought there was some section in the old regulations which referred to production.

Mr. SMITH (*Calgary South*): I am sure Mr. Hardie will be the first to agree the only place you could permit it in written statutes would be by discretionary power, and opinions vary as to circumstances when this should be done.

Mr. HARDIE: Yes; they have discretion. I pointed out that under the old regulations the minister would have discretionary powers, while under the new regulations more of the detail of the discretion the minister has in that respect is laid down.

Mr. DAVIDSON: I am not sure to which sections you refer. However, the discretion in respect of when wells must be drilled and in respect of well spacing are very broad in the existing regulations.

Mr. HARDIE: What is the next change?

Mr. SMITH (*Calgary South*): Mr. Chairman, may I point out one thing. Mr. Hardie was confusing the old regulation:

> The minister may in his discretion fix and regulate the production and allowables from all wells or pools in order to effect economic production and the conservation of oil and gas.

Admittedly, the economics are included, but we should not confuse the conservation method with this.

Mr. HARDIE: Subsections (1) to (5) of section 43 are revoked. Is there any substantial change in that amendment?

Mr. PALMER: The royalty for the first three years has been reduced from 10 per cent to 6¼ per cent as an incentive for the companies. After three years it goes back to the original 12½ per cent. That has not been changed.

Mr. HARDIE: Except that there is a change of 3¾ per cent for the first three years in the royalties.

Mr. PALMER: Yes.

Mr. HARDIE: I believe in this committee yesterday the minister referred to a royalty of 50 per cent.

Mr. ROBERTSON: Not a royalty of 50 per cent.

Mr. HARDIE: The newspapers carried it as a royalty of 50 per cent.

Mr. ROBERTSON: The minister did not refer to a royalty of 50 per cent.

Mr. DAVIDSON: I do not know whether or not he did in this case, but the minister has in the past in the case of crown reserves.

Mr. ROBERTSON: The minister, on the first day of the committee, said in dealing with a 50 per cent of the grid area that the government could impose special conditions in disposing of that 50 per cent.

Mr. HARDIE: This was in reference to something he was supposed to have said yesterday.

Mr. ROBERTSON: I am sure he did not say anything about a 50 per cent royalty yesterday.

Mr. HARDIE: There is nothing about 50 per cent royalty in these regulations?

Mr. ROBERTSON: No.

Mr. HARDIE: The only difference is the 3¾ per cent in the first three years?

Mr. ROBERTSON: As to royalty; yes.

Mr. HARDIE: Is there any substantial change in section 44?

Mr. PALMER: That is a new section dealing with transfers of permits and leases.

Mr. HARDIE: They grouped them into one section?

Mr. PALMER: Yes.

Mr. HARDIE: Is section 44A new?

Mr. PALMER: Yes.

Mr. HARDIE: It is just the administration?

Mr. PALMER: Yes; the administration of the recording office.

Mr. HARDIE: It is the recording of the transfers?

Mr. PALMER: Yes.

Mr. HARDIE: Item 23 says that subsections (1) and (2) of section 46 of the said regulations are revoked. Is there any substantial change in section 46?

The CHAIRMAN: Are you passing over section 45?

Mr. HARDIE: There is no change in section 45.

Mr. PALMER: That section gives a wider grouping for oil and gas leases.

Mr. HARDIE: You have increased the acreage. A company or individual may group in one permit?

Mr. PALMER: Under one lease.

Mr. HARDIE: From 22,400 acres to 120,000 acres.

Mr. PALMER: That is correct.

Mr. HARDIE: A company now can group 187½ square miles under one lease, whereas under the old regulations they could only group approximately 35 square miles?

Mr. PALMER: Yes; that is another incentive provision.

Mr. HARDIE: For a large company.

Mr. PALMER: Large-scale operation.

Mr. SMITH (*Calgary South*): Not being a member of the committee I hesitate to ask a question. However, we are obviously just hitting—and I assume the committee must have agreed to it—the changes. As a matter of procedure, do you propose to provide an opportunity, when the industry officials are here, to examine some of the present sections? It certainly does not

follow necessarily that because they were there before they are necessarily correct. I am doing my best to jump with Mr. Hardie from one to another. I do suggest, while this policy is continued, there should be an opportunity to come back.

Mr. NIELSEN: That is the reason the witnesses are being called. This is the political phase. We will get back on the other with the witnesses.

Mr. HARDIE: There is no political discussion. We are discussing the changes, and the changes only, in the regulations.

The CHAIRMAN: I think our procedure is in order.

Mr. HARDIE: Certainly.

Is there any substantial change in section 47?

Mr. PALMER: There is no substantial change except that the word "offset" was changed. It did not mean offset. It meant development drilling.

Mr. HARDIE: What are the changes in sections 48 and 49?

Mr. PALMER: That was the result of the decision of the Supreme Court as to what a lease means.

Mr. HARDIE: A surface lease?

Mr. PALMER: We have now tied it down to a surface lease rather than just a lease which means something entirely different.

Mr. HARDIE: In the old regulations they had a surface lease section and a surrender lease section. Now you have only one section.

Mr. PALMER: They just changed the order and put the surface lease in, and then the surrender lease.

Mr. HARDIE: Is there any change in section 109?

Mr. PALMER: Actually, the only change in that was made in the legal division in order to put it in legal language, rather than the way it was.

Mr. HARDIE: There is no real change?

Mr. PALMER: No.

Mr. DAVIDSON: We do not think this section reads too well and we will discuss it with the industry in an attempt to clarify it. We do not think it is too clear.

Mr. HARDIE: I think the change in section 137 has something to do with the log book. Does it just amount to a rewording?

Mr. PALMER: There is no substantial change. They added one section.

Mr. HARDIE: There is really no change in section 145?

Mr. PALMER: No.

Mr. HARDIE: What about section 154?

Mr. PALMER: This section was rewritten on the advice of the legal division. Under the old section the minister's decision could be appealed to the Exchequer Court, but the advice of the legal division is that it could not be done. They changed it. Now the decision is made by the chief and the appeal is made to the minister.

Mr. HARDIE: There is no change in section 155?

Mr. PALMER: Section 155 provides that old permittees may, if they so wish, come under the new regulations.

The CHAIRMAN: Are there any further questions on the regulations? We will leave this open, as suggested, for further discussion.

Mr. HARDIE: In going through the regulations today the idea was that as the minister would not be here we would go through these now and when the minister can appear before this committee again we still have a few

questions. We reserved the right to ask those questions of the minister on his statement.

The CHAIRMAN: That will be in order.

Shall we leave item 261 for the time being and proceed to item 262? This is on page 54 of your estimates. This is the item on the Northern Research Co-ordination Centre, including a grant of $10,000 to the Arctic Institute of North America; and an amount of $5,000 for grants in aid of northern research subject to allocation by Treasury Board.

Mr. NIELSEN: Mr. Chairman, I would like to stay with the main item for a moment in order to inquire into a matter of concern to, I feel, all Canadians in respect of the objectives of the department in its over-all policy of national development and northern development. Is Mr. Rowley here?

The CHAIRMAN: Yes.

Mr. NIELSEN: Mr. Rowley, could you give the committee your candid views on the approach which has been taken in the development of Canada's north—and I am not being exclusively concerned with that area north of the sixtieth parallel—in so far as these policies have been directed toward social development as compared with resource development. A number of questions arise in my mind. Do you feel that we have been preoccupied, perhaps not exclusively but almost exclusively, with the very necessary and admirable social development that has taken place to the detriment of resource development? And perhaps you could expand on your views?

Mr. ROBERTSON: Perhaps this puts Mr. Rowley in a somewhat difficult position. Mr. Rowley really does not have a direct responsibility in the over-all plans of our departmental work. The functions which he handles particularly are to act as secretary of the Advisory Committee on Northern Development, to act as the coordinator and chief of the Northern Research Co-ordination Centre we have which attempts to coordinate northern research or, at least, to keep in touch with northern research that is being done, and in certain cases to provide grants to undertake research that is not being done by other organizations. Finally, he is responsible for the information centre which we run through the departmental library, which is a place where information on the north generally can be obtained. But Mr. Rowley does not have particular responsibility for the over-all plans of expenditures or of effort, and so on. Perhaps it would be a little unfair to ask Mr. Rowley to deal with this question. I do not know whether or not I can deal with it either. It gets into the range of policy.

Mr. NIELSEN: Before the deputy minister answers, Mr. Chairman, I would like to say that I am grateful for the explanation by him of the responsibilities of Mr. Rowley from an official point of view, but I am more interested in Mr. Rowley's personal views.

The CHAIRMAN: Mr. Rowley, what is your position with the department?

Mr. G. W. ROWLEY (*Secretary, Advisory Committee on Northern Development*): Actually I have two jobs. I am secretary of the Advisory Committee on Northern Development, which is a committe on a deputy minister's level, with the deputy ministers of all those departments concerned in the north. They meet approximately once a month to discuss major matters of policy. As secretary of that committee I prepare the papers for discussions and when the decisions of this committe call for certain action to be taken, I follow through. That is one of my jobs. It is rather distinct from my second job, which is running the Northern Research Co-ordination Centre, which reports through me to the deputy minister. It keeps in touch with all research in the Arctic and it supports or carries out research in fields which are not already the responsibility of any government department.

Mr. NIELSEN: Mr. Chairman, I was thinking particularly of the very candid fashion in which we were treated to the views of the personnel and officials of the Department of Mines and Technical Surveys, when we were examining their estimates. I was particularly impressed with the very candid way in which they answered questions, which really had nothing to do with basic expenditures in the north but rather with the policy of the department past, present and future, in keeping with the endeavours of the committee to establish a comparison with what had been done, were the mistakes, if any, lay and how they could be cured, for the future development of the nation, and of the north particularly.

Now, I would hope that the officials of this department and those personnel of the department on the lower levels of the administration would be just as candid with us in assisting us in coming to precise, concrete and useful recommendations which we may use in the compilation of our final report to the house. I am not really interested as a committee member—and I would think other committee members would agree with my approach—with Mr. Rowley's view, and others in the department, with regard to sticking rigidly to the fiscal considerations concerned with these estimates, but rather on the second plain. If Mr. Rowley does not feel it is unfair or if he does not feel it is going to embarrass him, I would like him to answer this type of question. I think all members of the committee would give him and the other officials of the department every assurance that we are only interested in determining evidence here upon which we can base a report, which the house may find of some use, as opposed to the report of the last committee in the last session. So, if I may, Mr. Chairman, I would like to direct these questions.

The CHAIRMAN: Go ahead, Mr. Nielsen.

Mr. HARDIE: A political discussion.

Mr. NIELSEN: No.

Mr. ROBERTSON: On the general nature of what Mr. Nielsen has mentioned, the officials of the department will be glad indeed to give all and as full and complete information as they can. There will be no limitation in that regard. However, if I understood Mr. Nielsen's question correctly, I do feel perhaps that it may put Mr. Rowley in a somewhat invidious position. The questions, as I understood them—and I have gone through the proceedings of the committee previously—were directed in regard to the officers' particular lines of responsibility, whereas the present question, as I understood it, was whether there had been an imbalance between expenditures on the social side versus expenditures on the physical side.

Mr. NIELSEN: That was not my intention. I was merely trying to get at the objectives of the department; what has been, what is now and what should be the basic objective of the departmental planners in national development, with emphasis in the north.

Mr. ROBICHAUD: That is a question of policy of the department. The minister should answer that.

Mr. ROBERTSON: So far as I am concerned, Mr. Rowley is quite free to take a crack at the answer, but I think it is in the realm of policy which, perhaps, the minister could better answer.

The CHAIRMAN: I think you are actually getting into a realm which is a little beyond this witness, and if you can keep it on the same basis as we did with the Department of Mines and Technical Surveys I think you will get the questions answered.

Mr. NIELSEN: Well, I put a question to Dr. Convey when we were examining the estimates of that department. I put the question to him as a scientist, not as head of the Mines Branch. The question I put was whether he felt as

an individual scientist that Canadian science as a whole was suffering because of certain factors, and he answered that question quite apart from his position as a branch head. This is the type of question I would like to ask.

Mr. ROBERTSON: The difference is that Dr. Convey was answering a question in regard to scientific work as a scientist, whereas in this case Mr. Rowley, who is our leading expert in many ways, certainly in the scientific aspects of northern work, the geography, physiography and so on, would have to get into economic, social, political and general policy fields, which is a rather different thing. If Mr. Nielsen were to ask Mr. Rowley about the needs in terms of, say, research not being done at the present time, I think Mr. Rowley could well deal with a lot of this sort of thing.

Mr. NIELSEN: Yes. Mr. Chairman, I find it a rather colourless task for committee members to direct questions the answers to which either are obvious or have been presented previously to Treasury Board and other governmental bodies. I think what the committee should be concerned with is basic objectives, and I think this is the field in which our recommendations should be made in our report to the house. This is something substantive. And, while I am interested in and I am acquainted with some of Mr. Rowley's writings and works in relation to his activities in the government, and while I appreciate the significance of his contribution, I still think we, as committee members, could be gaining an advantage by having Mr. Rowley's candid opinions and the candid opinions of other members of the department in dealing with this type of question.

Mr. HARDIE: Mr. Chairman, I am sure Mr. Rowley's candid opinion, if he ever does get around to giving it, will take over ten minutes; and it is ten minutes to one now. I suggest that the committee adjourn for today, and if Mr. Nielsen wants to go ahead with his questions at another meeting, it would give the committee, the minister, the deputy minister and Mr. Rowley time to think it over.

The CHAIRMAN: Gentlemen, I have no objection.

Mr. NIELSEN: I would like to have it determined before the adjournment whether I will be in order in pursuing this line of questioning.

The CHAIRMAN: I have not ruled out your question and, in view of what the deputy minister has said, perhaps it would be just as well if we adjourned. You will be at liberty to ask the same question at the next meeting.

Mr. FISHER: I do not know what you have arranged, Mr. Chairman, with regard to the forestry portion of the estimates. There is a number of us who want to ask questions of expert witnesses before the committee, and I am wondering if that is to be discussed in the whole committee or if you want to have that considered in the steering subcommittee.

The CHAIRMAN: Since you have mentioned this, Mr. Fisher, I will say this for the benefit of the committee. We have had representations from the forestry industry in Canada to appear before us, and the tentative date has been set for May 13, and I think the next one would be on the following day.

With your permission, we will arrange our proceeding here to accommodate these people who are travelling a great distance. We are not quite ready for a meeting of the steering subcommittee because as yet we have not the draft report in shape.

We may have a meeting of the steering subcommittee later in the week and, if we do, it looks now as though it might be next week before we can submit the draft report to the committee. The meeting will be adjourned until nine o'clock next Thursday morning.

Mr. HARDIE: A week Thursday?

The CHAIRMAN: No, this coming Thursday, according to the schedule.

Mr. ROBICHAUD: Mr. Chairman, the members of the fisheries committee expect to be out of the city on Thursday.

The CHAIRMAN: You and I, both?

Mr. ROBICHAUD: Quite a few of us are sitting on both committees.

The CHAIRMAN: I think, Mr. Robichaud, we will have a quorum.

Mr. HARDIE: Who drew up this schedule to which you referred?

The CHAIRMAN: Mr. Hardie, the chairmen of all committees met about a month ago, to try to overcome the overlapping of the meetings of the various committees, in view of the fact that your party and the C.C.F. have not many members to represent themselves on committees.

With that aim in view a considerable time was spent with the hope of establishing a schedule which would inconvenience the members least, and we were allotted Monday at eleven; Tuesday at eleven and Thursday at nine o'clock.

Mr. HARDIE: Three meetings a week?

The CHAIRMAN: Mr. Robichaud, I want the committee to understand it looks as though we will have to have four or five meetings a week.

Mr. ROBICHAUD: That is impossible—we object to that. We are on five or six committees which are now sitting.

The CHAIRMAN: We will never get through with the estimates, unless we do. I am hoping this committee will not be an instrument in delaying the prorogation of the house.

Mr. HARDIE: Oh, I hope the prorogation of the house is not going to be determined by this committee.

The CHAIRMAN: No, but we want our report in before the house prorogues.

Mr. ROBICHAUD: The house is not on the eve of proroguing.

Mr. HARDIE: The house cannot prorogue until these estimates are in.

Mr. NIELSEN: In any event, there will be ample opportunity for examining these estimates when they do go before the house.

Mr. HARDIE: All I am concerned about is this, that the Chairman said we are going to sit three days a week, and probably four.

Some of us, and I gather Mr. Fisher and the Liberal members at least—are sitting on four or five committees that are meeting at the same time as this committee, and we surely cannot split ourselves up into sections to sit on these various committees.

The CHAIRMAN: If you look at the schedule—perhaps you have not seen it—you will see that our meeting on Monday morning last was at eleven o'clock. That was the only committee meeting on that day. According to the schedule the Veterans Affairs committee normally meets at nine o'clock on Mondays. On Tuesdays we meet at eleven o'clock and Agriculture and Banking and Commerce Committees meet at the same time. On Thursday mornings we meet at nine o'clock, and Railways, Canals and Telegraph Lines and External Affairs Committees meet at the same time.

Mr. ROBICHAUD: What about the Committee on Broadcasting?

The CHAIRMAN: Ours is a standing committee, and we certainly have preference over these special committees.

This schedule was arranged by the chairmen of the committees, and I hope it is not the wish of the committee to alter that schedule because, as far as I am concerned, I think we should maintain that schedule and, if necessary, we will have to have more meetings.

Mr. HARDIE: The members of these committees not only have the work of the committees but they also have a lot of other work to do.

The CHAIRMAN: I appreciate that.

Mr. HARDIE: If we sit at 9:30 on Mondays on one committee and at 11 o'clock on this committee, that day is shot.

The same thing happens on any other day when we might have two or three committees meeting, even at different times. It leaves the members with no time at all for any other work, or for any of their responsibilities.

The CHAIRMAN: These objections, Mr. Hardie, were all raised at the meeting of the chairmen, and we did our best to try to draw up a schedule to suit the convenience of the members, having in mind the small membership of the Opposition.

Mr. ROBICHAUD: It is an impossible situation.

The CHAIRMAN: Considering the numbers of meetings we had last year to deal with the estimates of this department, I cannot see any alternative to having at least three or possibly four meetings a week.

Mr. ROBICHAUD: It is impossible!

Mr. NIELSEN: It is not impossible.

Mr. ROBICHAUD: We cannot carry on this way.

The CHAIRMAN: The next meeting, gentlemen, will be on Thursday morning next at nine o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 17

THURSDAY, MAY 7, 1959

RECEIVED
MAY 18 1959
Library of Parliament

Estimates 1959-60 of the Department of Mines and Technical Surveys

---

WITNESSES:

The Honourable Alvin Hamilton, Minister; Mr. R. G. Robertson, Deputy Minister; and Mr. A. T. Davidson, Chief, Resources Division.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21139-1—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

ORDER OF REFERENCE

HOUSE OF COMMONS,
TUESDAY, May 5, 1959.

Ordered,—That the names of Messrs. Payne and Smith (*Calgary South*) be substituted for those of Messrs. Latour and MacInnis on the Standing Committee on Mines, Forests and Waters.

Attest.

LÉON J. RAYMOND,
Clerk of the House.

21139-1—1½

MINUTES OF PROCEEDINGS

THURSDAY, May 7, 1959.
(18)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day. The Vice-Chairman, Mr. Erik Nielsen, presided at the opening of the meeting. He then vacated the Chair which, by agreement of the Committee, was assumed by Mr. R. C. Coates.

Members present: Messrs. Coates, Drouin, Fisher, Fleming (*Okanagan-Revelstoke*), Godin, Hardie, Kindt, Martel, McFarlane, McGregor, Muir (*Cape Breton North and Victoria*), Nielsen, Payne, Roberge, Robichaud and Simpson —(16).

In attendance, of the Department of Northern Affairs and National Resources: The Honourable Alvin Hamilton, Minister; Messrs. R. G. Robertson, Deputy Minister; G. M. Carty, Chief Administrative Officer; G. H. Davidson, Chief, Purchasing Division; T. R. Reid, Assistant Chief, Personnel Division; G. W. Rowley, Secretary, Advisory Committee on Northern Development; V. F. Valentine, Northern Research Coordination Centre; M. A. Currie and A. Martin, Administrative Officers; and A. T. Davidson, Chief, and K. J. Christie and J. C. Palmer, Resources Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Continuing on Item 261, Departmental Administration, the Minister was questioned on the Territorial Oil and Gas Regulations and amendments thereto. Further consideration of the said regulations was deferred.

On the same item, Mr. Robertson was questioned on the problems faced by the department in regard to the acquisition and retention of staff, in particular, of senior officials, especially as the said problems arise from insufficiency of salaries; he was also questioned on problems of accommodation.

Further, Mr. Robertson was questioned on the increasing totals of the estimates of the department over the past ten years, in particular, those portions of the estimates applicable to the Northern Administration Branch.

At 11.00 o'clock a.m. the Committee adjourned until 11.00 o'clock a.m. on Monday, May 11, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

THURSDAY, May 7, 1959.
9.00 a.m.

The VICE-CHAIRMAN (*Mr. Nielsen*): Gentlemen, we have a quorum. I would like to welcome Messrs. Payne and Smith—Mr. Smith is not here today—who have been substituted for Messrs. Latour and MacInnis on the committee, by order of the House of Tuesday, May 5.

We are on the main item, No. 261, and we will continue with that this morning. I have a number of questions that I wish to ask on the main item and others, and I do not feel I should be asking those questions as chairman of the committee. I am wondering, therefore, if I might have the committee's consent to asking Mr. Coates to act as chairman while I take my usual place on the committee.

Agreed.

Mr. HARDIE: Before we go on to the first item—it was agreed that before we continued with that item we would deal with the minister's statement given at the first sitting of this committee on these estimates. As a matter of fact, I promised the minister the other day that I would deal with some of the points that I did not deal with at the last meeting.

The VICE-CHAIRMAN: I thought—the committee can correct me if I am in error here—that at the close of the last meeting we had already commenced on item 261, with the understanding that we would be going back at some future time to the oil and gas regulations which were under discussion.

Mr. HARDIE: Before we went on to item 261 the other day I stated that I intended—or the committee intended—to deal with the minister's statement, when he returned. At the last meeting we could not deal with it because the minister was at a cabinet meeting, I think. It was our intention to come back to this matter, and I am sure that the chairman, Mr. Murphy, agreed that we would be given time, when the minister returned, to deal with his statement.

The VICE-CHAIRMAN: Certainly this is my impression too. It is merely a question of timing. I thought we had already started on item 261. However, unless the committee members have any objection to the procedure, we will leave the main item and revert to the oil and gas regulations, for the convenience of Mr. Hardie. Incidentally, the minister has to leave at 10.00 o'clock to attend a cabinet meeting.

Mr. FISHER: Mr. Chairman, there is one question I would like to ask the minister. I think we could get over a lot of this difficulty in connection with the oil and gas regulations—which seems to me to be, to a certain extent, a partisan misunderstanding—if the minister would consider withdrawing at least one paragraph of his statement. That is the paragraph on page 6 of his statement, and I refer specifically to this statement:

> The apathy of the previous administration, which failed completely to develop a policy for the protection of the public interest in the oil and gas resources of northern Canada, will rank as one of the greatest examples of economic ignorance and failure to protect the public interest that the world has ever experienced.

I would like to suggest to the minister that the evidence I have heard in the time I have been in the committee indicates that this statement contains a certain amount of exaggeration. I think if he would consider withdrawing it, we might be able to get past this block.

Hon. ALVIN HAMILTON (*Minister of Northern Affairs and National Resources*): Mr. Chairman, I do not think the hon. member would ask me to withdraw something that I firmly believe and which I believe I can substantiate.

Mr. FISHER: You still stand by this?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. NIELSEN: Mr. Chairman, I might say—as the view of another member of the committee—that I am rather inclined to feel that the evidence which I have heard tends to go along with that statement.

Mr. FISHER: That is a matter of opinion.

Mr. NIELSEN: I know that is a matter of opinion; I am merely stating the other side of it.

Mr. ROBICHAUD: Mr. Chairman, in that case I think the minister would have to substantiate the charge he has made in his statement. He will have to give us some definite facts which prove the apathy of the previous administration; and, further, its failure to protect the public interest.

We went through the regulations at the last meeting. We found very minor changes had been made, most of them being in the wording. So far as the public interest is concerned, there again that is a matter of opinion, because the main change in the regulations was in the grid system.

Mr. NIELSEN: On that same point, Mr. Chairman, I feel that the evidence is now a matter of record. If the committee feels that the evidence does not substantiate the minister's statement, they can make that finding in their final report: if they do find it substantiates the minister's statement, they can make that finding. I do not think anything can be accomplished by attempting to sway opinion one way or the other now—because that is all it is.

Mr. FISHER: Mr. Chairman, partisanship has crept into this so strongly that I do not know whether the committee is going to get anywhere. I am not trying to claim complete objectivity, but, as someone who is standing some way away from this, I think two wrongs are flogging each other, to the extent of points of view.

Mr. NIELSEN: Except that you have the evidence. If it does not support the statement, it does not: if it does, it does. I think this is a matter for the final report.

Mr. HARDIE: Before Mr. Nielsen left the chair I think it was agreed I could go ahead and deal with those things which I promised the minister the other day I would deal with, when he said I was trying to cover up some fallacy—let us call it—of the former administration. I intend to deal with that today. I promised the minister I would do so, and I am going to deal with it.

The ACTING CHAIRMAN (*Mr. Coates*): A request has been made for a withdrawal of certain parts of the minister's statement, and the minister says he considers he can substantiate his statement. I feel we should continue with questions and let the committee decide.

Mr. HARDIE: You do, apparently; but I do not. As I said, I promised the minister the other day I would deal with this.

Mr. NIELSEN: Nobody is stopping you; get on with it.

The ACTING CHAIRMAN (*Mr. Coates*): Continue with your question, then.

Mr. HARDIE: In making this statement I intend to be as subdued as possible, for the sake of the minister's health, because I have a personal feeling for him, as I realize how the shocks he has received since taking office must affect him; and I, for one, do not want at this stage to shock him out of his wits.

Mr. PAYNE: Relax!

Mr. HARDIE: I might add, that after listening to the minister's statement on the oil gas policy of this government, I thought I was sitting in the committee dealing with malarky, fertilizer and hogwash, instead of mines, forests and waters.

On pages 3 and 4 of his statement, the minister refers to the concession system. He states that this system could endanger the public interest. He goes on to say—and here I will quote from page 4 of his statement:

> It may surprise you, and indeed it shocked me, that a modification of this system was in effect in the Northwest Territories when I came into my present office. I immediately set about revising it. In my opinion, the public interest was not sufficiently protected.

Of course, he was referring to the Peel plateau concessions given originally to the Conwest Company in 1952 and later assigned to the Peel Plateau Exploration Company—

Mr. HAMILTON (*Qu'Appelle*): Correction, Mr. Chairman: I was referring to the regulations in general. That included, not only the Peel Plateau and Eagle Plain, but the regulations in general.

Mr. HARDIE: I will deal with them also.

Mr. NIELSEN: On a point of order, Mr. Chairman; is the hon. member for Mackenzie River not making a statement and giving evidence in an effort to establish facts, rather than asking questions of the minister and his officials?

Mr. HARDIE: I am establishing facts in what I am going to say now, in connection with the minister's statement.

Mr. PAYNE: Does Mr. Hardie submit himself for cross-examination?

Mr. HARDIE: Yes, if you want me to, after I am through with this—at any time.

The ACTING CHAIRMAN (*Mr. Coates*): On the point of order, gentlemen, it is my feeling that we are here to ask questions of the minister and his departmental officials, and in that way ascertain whether statements made by the minister are correct or incorrect. I do not feel that any member should have the right to make a statement similar to the minister's statement, because the minister is a witness before the committee and the members of the committee are here to ask questions and substantiate—

Mr. ROBICHAUD: On a point of order, Mr. Chairman, the previous experience of this committee has been—and the reports that have come in for its approval show this—that certain members, and one in particular—that is the member for Yukon—have begun, at the meetings of this committee, to give prepared statements, following which he asked questions. The record is there.

We had it this year when we were examining the estimates of the Department of Mines and Technical Surveys; we had it last year in connection with Northern Affairs and also Mines and Technical Surveys. If one member is allowed to do it, I cannot understand why the same privilege should not be extended to other members.

Mr. NIELSEN: On the point of order, Mr. Chairman, inasmuch as I have been named specifically by the hon. member for Gloucester, search the records of the committee—as you will, during the examination of the estimates of the Department of Mines and Technical Surveys—and nowhere will you find that any lengthy statement has been made by me.

I will admit to this weakness during the last session, but this was because I, for one—as a member of this committee—did not see clearly the objective of the committee, and I dare say there were a number of others in my position.

Mr. ROBICHAUD: In other words—

Mr. NIELSEN: Allow me to complete my answer.

The ACTING CHAIRMAN (*Mr. Coates*): Is there anyone else who would like to speak to the point of order?

Mr. HARDIE: Mr. Chairman, I would like to speak to the point of order. I am now dealing with the evidence and summarizing it, and I will summarize as briefly as possible the evidence we have received in this committee in the past few days. At the same time, I will link this evidence to the statements made by the minister the other day, and also bring in certain other facts. I would hope, in order to expedite the business of this committee as much as possible that I may continue; otherwise I am sure we are going to be on a debate on points of order for some time, and possibly for some days.

Mr. NIELSEN: Is that a threat?

Mr. HARDIE: It is a fact.

The ACTING CHAIRMAN (*Mr. Coates*): My feeling in this matter is that, as members of the committee, you are in a position to bring to the attention of the committee any discrepancies which you feel there might be within the statement made by the minister. It must, however, be done on a question and answer basis.

Mr. NIELSEN: I have a further point of order. Would the hon. member for Megantic who is sitting in the committee say whether or not he is a member of this committee?

Mr. GODIN: I am a member of this committee. I am not, however, the member from Megantic.

Mr. NIELSEN: I am sorry.

Mr. GODIN: I would like to say a word on this point of order. I was not recognized. As a new member of this parliament, I am scandalized at the manner in which I see the work of this committee proceeding. Apparently, the member for the Yukon feels he is in a different class and indicates that unless his statements are lengthy they are not statements. I know that he has stopped the member for Mackenzie River when he had occasion to speak for barely over sixty seconds. I feel those things will certainly tend to confuse this committee and will not permit of our proper work which is intended to be the obtaining of facts.

I am definitely scandalized when I realize that the minister has made statements which have no relevancy in respect of giving the facts with reference to the department to this committee. I am very sorry. I would like to have it on the record that the minister did not see fit to withdraw statements he made which have nothing to do with enlightening the work of members of parliament. We are here this morning to obtain information so that we can assist in properly operating this department. If this goes on I will definitely take part in these points of order and disputes about opinions.

I think the committee is confused enough now. Our program should not permit more confusion to prevail.

Mr. MUIR (*Cape Breton North and Victoria*): I do not think the committee is confused a bit. I speak for myself. I am not confused. I think we can get this thing ironed out very easily. Mr. Hardie can carry on with his questions very easily. There is no reason why he cannot reach his objective. Now that everybody is scandalized, I do not understand what this crazy attack is all about.

This is a good committee. It has been and may well continue to be an excellent committee. Just because someone comes here for his first meeting he should not be scandalized because of something he does not like.

Mr. GODIN: Even if the minister does not want to withdraw his statement? I might imagine his reasons. Let him prove it.

Mr. PAYNE: Speaking on the point of order, if Mr. Hardie would like to make a statement, surely it is the right of a member of parliament to make statements. However, our function as members of this committee is to elicit evidence from the witnesses; and certainly, if Mr. Hardie wishes to cross-examine the minister, I am sure he would be given every opportunity by the Chair to do so.

If, because of the right or the privilege of making statements here, every member of the committee made a statement, we would be here indefinitely. That is not our function at all.

Mr. HARDIE: I am not making a statement. I am summarizing the evidence of the past meetings of the committee; I am drawing certain conclusions from it and am making suggestions to the committee. Personally, I think it is a matter of the truth hurting the Conservative members of the committee.

Mr. HAMILTON (*Qu'Appelle*): The truth hurts the Liberal government of the previous administration.

Mr. HARDIE: The tactics of the Conservative group in this committee on points of order in trying to stop me from speaking on the various points made by the minister in his statement is a system of tactics which I think should not go on in this committee. I am sure that in the House of Commons it would not be allowed.

Mr. NIELSEN: On the point of order; would the hon. member help me in identifying his riding?

Mr. GODIN: Nickel Belt.

Mr. NIELSEN: The hon. member for the Nickel Belt brought me into this matter in respect of statements made. I do not see how the hon. member for Nickel Belt could be any judge of anything in this committee, inasmuch as his attendance has been far from frequent.

Mr. GODIN: It has been often enough to realize that the member for the Yukon, unfortunately, takes the position that he is above all other members of the committee. I have perceived this on every occasion—whatever number they may be. Every time I came in this committee it has been obvious that the member for the Yukon takes upon himself a large part of the work, and the discussions.

The ACTING CHAIRMAN (*Mr. Coates*): I have made a ruling. I have heard arguments, and my ruling stands. I wish that we proceed with the questioning.

Mr. HARDIE: I wish to preface my questions with a few observations. In respect of the concession system, referred to by the minister in his statement, he said that immediately he took office he set about revising this system and particularly to look after the public interests. My questions to him will deal with that. We would naturally expect that at the first opportunity the minister, if he is as sincere as he claims to be, would put a stop to such a practice.

The truth is that the last extension of time given to the companies in the Peel and Eagle Plateau areas by the former government would end on October 31 of this year. We could, therefore, expect on that date that the minister, the great watch-dog of the public interest, would terminate the concessions and give the companies an opportunity to take new permits under the new regulations and, failing agreement, call for public tenders.

An hon. MEMBER: On a point of order; if the member for Mackenzie River is referring to the minister as a "dog", I would ask him to withdraw that.

Mr. NIELSEN: It was "watch-dog".

Mr. HAMILTON (*Qu'Appelle*): I do not object to the phrase "watch-dog of the public interest". That is what I am trying to be. I think "watchdog of the public interest" is a very complimentary comment. Would you come to your questions rather than stating opinions? I think the chairman has a point, that opinions are fine, but we should have questions.

Mr. HARDIE: I think the members of the committee should give their opinions in order to help us in preparing our report.

The ACTING CHAIRMAN (*Mr. Coates*): I feel enough opinions have already been made. Let us have some evidence.

Mr. GODIN: Could the minister clarify the paragraph referred to as being an opinion or as being a fact?

Mr. HAMILTON (*Qu'Appelle*): I think that the answer is an obvious one; that, as a witness before this committee, I do have the right not only to state the facts but to draw conclusions from them; and that is a conclusion I am prepared to substantiate. Whenever the hon. member for Mackenzie River is finished, I will try to substantiate it.

Mr. HARDIE: Why did the minister, if he thought so little of the policy of the former administration, recommend to his colleagues in the cabinet an extension for a further three years for this company? As a result of his representations to cabinet, an order in council, P.C. 1959/198, was passed on February 19 of this year, two months ago, extending the life of the concession until October 31, 1962.

I am sure the minister will say that there are certain conditions to the extension as set out in the order in council. True, there are conditions. On October 31, 1960, they must give up 20 grid areas; the same in 1961 and 1962. These 60 grid areas represent half the area under concession at the present time. I ask the minister, who will want the 60 grid areas they will give up by the end of 1962? Who wants to pay out good money for ground that has only produced dry holes? Surely the minister knows they will not turn back ground that has a chance of producing oil or gas, if they can possibly help it. The remaining 60 grid areas will have a total of approximately three million acres and will then come under the present regulations after 1962, if the companies occupying them wish to hold on to them. Also, the company shall furnish the minister with all information on Eagle Plain well No. 1 and subsequent wells, and all geological or geophysical information obtained by exploration on the reservations, and all such information may be released by him at that time.

If the minister was really sincere in the statements he has made during the past few days, why does the order in council, when referring to information, use the words, "may be released by him at any time", instead of "shall be"—if the minister sincerely feels that the information is vital to the public interest?

The last point I wish to make regarding this matter concerns the expenditures on exploratory deep-test wells. The order in council gives the right to the company to apply their expenditures on the whole of the reservation in double the amount of the actual expenditure on deep-test wells. Also, paragraph 4 of that order in council says if they spend anything in excess of $400,000 in the period of the life of the permit, that the amount in excess also can be applied to the whole of the permit area. It can be applied to the three million acres.

Mr. MUIR (*Cape Breton North and Victoria*): May I interrupt? The member has now asked four or five questions. Why do you not stop and let the minister answer?

Mr. HARDIE: I have only a couple more. In respect to the other expenditures which can be applied to the permit area, including the three million acres that will be left after 1962, I might point out that in answer to a question the other day the minister said he understood that Western Minerals have spent well beyond their minimum in the Peel Plateau area up until this time. Therefore, because the company will be drilling deep-test holes, along with its other exploratory work, it will be likely that by 1962 they will have again spent considerably more than the minimum. This being the case, they could hold the remaining three million acres after coming under the new regulations for a number of years without doing any work.

My question is: what is the difference so far as the word "concession" is concerned? If they are allowed to apply this money on the three million acres they will have left after 1962, and because of these expenditures are able to hold this ground for a number of years without doing any work, I cannot see any real reason in changing it or any real difference in the concession. It is just a concession under another name. After "crying the blues" over the preferred treatment the former government had given this company, is he now going to tell us that it was not treated as well as it should have been?

If the minister wants to answer the question about concessions, that will be fine. Otherwise I can go on to the regulations.

Mr. HAMILTON (*Qu'Appelle*): I think we had better, in the interests of the committee, stop and take up these questions and give the answers, The question I think indicates exactly what I was saying in that paragraph which the hon. member for Port Arthur asked me to withdraw. I think it serves as a classic illustration of the correctness of my charge.

The first statement or question made by the member for Mackenzie River was this: that if I was opposed to this concession system, why then did I extend the reservations beyond 1960 to Western Minerals, who have those two reservations?

I think the answer is obvious and clear. The first answer is this: that under the regulations set up by the previous administration, this Canadian company was required to spend in the first five years approximately $400,000 on exploration and development work.

Mr. HARDIE: And what did they spend?

Mr. HAMILTON (*Qu'Appelle*): I wonder if the hon. member would please refrain from interrupting. He will recall that I did not interrupt him when he was speaking.

Mr. HARDIE: I have been interrupted all the morning.

Mr. HAMILTON (*Qu'Appelle*): I know, and I stuck up for you and tried to stop it.

The ACTING CHAIRMAN (*Mr. Coates*): I think it would speed up the work of the committee if we did not interrupt one another.

Mr. HAMILTON (*Qu'Appelle*): Under the requirements of the regulations this company had to spend $400,000 in a five year period. And bear in mind that this company did not have any help from the previous administration in the way of roads, airfields, or any of the other things we are offering now to get companies in there. They have gone ahead and spent over $5 million. That is one reason why I would consider the extension of any permit—as the regulations do allow me both then and now—when a company has acted in good faith.

The second reason is a most important one. It is the key reason. It is that as part of the arrangement with this company in respect to the reservation or concession, it was agreed that if they found gas or oil, or on such and such a date as is listed in the privy council order, they would shift to the new regulations. That is the key thing which I wish all members of the committee

would realize. That is the big point of difference between our opinions as to what was right and what was wrong with the regulations of the previous administration.

Mr. HARDIE: Did you not say that by 1962 if the company found gas and oil they would come under the new regulations?

Mr. HAMILTON (*Qu'Appelle*): Yes, under the agreement, in return for extending their permit time they would come under the new regulations. That is the key point. If they did find oil or gas they would only have the right to 50 per cent of the permit area in which the discovery is made. We apply the corridor principle which, according to the law of averages, should give approximately 50 per cent to both of us. This, I repeat, is the key, because under the old regulations by using the solid block and 35 per cent of the acreage, the chances were—using the experience of the pools in Alberta—that the company would get the majority of the oil lands.

Mr. HARDIE: Is this system used in Alberta?

Mr. HAMILTON (*Qu'Appelle*): No. Under the system we have brought in, we use the system as in Alberta whereby the reservation to the crown has been made greater than it would be giving a solid block.

I think the question which is confusing the hon. member for Mackenzie River is that where you have this 50 per cent under the crown reservation system, as I have tried to indicate, in every field it is different.

If you took a big field, as I gave you as an example, the one at Redwater, you would find that in that type of field, using the crown reservation system, if the chap knew where the field was, he could have a pretty good fighting chance of getting more than the crown would get. But, because of his uncertainty after drilling the well, he would not know for sure. However, by a detailed study of the crown reservation system and the operation of the law of averages, it is indicated that the crown will likely reserve for itself 50 per cent of the oil lands in a big area.

That is why the western countries in North America have gone on the crown reservation system. It is in use in the four western provinces, and in almost all of the states where oil and gas is produced. But if you refer to Europe, that is not true, because no one knows until the field is fully developed who will get the most.

Mr. HARDIE: Do you mean under the old and under the new regulations?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: It is just guesswork?

Mr. HAMILTON (*Qu'Appelle*): But applying the law of averages to the fields discovered in Canada up to this date, under the straight crown reservation system, it would give the crown a fighting chance to 50 per cent; but under the old regulations, the block system, if the field ran across three or four permits, the permittees could, in the majority of cases, get almost all the oil lands.

Mr. HARDIE: And in the case of a small pool?

Mr. HAMILTON (*Qu'Appelle*): Yes, Because most of our pools in Canada have been small.

Mr. HARDIE: If they are lucky with their costs.

Mr. HAMILTON (*Qu'Appelle*): On that point I cannot convince the member for Mackenzie River, because he says it is a matter of opinion.

Mr. HARDIE: The officials convinced me the other day that you were wrong, and I believe them.

Mr. HAMILTON (*Qu'Appelle*): The second question is: why did we put the word "may" in the order in council in regard to the information. Actually,

there is no particular reason why we should not change over to "shall". But the big thing was, I think, that for the first time I believe in the history of dealing with oil and gas companies in North America, we got a company voluntarily to agree to the dissemination of information, not a year after they had dropped their interests, but immediately the information was available to them.

As to the discretionary power of "may" in the hands of the minister and his staff, there are some arguments in favour of it. You might decide for instance that the information was such that it should not be put in the hands of other interests. Most thinking is that in most of the cases, having received those permits, I should make it available immediately without any attempt to apply any deductions to it. That is the job of the companies. We simply supply the information when they have made this information available to us. The province of Saskatchewan has a provision in its regulations which says that one year after the permittees has dropped his interest in an area, that information may be divulged to other oil and gas companies. But this order in council says that I have the right to divulge that information, even when they continue to hold permits in the area. In other words, when the permittee has not dropped his interest. I think that is a point to keep in mind.

Mr. HARDIE: Does the order in council not state that the company will give information on the Eagle Plain number 1 well? I wonder if they have given that information to you as yet.

Mr. HAMILTON (*Qu'Appelle*): They have to, under the old and new regulations; they have to give it to me all the time.

Mr. HARDIE: Have you released the information?

Mr. HAMILTON (*Qu'Appelle*): It has been released.

Mr. HARDIE: You have released the information to the public on Eagle Plain well number 1, is that right?

Mr. HAMILTON (*Qu'Appelle*): Yes.

The next question is about the theory behind the double benefits for deep drilling. This is a subject which I understand in a broad way, but I shall ask Mr. Davidson to give the answer because he is more of an authority on it than I am.

Mr. HARDIE: My question only deals with the Eagle Plain reservation in that regard, because of the development of the Eagle Plain reservation and the order in council; and my question in regard to deep test holes under the application of the doubled expenditure alone—these people may spend a great deal of money during the next three years.

The other day I think the officials indicated that this company had complained; and the minister again this morning—in a great many of his remarks would justify that complaint. If I understand the order in council, they can apply this against the whole of the permit area. In other words, up to 1962 it is quite conceivable that with that amount of money applied against the whole of the permit area, and with the three million acres they have left, they could hold this area for a number of years without the company being required to do any work. Is that right?

Mr. A. T. DAVIDSON (*Chief, resources division*): It may apply for some time, but we do not know how long.

Mr. HARDIE: It would apply if they had spent more money than necessary. That is all I wanted to know.

Mr. GODIN: Would the time be related to the amount that they would have overspent?

Mr. HARDIE: After 1962 they are going to have to come under the new regulations which say that they must spend 50 cents in the first year; and if they spend more than this amount of money, they will hold the ground for an additional period.

Mr. HAMILTON (*Qu'Appelle*): In answer to the first question, if you require under the regulations that a man spend, let us say $3 over the life of the permit, dealing with the northern areas, and if that is the requirement in the public interest, that he do that amount of work, and if the man has six million acres and you require that amount to be spent over the life of the permit, if he gets ahead of schedule and does a lot more in one year than in another, then it would be only common justice to allow it, or allow any such company which did the same thing; because it is evident to me that they are acting in good faith. If they want to spend ahead of time, so much the better.

I could give you many examples, both under the previous administration and certainly a notable one under this administration, on this question of extension of time because of work done, and where it has been allowed, because it is a matter of simple justice.

If you sit down and require $3 per acre, it would work out to so much per year; but if he goes ahead and does a lot more work, you will surely not penalize him for having gone at it extensively.

Mr. ROBICHAUD: Mr. Chairman, the minister will agree that the territorial oil and gas regulations have been revised and amended quite regularly since they were first introduced. And from the evidence given before this committee at previous meetings dates were given—I think 1954, 1957 and 1958—as being the years when the regulations were amended.

The minister said before, in replying to Mr. Hardie, that in his reply he would show to this committee where the apathy of the previous administration was. Is he in a position to substantiate these charges:

> The apathy of the previous administration, which failed completely to develop a policy for the protection of the public interest in the oil and gas resources of northern Canada, will rank as one of the greatest examples of economic ignorance and failure to protect the public interest that the world has ever experienced.

He has admitted that the regulations were changed. They were amended according to the developments of the new industry, and just because he has made what he calls a "major change" it is, again, a matter of opinion. It may be better; it may be protecting the public interest better than the previous regulation.

If the minister feels that is so, we cannot discuss his opinion; but I am still doubtful that he had the right to make such a serious charge when this view is based on such minor changes.

Mr. HAMILTON (*Qu'Appelle*): I do not suppose I could ever convince the hon. member for Gloucester, but if I might point it out this way, that with these amendments you speak of you are missing the fundamental point of the regulation—as to who is going to get the ownership of the oil. In the old regulations it was different from the regulations of every other set of oil laws in Canada and North America.

Mr. HARDIE: It does not make everything better.

Mr. HAMILTON (*Qu'Appelle*): You can put it that way. When the provinces of Alberta, Saskatchewan, British Columbia and Manitoba fight their way through and accept these new principles, and when the mines ministers' conference—made up of all the deputy ministers of the provincial mines departments, plus the federal government—meet annually, they have a subcommittee on oil and gas regulations which drafts amended regulations.

When they pointed out these changes, I say when the federal government did not follow the amended regulations of this subcommittee they were apathetic to what the real interest was.

Furthermore, if you want to get the extent of the economic ignorance of what they were handling, you will see that they were not even considering it. They did not do it deliberately; they were not thinking about it.

As the former Prime Minister said, they looked on these northern resources with—what is the phrase?

Mr. NIELSEN: "In a continuing state of absence of mind".

Mr. HAMILTON (*Qu'Appelle*): "In a continuing state of absence of mind".

The statement was made two or three weeks ago that the potential oil and gas reserve in the Northwest Territories is now established at over 200 trillion cubic feet of gas. But, of course, they are just guessing.

Mr. HARDIE: What is the estimate?

Mr. HAMILTON (*Qu'Appelle*): This is based on the Borden Commission evidence. It is now out of date.

Mr. HARDIE: On what evidence?

Mr. HAMILTON (*Qu'Appelle*): My hon. friend would not admit the use of averages, of formulae; but the oil industry takes experience over a period of eight or ten years, or in a given area, of seven or eight types. Then, by calculating the cubic volume of a sedimentary area which they have explored, and by applying the formula to what they have discovered about a known area, they then apply that knowledge to the unknown area and they do get an estimate.

This averaging method is used by oil experts all over the world, and this is the basis upon which they assess these tremendous reserves of oil and gas in the territories.

If the total potential of oil in the northern territories is, say, 30 billion barrels—and that is the estimate at the present time—and the oil is worth approximately $3 a barrel, and you are handing most of it over to the private companies that find it—then, surely, you are justified in saying that a government that does a thing like that with regard to $90 billion worth, is being very generous; and I accuse it of being guilty of the charge of public ignorance of the economic set-up.

Mr. GODIN: Mr. Chairman, before the minister goes on to something else, is it the minister's contention that he finds ignorance on the part of the previous administration, based on the fact that we now know more about the oil reserves in the provinces across Canada than we did in 1950; and thereby concludes that those persons who administered in those years after 1950 were ignorant?

Has not the knowledge of our wealth in Canada varied in mines, the same as it has in other fields, in regard to Canadian capacities?

Is the minister's argument based on the fact that we know more in 1959 than we did in 1952; and, therefore, somebody was stupid and ignorant before?

Mr. HAMILTON (*Qu'Appelle*): All I am saying is that other governments, looking after the public interest in their provinces, amended their regulations to suit the new knowledge they amassed in a particular industry, then; when the federal government did not do so they were guilty of that particular charge.

Mr. GODIN: Could you substantiate your charge by telling this committee how much has been lost in the protection of the public interest? How much has been lost by the federal treasury in view of the application of the old regulations?

If the minister can prove or substantiate his charge by saying how much the country has lost by the application of the old regulations, then we might know where we are heading.

The ACTING CHAIRMAN (*Mr. Coates*): This will be the last answer which the minister can give as he must now leave for a cabinet meeting.

Mr. HAMILTON (*Qu'Appelle*): In giving an answer to that question I think this map tells the story.

These 34 million acres in blue, including the blue in the two reserves here, represent the extent of the loss; and if you apply that formula—

Mr. HARDIE: Why?

Mr. HAMILTON (*Qu'Appelle*): And if you apply that formula, you could work out the millions of dollars of oil and gas being given away.

Mr. GODIN: Has it been?

Mr. HAMILTON (*Qu'Appelle*): If it had not taken place—and it amounted to 171 million acres—you could work out the figure approximately, and that calculation would represent the "gift" we have made, in effect.

Mr. GODIN: Has any "gift" been made?

Mr. HAMILTON (*Qu'Appelle*): Yes, because they were not doing anything about it.

Mr. GODIN: Based on the application of the old regulations, the minister cannot state what has been lost to the federal treasury?

Mr. NIELSEN: It is a future loss; it is as plain as the nose on your face.

Mr. ROBICHAUD: It is pure speculation.

Mr. NIELSEN: The whole thing is speculation.

Mr. HAMILTON (*Qu'Appelle*): I must really go now.

Mr. GODIN: If he takes this year, then last year we lost money.

Mr. HARDIE: Before we proceed, now that the minister has "taken off", I think that we are entitled, when he returns to this committee, to go back to this point—but if the committee wishes I can go ahead now rather than wait for the next meeting and summarize what we did on Tuesday. We intend to do this in any case. At least, we feel,—the Liberal members feel,—we will have to go through the whole of the proceedings of Tuesday relating to the questioning on the oil and gas regulations, on every section when the minister returns.

To expedite the business of the committee, I think that I should either go on now—and the minister can read the record and answer me at our next meeting, if he so desires—or, at the next meeting, in order to elicit this information we will have to go over what we did on Tuesday. I see no alternative to that.

Mr. PAYNE: Mr. Chairman, speaking on that point, I would like to say that it does seem rather unusual that we should have what might be called a steering committee to tell us how to function and how to proceed.

Mr. HARDIE: As a matter of fact, it was for your information, since this is the first time you have been on the committee.

Mr. PAYNE: Oh no. I have been on it all the time, other than for three meetings—for all but two sessions.

Mr. NIELSEN: That is so, and you cannot deny it.

Mr. HARDIE: I thought that he was a new member.

The ACTING CHAIRMAN (*Mr. Coates*): Let us not start bickering about who was on the committee, and when. The important thing is, how we are to proceed and expedite the business of the committee in the fastest possible way.

Mr. HARDIE: What I want to know, Mr. Chairman, is this: are we going to be throttled?

Mr. NIELSEN: No one is throttling any member of this committee, Mr. Chairman.

Mr. HARDIE: Or, are we going to be able to go through the same procedure with the minister as we did on Tuesday with the officials of the department? I mean, if it is not the wish of the committee, that I proceed now, this is what we intend to do.

Mr. NIELSEN: Why not deal with it when it comes up?

The ACTING CHAIRMAN (*Mr. Coates*): Has any other member any feelings in this matter?

Mr. MUIR (*Cape Breton North and Victoria*): Mr. Chairman, all I was going to say to the hon. member for Mackenzie River is, why could you not go ahead now and question any of the men who are here on points that you have in mind; and then, when the minister comes back again—if I know you like I think I do—you will have no difficulty in thinking of a lot of questions to put to the minister, and you can get his answers when he comes back. In the meantime, we could carry on with the other work.

Mr. NIELSEN: Mr. Chairman, I think the members of this committee should be given every latitude—as they have in the past—within the rules of relevancy, to question as fully as they wish all the officials of the department. They have been given that right in the past, and there is no reason why there should be any feeling on the part of any member that it is not going to be the case in the future.

Mr. HARDIE: We want to question the minister on the statement he made, and we were told by the regular chairman of this committee that we would have every opportunity of doing so. As a matter of fact, I think the record will show that the regular chairman did say, at the first meeting, we would be allowed to answer the minister's charge.

The ACTING CHAIRMAN (*Mr. Coates*): Mr. Hardie, no one seems to be arguing with you on that point. You seem to be over-stressing this point.

Mr. HARDIE: It will be allowed?

The ACTING CHAIRMAN (*Mr. Coates*): It would appear that all the members are in agreement that every possible latitude should be given to every member of this committee to question the minister on any aspect of the statement he made. Therefore, I would suggest we continue, and return to this particular matter when the minister is before the committee again.

Some Hon. MEMBERS: Agreed.

Mr. HARDIE: Is the type of questioning that started on item 261, just before the close of the last meeting, by the hon. member for the Yukon going to be allowed today? Has any decision been reached?

Mr. NIELSEN: I am not going to press the point. I now have my questions prepared along a different line, which will achieve the same purpose as the rather lengthy questions which I put at the last meeting.

Mr. HARDIE: Will we be continuing the questioning of officials of the department on policy?

The ACTING CHAIRMAN (*Mr. Coates*): We are now on item 261, is that correct?

Mr. NIELSEN: Yes, that is the item.

The ACTING CHAIRMAN (*Mr. Coates*): We have the deputy minister here.

Mr. NIELSEN: Mr. Chairman, I would like to refer to the organization chart.

The ACTING CHAIRMAN (*Mr. Coates*): All right.

Mr. NIELSEN: It was distributed at the last meeting. I would like to have one or two points clarified before we go on to an examination of the estimates. Can the deputy minister tell the committee whether the personnel who are listed vertically, in the vertical blocks, under the director level, are on the same level, (a) as to salary, and, (b) as to authority in the department?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): I think everybody has a copy of the organization chart.

The primary division of the department is into branches, and each branch is headed by a director, as is indicated in the boxes across the chart.

This is different in regard to administration services. We do not regard that as a branch because there are completely different types of services within it. It is headed by a chief administrative officer who does not have the same standing as a director.

Below the directors in the large branches, there are divisions, and each division is headed by a chief. There is one exception to this last type of sub-division, and that is the Northern Administration Branch. It is so large that this year the organization and methods branch of the Civil Service Commission, along with ourselves and Treasury board, worked out a new organization. We have two assistant directors; and then the divisions come under them. So that in the larger boxes in Northern Administration, you have two assistant directors who have a standing higher in responsibility than do the chiefs of divisions.

At the present time their salaries are the same as the chiefs of divisions, but I expect these to be adjusted in the coming year.

The chiefs of the divisions have the same general responsibilities all the way through. They head a division, but this does not mean that in all cases they have identical salaries, because some divisions are smaller and of less importance than others; and in those cases the chief of division may be at a lower salary level. But, as far as responsibility and authority are concerned, they are the same. But the burden of work might be different, because one division might be larger than another.

I do not know whether this answers the member's question.

Mr. NIELSEN: That helps a lot, Mr. Chairman.

I wonder if the deputy minister's attention could be directed to the tables on page 299 of the proceedings of the committee when this committee was examining the estimates of the Department of Mines and Technical Surveys.

Having once examined that table of comparative salaries in comparative departments, I wonder if the deputy minister could supply the members of this committee with a similar chart. I am referring to page 299.

Mr. ROBERTSON: Mr. Chairman, Northern Affairs appears to be in it.

Mr. NIELSEN: It is in there, but not the breakdown as it is for the Department of Mines and Technical Surveys. I would like to obtain a chart showing the salary levels, compared as they are in this chart, on the dollar level.

Mr. ROBERTSON: As I see it, Mr. Chairman, the Department of Northern Affairs is shown in each of the salary brackets. For instance, the director of the national museum is shown in the $11,000 bracket; the chief of historic sites is shown in his bracket; the chiefs of other divisions are shown in their brackets. I believe they are all there.

Mr. NIELSEN: So they are. That answers that for me, Mr. Chairman. Do you find any impediments to the functioning of the branch—as appeared in the Department of Mines and Technical Surveys—due to an inability to promote personnel at the lower levels because of a rigidity in the salary level, at the chief of division level, or the director level?

Mr. ROBERTSON: Yes, I think there is undoubtedly a certain amount of that, Mr. Chairman. It applies throughout the organization. In a sense, I think one of the defects in Civil Service salary grouping is that the salaries are not looking just at the opening, or joining salary, but who are looking you have trouble getting enough scope for the kind of promotion necessary if satisfactory and attractive careers are to be offered. This affects the possibility of getting people.

The joining salaries are often comparable with what, say, private enterprise offers; but you find that after a few years of service the salaries in the Civil Service fall behind. This limits your chance of getting people who are not looking just at the opening, or joining salary, but who are looking for a career. I think there is a good deal of that.

Mr. NIELSEN: Would you say this constitutes a serious problem in the functioning of the department in endeavouring to carry out its responsibilities?

Mr. ROBERTSON: In varying fields. I think it does in most of them. In forestry for example, we are in competition with the demands of private enterprise for the same type of forest engineers and forest experts, and our loss of forestry people has been very high indeed. I think this has been the main factor in it.

Mr. NIELSEN: Could you indicate those branches in which this problem is more serious than it is in others?

Mr. ROBERTSON: I think that in forestry it is probably the most serious, Mr. Chairman; but it does run throughout. In Water Resources we have the same problem of trying to attract and hold competent, really good engineers in a field that is highly competitive.

The same thing applies in regard to our engineering divisions. We recently lost an engineer in our Parks Branch, which I do not think would have happened if—

Mr. NIELSEN: Where did he go?

Mr. ROBERTSON: He went to a private engineering company in Edmonton. I do not recall the name of it.

Mr. NIELSEN: Do you find your staff turnover is high, particularly in the Forestry Branch and the Water Resources Branch?

Mr. ROBERTSON: Staff turnover in the Forestry Branch has been very high.

Mr. NIELSEN: To what do you attribute this?

Mr. ROBERTSON: I think the main factor is the salary question. The demand for forest engineers and forest scientists has been very much increased over recent years. We have passed, in a sense, from forest exploitation to forest management. The pulp and paper companies, the lumber companies, and so on, realize that they have to have scientific advice in order to handle their forest problems properly. Therefore, they are anxious to get forest engineers and forest scientists, and they are competing for exactly the same type of men that we have got to have.

Mr. NIELSEN: Could you say how long this condition has existed?

Mr. ROBERTSON: Certainly for a number of years.

Mr. NIELSEN: Could I take—leading you on this—a guide of ten years? Would you say this has existed for ten years?

Mr. ROBERTSON: Oh, yes, definitely.

Mr. NIELSEN: Pursuing this matter, in the Forestry Branch particularly—I do not want to get too specific, and this is the only specific question I will ask of this nature—what, for instance, would a chief of the Research Division be paid, as opposed to his counterpart in industry?

Mr. ROBERTSON: I would find this hard to answer, Mr. Chairman. I think perhaps the director of the Forestry Branch could answer it when he comes here.

Mr. NIELSEN: We will leave that, then. So salaries are a real problem in the department, in relation to the obtaining and retaining of staff?

Mr. ROBERTSON: That is correct.

Mr. NIELSEN: Has the department any scientific and technical personnel, as such, conducting basic, fundamental research in the department?

Mr. ROBERTSON: Yes, certainly in the Forestry Branch. It is very difficult, Mr. Chairman, for even scientists to distinguish between what is basic research and what is applied research; they do not even agree on definitions. But certainly in the Forestry Branch a good deal of the research could be regarded, I think, as basic or fundamental research. In the National Museum, I think all the research would be regarded as basic or fundamental, in the sense that that kind of research is to expand the frontiers of knowledge, rather than to achieve a specific result.

Mr. NIELSEN: Do you find the obtaining and retaining of scientific and technical personnel is more of a problem than that which confronts you in the department with regard to non-scientific or non-technical personnel?

Mr. ROBERTSON: Yes, I would say it is, Mr. Chairman. But all that really means is that there is more chance of getting somebody to fill a job in a non-scientific field; it does not necessarily mean you are always getting the quality that you want to get.

Mr. NIELSEN: Could you indicate to the committee, in as much detail as you can, the situation confronting the department with regard to accommodation? How many buildings is the department now occupying in Ottawa; where are these located; what difficulties in communication does it result in to the department; is it a deterrent to the efficiency of the department? Could you deal generally with that sort of situation.

Mr. ROBERTSON: Mr. Chairman, our situation is perhaps indicated by the fact that I had to check with the chief administrative officer to find out how many buildings we are in. We are in 11 buildings in Ottawa.

In some cases branches are split within themselves into more than one building. Basically, the way it works out is that the minister's office and mine, and the administrative headquarters, are in one building. There is nothing else in that building except the offices of the minister, the deputy minister and the chief administrative officer.

Then the branches are scattered all over Ottawa in 10 other buildings. The problems that this imposes are very considerable. It means that we have to have a filing system in every building; it means that we have to duplicate our files, because in most cases a letter will come to, say, the minister or the deputy minister which will require action in a branch, or will require information from a branch and will have to be sent to that branch and then returned.

We have to have files in both places or we do not know what we are talking about or dealing with. We have to have a messenger service to shuttle among these various buildings. For meetings which have to be held frequently, people have to come from one part of the city to another part of the city to sit down and discuss a problem, whereas if we were in one building it could be discussed by walking down the corridor.

I can illustrate this in connection with people coming to see the minister. When they come, the minister may want to have one or two officials available on points of detail or information. Those people may have to come two or three miles across town in order to be present for that meeting. Then it may be found that somebody who is not there is wanted—he is three miles away

across town. We have undoubtedly great inefficiencies and, I would think, fairly considerable costs, as a result of this.

Mr. NIELSEN: Have you under way any plans for the construction of a single building in which to house the various branches of the department?

Mr. ROBERTSON: To say there are plans is perhaps going a little too far. There have been meetings between the Department of Public Works and ourselves over the last eighteen months to work out what our requirements would be for a building. Now, after the requirements are worked out, then they have to go to the stage of getting plans, and so forth. Therefore, I would say we are not within four years of having a building, as far as I can see.

Mr. MCGREGOR: Did you say there were eleven buildings, plus ten small ones?

Mr. ROBERTSON: There are, in all, eleven buildings in Ottawa in which we occupy space.

Mr. MCGREGOR: How many employees do you have in Ottawa?

Mr. ROBERTSON: I am told there are probably about 1,200 in Ottawa. Our staff is very widely scattered.

The Acting CHAIRMAN (*Mr. Coates*): There are 1,200 in Ottawa. How many are there in Canada?

Mr. ROBERTSON: There are 4,700 in Canada, of which 1,200 are in Ottawa. In addition to the staff in Ottawa, we have laboratories and so on as well.

Mr. FLEMING (*Okanagan-Revelstoke*): Is it correct to say, because of the nature of the operations of the department, that you could not house all your functions, even in Ottawa, in a single building? I believe some of the functions of the department would not lend themselves to being conducted under one roof. In fact, you would actually need either a group of buildings or one main administrative building, plus additional ones.

Mr. ROBERTSON: I think we could reduce it from eleven buildings to three buildings. We would need to leave in the museum the staff which is operating there now because the museum is separate and not connected. The forestry products laboratory would be separate because it requires large laboratory space. In fact a new laboratory just has been built. All the others could go in one building.

The ACTING CHAIRMAN: (*Mr. Coates*): How many of the 4,700 are full-time personnel?

Mr. ROBERTSON: There are, in round figures, 2,800 full-time and 1,900 part-time or seasonal employees.

Mr. NIELSEN: How long have you been confronted with staff difficulty? Would you say the condition has existed for ten years?

Mr. ROBERTSON: The building problem?

Mr. NIELSEN: Yes.

Mr. ROBERTSON: The building problem was worse up until about three years ago. When I came into the department, if I recall it correctly, I think we occupied sixteen buildings.

Mr. NIELSEN: Are these all government buildings?

Mr. ROBERTSON: No; they are not. In a number of them the space is rented.

Mr. MCGREGOR: Are they rented on the basis of square feet?

Mr. ROBERTSON: Yes. The Department of Public Works does the rental. They rent them for so much per square foot. I do not have the figures. We could find out. The Department of Public Works would have this information.

The ACTING CHAIRMAN (*Mr. Coates*): Mr. McGregor, would you like to have this information?

Mr. McGREGOR: Yes. I would like to know where the buildings are and what the rental is per square foot.

Mr. ROBERTSON: We will try to get that.

Mr. NIELSEN: While you are getting that information, I wonder if you would also obtain information as to the manner in which the department is holding this space, whether by lease or some other method?

Mr. ROBERTSON: We are not holding it. It is the Department of Public Works which holds it.

Mr. NIELSEN: The Department of Public Works would give you that information?

Mr. ROBERTSON: Yes.

Mr. NIELSEN: And, particularly, the length of the leases?

Mr. ROBERTSON: We will get that, Mr. Chairman.

Mr. NIELSEN: Could the deputy minister, starting in 1949, indicate to the committee the total vote of the department for each year through to these present estimates?

The ACTING CHAIRMAN (*Mr. Coates*): For how many years?

Mr. NIELSEN: From the fiscal year 1949-1950 to 1959-1960.

Mr. ROBERTSON: The last ten years?

Mr. NIELSEN: Yes.

Mr. ROBERTSON: Yes; we could do that, Mr. Chairman. This is the departmental vote as a whole. Is that right?

Mr. NIELSEN: Yes.

Mr. ROBERTSON: In 1949-1950, the department was called the Department of Resources and Development. At that time it included certain functions which are not now in the present Department of Northern Affairs and National Resources. It included the trans-Canada highway, which has now been given to the Department of Public Works. It also included a section called demobilization and reconversion. Both those sections took a certain amount of money. Does Mr. Nielsen wish the vote with those included or with those excluded, in order to have comparable figures?

Mr. NIELSEN: Would you give them both ways—included and excluded?

Mr. ROBERTSON: The votes for the Department of Resources and Development, including all its functions, were as follows: 1949-1950, $27,873,741. Should I give these in round figures?

The ACTING CHAIRMAN (*Mr. Coates*): You might give them in millions.

Mr. ROBERTSON: 1949-1950, $27.8 million, 1950-1951, $34.4 million, 1951-1952, $35.7 million, 1952-1953, $38.4 million. If one subtracts the amounts in respect of the trans-Canada highway and the demobilization and reconversion sections which were not carried forward into the Department of Northern Affairs, the votes become as follows: 1949-1950, $24.8 million, 1950-1951, $23.5 million, 1951-1952, $19.8 million, 1952-1953, $21.9 million.

Mr. NIELSEN: At that time the department, as I understand it, was relieved of its responsibilities in respect of the trans-Canada highway and the demobilization and reconversion sections of which you speak.

Mr. ROBERTSON: That is correct. At that time the Department of Northern Affairs and National Resources Act was passed and the department changed its name. These two functions were moved to the Department of Public Works.

Carrying forward the figures under the Department of Northern Affairs and National Resources, the votes are as follows: 1953-1954, $21.6 million, 1954-1955, $23.1 million, 1955-1956, $28.7 million, 1956-1957, $39.4 million,

1957-1958, $53.7 million, 1958-1959, $78.7 million. 1959-1960 is covered by the current estimates and therefore includes the main estimates only, and amounts to $85.8 million.

Mr. NIELSEN: You are reading from information. Mr. Chairman, I wonder if that information from which the witness is reading could be included in the printed proceedings of this meeting?

Mr. ROBERTSON: Yes, this could be done Mr. Chairman.

The ACTING CHAIRMAN (*Mr. Coates*): It could be included in the main proceedings, could it not?

Mr. NIELSEN: Or as an appendix, just as we included this other information from the Mines Department. I so move.

The ACTING CHAIRMAN (*Mr. Coates*): Have we a seconder?

Mr. FLEMING (*Okanagan-Revelstoke*): I second the motion.

Mr. GODIN: Is there something else in the table?

Mr. ROBERTSON: There are other items in the table. We have worked out the percentage increase over the previous year, but I am sorry that it is on a different basis for the two different parts of it. For the Department of Northern Affairs and National Resources for the last seven years, we have a good deal of information worked out; but for the previous four years for Resources and Development, there is not as much. We have worked it out on the percentage of appropriation increases over the previous year compared to the total federal appropriation, the total budget; and we have worked out staff changes and the increased percentage in staff changes.

Mr. NIELSEN: I intended to include in my motion both tables which the deputy minister has been using.

Mr. ROBERTSON: It could certainly be included.

The ACTING CHAIRMAN (*Mr. Coates*): It is agreed.

RESOURCES AND DEVELOPMENT
TOTAL APPROPRIATIONS

Years	
1949-50	27,837,741
1950-51	34,453,438
1951-52	35,760,812
1952-53	38,390,651

APPROPRIATIONS—RESOURCES AND DEVELOPMENT

(Excluding Demobilization and Reconversion and Special Projects Including Trans-Canada Highway)

Year	Departmental Appropriation	% increase over Preceding Year	Northern Administration Branch	% increase over preceding year
1949-50	24,818,454	*	5,748,699	*
1950-51	23,560,977	(−) 5.0	5,889,625	2.4
1951-52	19,766,732	(−) 16.1	3,325,004	(−) 43.5
1952-53	21,887,672	10.7	4,167,170	25.9

*No Department of Resources and Development as such prior to 1949-50.

DEPARTMENTAL STATEMENT—NORTHERN AFFAIRS AND NATIONAL RESOURCES

Year	Appropriations	% Increase over preceding year	Appropriations All Departments	% Increase over preceding year	Full Time Dep'tal Staff	% Increase over preceding year
	$		$			
1953–54.....	21,581,300	†	4,660,157,896	†	1666	—
1954–55.....	23,104,709	7.0%	4,634,832,565	−0.5%	1684	1.08%
1955–56.....	28,697,430	24.2%	4,569,438,756	−1.4%	1842	9.38%
1956–57.....	39,392,896	37.2%	4,934,544,536	+7.9%	1978	7.38%
1957–58.....	53,713,741	36.3%	5,179,480,914	−4.7%	2141	8.24%
1958–59.....	78,685,209	46.4%	5,606,870,020	+8.2%	2390	11.63%
1959–60.....	85,787,577	*9.0%	5,595,848,557	*−0.19%	2791	16.77%

Financial figures for 1953–54 to 1957–58 taken from Public Accounts
Financial figures for 1958–59 taken from Main and Supplementary Estimates
Financial figures for 1959–60 taken from Main Estimates
†Prior to this Department called Resources and Development—included Trans-Canada Highway Div.—figures cannot be compared therefore.
*Main Estimates for 1959–60 only—no Supplementary Estimates.

Mr. NIELSEN: Would you, for the time being, if you have them convenient, place the administrative votes on the record too?

Mr. ROBERTSON: I am not sure that I understand what is meant by that.

Mr. NIELSEN: As opposed to the total votes.

The ACTING CHAIRMAN (*Mr. Coates*): I think he means the Northern Administration Branch.

Mr. NIELSEN: Yes, for the Northern Administration Branch, just the one branch.

Mr. ROBERTSON: Yes, I have the Northern Administration Branch. Do you want those figures now?

Mr. NIELSEN: Yes, because we will not have the printed record for two or three days.

Mr. ROBERTSON: I shall take them for the same periods for the Northern Administration Branch, as follows:

NORTHERN ADMINISTRATION BRANCH

Fiscal Year	Vote Totals	% of increase over previous year	Full-time staff	% of increase over previous year
1953–54.....	4,052,075		290	
1954–55.....	4,839,262	19.4	306	5.5
1955–56.....	8,512,413	75.9	381	24.5
1956–57.....	12,630,914	48.3	479	25.7
1957–58.....	20,428,609	61.7	552	13.1
1958–59.....	40,570,424	98.5	718	30.0
1959–60.....	45,543,178	12.2	978	36.2

Mr. NIELSEN: It would appear—and please correct me if I am wrong, Mr. deputy minister—that in those ten years, and in the total votes, the number of dollars allocated to the department has quadrupled as in the 1959-1960 estimates. Most of it seems to have come—at least a triplication of it—from the last two years. Is that correct?

Mr. ROBERTSON: Yes, it has approximately quadrupled over a ten year period.

Mr. GODIN: It certainly has not tripled.

Mr. ROBERTSON: Let me put it this way: it has doubled. Perhaps I should put it this way: that there is no significant change in the first six years of that period. Then there was an increase that brought it up to about double the original level by 1957-1958, and since then it has come up, as Mr. Nielsen said, to about four times the original level.

Mr. ROBICHAUD: A department of this extent has to be organized, and it has to develop and progress accordingly.

Mr. ROBERTSON: That is correct.

Mr. ROBICHAUD: As is clearly shown here, according to the figures you have just given, the department has been progressing in accordance with the needs and demands of the country in its northern section.

Mr. NIELSEN: Is that a question or a statement?

Mr. ROBICHAUD: I think it is a question. It has a bearing on what has been done.

Mr. MUIR (*Cape Breton North and Victoria*): By the same token it must have been increased considerably in the last two years.

Mr. GODIN: May I ask a question? I believe the committee is for all members, not necessarily just for one or two. It is obvious that with the expansion of the country, the expenditures in this department have increased accordingly, and possibly for good reasons. Could the deputy minister indicate if those expenditures are based on additional personnel, and increases in salaries, or the possible opening up of branches of the department?

Mr. ROBERTSON: There have not been any new branches opened up. Most of the increase, as the figures have indicated, has come in the Northern Administration Branch.

Going back to the original figures for 1949-1950, the Northern Administration Branch was $5 million out of $24 million. In 1953-1954, when the Department of Northern Affairs and National Resources was established as a new department, the Northern Administration Branch was only $4 million out of $21 million, and in 1959-1960 the Northern Administration is $45 million out of $85 million. In other words, Northern Administration has been multiplied by ten, while the department as a whole has been multiplied by four. So the main change is related to the very greatly increased activity in the north. That is the main change.

Mr. GODIN: Could you indicate to the committee just what you mean? Is it because of salaries, personnel, or the opening up of offices and increasing the number of investigators? There must be a way of indicating it to the committee?

Mr. ROBERTSON: Yes, that could be done. Most of the cost has been due to physical work. The largest initial expansion program has been in relation to education and the provision of schools, and these of course are costly. The new situation even yet is highly unsatisfactory.

Mr. GODIN: Just what schools is the deputy minister referring to?

Mr. ROBERTSON: I am talking about schools for Indians and Eskimos in the Northwest Territories. Schools for non-Indians and non-Eskimos in the Northwest Territories are paid for by the territorial government and the schools for Indians in the Yukon are paid for by Indian Affairs. I am referring to schools for Indians and Eskimos in the Northwest Territories—

Mr. GODIN: Could it be said that the major part of the expansion is due to social and welfare works?

Mr. ROBERTSON: No. That has been a big part of it, but in addition there have been very substantial expenditures on a new roads program

which has added very considerably to the figures. So I would say that most of the increase was for construction, either of schools or for roads and transportation.

Then of course with the new schools there was an increase in the number of teachers, which is reflected in the total of personnel, and in addition an increase in the number of northern service officers and that sort of thing in the north. But most of it is due to construction.

Mr. ROBICHAUD: Mr. Chairman, is the largest item not due to the town of Aklavik?

Mr. ROBERTSON: No, this would not be a large item in there. I could separate that out. I do not know what it is on a year to year basis, but I could get it for you.

Mr. ROBICHAUD: Do you know what the total to date has been?

Mr. ROBERTSON: I have not got it with me this morning, but I could get it for you.

The ACTING CHAIRMAN (*Mr. Coates*): Would you like it broken down for each year, Mr. Robichaud?

Mr. ROBICHAUD: No, just the total to date.

Mr. FLEMING (*Okanagan-Revelstoke*): Mr. Chairman, I have a question on organization that is completely separate and apart from the current line of questioning; and if the committee wishes to continue on the present line I will save it for another meeting.

Mr. NIELSEN: Would you say too, Mr. Robertson, that this apparently smaller increase in the allocation of the total vote to this department in the last two years has been due, primarily, to the greatly increased tempo of attention and activities in the areas north of the 60th parallel in Canada?

Mr. ROBERTSON: Yes, Mr. Chairman.

Mr. GODIN: Would you explain that?

Mr. ROBERTSON: The new road program that has been brought in, the territorial roads program and the roads-to-resources program, are quite extensive. I can get the figures for you in just a moment.

Mr. GODIN: Is the relief and winter work road program included in the figures given here by you?

Mr. ROBERTSON: No, they are separate votes. They are included in the departmental total, but they are not included in what I was referring to, the road program north of 60 degrees.

Mr. GODIN: In the last figures you have given there are items of expropriation of moneys which are for the purpose of relief and winter work not seen in previous years.

Mr. ROBERTSON: Yes, that is true.

Mr. NIELSEN: What is meant by "relief" here?

Mr. ROBERTSON: The winter work program. There is no "relief".

Mr. GODIN: It was to relieve unemployment, call it what you will.

Mr. ROBERTSON: The winter work figures are included. I have forgotten what the expenditures are. I am told it was $1,300,000 last year. That is only a part of it.

The ACTING CHAIRMAN (*Mr. Coates*): That is the total of what?

Mr. ROBERTSON: The departmental total.

Mr. MCGREGOR: Mr. Chairman, I want to have put on the record the moneys spent for education since 1949.

Mr. ROBERTSON: We can try to sort this out. It is going to be difficult.

Mr. MCGREGOR: I am not asking for it now, but you could put it on the record.

Mr. ROBERTSON: We can try to sort that out, and present it.

There is one thing I would like to add on the education part, if I may, Mr. Chairman, while we are at this point. That is, while the expenditures are substantial and will continue to be substantial, the education situation in the north is still anything but satisfactory.

I do not know whether the committee is interested in what the figures are for literacy and school attendance even now.

Mr. MCGREGOR: Yes.

Mr. ROBERTSON: I got this because I thought it might be of interest. They are relevant, and it shows that it is not a satisfactory state of affairs.

In the Northwest Territories at the present time only 10 per cent of the Eskimos are literate, and only 40 per cent have schools available even now, after the schools program has been underway for several years. As I said, only 40 per cent have schools available now.

Of the Indians in the district of Mackenzie—and they are in a much more developed and more highly populated area—only 50 per cent are literate at the present time, and only 70 per cent have schools available.

Despite the program that has been under way in the last few years, we still have a situation in which we have school space available for less than one-half of the native people in the Northwest Territories.

We are a long way from a satisfactory situation, and the relevance of this is that—as members of the committee know—the economic resources and the possibility of life on the land is vanishing, and has vanished in some cases; and the only chance these people have is education. That is why a terrific amount of attention is being given to it.

The ACTING CHAIRMAN (*Mr. Coates*): Could you provide for the committee the number of Indians and Eskimos in the Northwest Territories?

Mr. ROBERTSON: Yes, Mr. Chairman.

Mr. NIELSEN: It is in the annual report.

Mr. ROBERTSON: Yes, I think it is in the annual report. It is roughly 5,000 Indians and 10,000 Eskimos.

Mr. NIELSEN: In the Northwest Territories?

Mr. ROBERTSON: Yes, in the Northwest Territories.

The ACTING CHAIRMAN (*Mr. Coates*): Would you have any idea how many of those are under the age of 21?

Mr. ROBERTSON: We could try to get those figures.

The ACTING CHAIRMAN (*Mr. Coates*): Could you get those?

Mr. ROBERTSON: Yes.

Mr. MUIR (*Cape Breton North and Victoria*): Mr. Robertson, would you say that despite the excellent improvements which have been carried out, illustrated so dramatically by your figures in the last two years, there is still a great need, according to your statement, for a great enlargement of the work being undertaken in the area?

Mr. ROBERTSON: There is no question about it. We have gained a lot of ground; but we have a long way to go.

Mr. MUIR (*Cape Breton North and Victoria*): There is further indication we have a lot of work to do there yet?

Mr. ROBERTSON: Yes, a tremendous amount of work to do.

Mr. NIELSEN: What is the importance in timing of this program? Obviously, we need more schools and increasing attention must be paid towards the education of the native peoples of the north. Would you say it is an immediate requirement, or have we a period of grace?

Mr. ROBERTSON: I do not think there is any period of grace. If I may say so, I think in regard to this that we have less time than in anything else, because if we lose five years we have missed a person's lifetime, because that person's opportunity for education will have gone. That means that because of the way in which life is going in the north, that person, for his whole lifetime, has not a fair chance.

Mr. NIELSEN: In other words, he has lost his chance to become educated and therefore is unable to find a job?

Mr. ROBERTSON: Yes, you might give him vocational training, so he could get some kind of work.

Mr. NIELSEN: But that commences at the 18 years' level?

Mr. ROBERTSON: Yes, that is correct.

Mr. GODIN: Could the deputy minister tell us, in view of his last remarks, if it is possible that more attention could be paid to this education and humane aspect of the north; and for the time being, or maybe for the last year, if more moneys had been placed in that direction instead of being used on roads and other parts of the division, that possibly we would have achieved more and would find ourselves less in arrears on that very important point?

Mr. ROBERTSON: I do not think it is an "either/or" proposition, because, in part, the educational process is aimed at preparing the people for employment opportunities, and a way of life which will support them. Therefore, unless we go ahead on the resources side of it at the same time, we will not have employment opportunities and the possibilities of earning a living in the area. As I say, it is not an "either/or" proposition, but both.

Mr. NIELSEN: Would you say that in the last ten years the working picture of the resources side has been neglected above the 60th parallel?

Mr. ROBERTSON: It certainly has not gone as fast as I would like.

I made a submission to the Gordon Commission, as commissioner in the Northwest Territories, in regard to measures which I thought were desirable. At that time I was advocating a program which I thought was ambitious. It was far too small a program at too slow a pace.

The situation in the north has changed at a rate that none of us, even dealing with the problem, has really kept pace with.

Mr. NIELSEN: May I move that we adjourn, Mr. Chairman?

Mr. MCGREGOR: I would like to ask just one question. You have given us some figures of schools and the accommodation you have and so on?

Mr. ROBERTSON: Yes.

Mr. MCGREGOR: That is for the Indians. Would you give us the figures for the year 1946 so we may draw a comparison?

Mr. ROBERTSON: I can, yes.

Mr. MCGREGOR: I am not asking for it now, but merely to have it put on the record.

Mr. ROBERTSON: I will try to get that, Mr. Chairman.

Mr. GODIN: Would the deputy minister give us also a separation of the school expenditures and segregate it from the others, the main ones, he has mentioned?

The ACTING CHAIRMAN: He said he would try and do that.

The meeting is adjourned until 11.00 a.m. on Monday next.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 18

RECEIVED
MAY 20 1959
Library of Parliament

MONDAY, MAY 11, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. R. G. Robertson, Deputy Minister; Mr. G. W. Rowley, Secretary, Advisory Committee on Northern Development; and Mr. J. R. B. Coleman Director, National Parks Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21141-7—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, May 11, 1959

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Dumas, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, Hardie, MacRae, Martineau, McFarlane, McQuillan, Mitchell, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Payne, Roberge, Simpson and Smith (*Calgary South*)—(20).

In attendance, of the Department of Northern Affairs and National Resources: Messrs. R. G. Robertson, Deputy Minister; G. M. Carty, Chief Administrative Officer; G. H. Davidson, Chief, Purchasing Division; T. R. Reid, Assistant Chief, Personnel Division; G. W. Rowley, Secretary, Advisory Committee on Northern Development; V. F. Valentine, Northern Research Co-ordination Centre; M. A. Currie and A. Martin, Administrative Officers; and J. R. B. Coleman, Director, and G. L. Scott, Chief Engineer, National Parks Branch.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Continuing on Item 261, Departmental Administration, Mr. Robertson was further questioned in regard to consideration of possible tax concessions to mining companies and to individuals resident in the North, and in regard to consideration of possible inducements to settlement in the North. Further consideration of Item 261 was deferred.

On Item 262, concerning Northern Research Co-ordination Centre, Mr. Rowley was questioned; the said item was approved.

Item 263, relating to Contributions to the Provinces for Campground and Picnic Area Developments, was called. Mr. Robertson was questioned thereon; the said item was approved.

Item 264, Branch Administration, National Parks Branch was called. Messrs. Robertson and Coleman were questioned thereon.

At 1.02 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Tuesday, May 12, 1959.

Eric H. Jones
Clerk of the Committee.

21141-7—1½

EVIDENCE

MONDAY, May 11, 1959
11.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. The minister will not be here today; there is a cabinet meeting on now. He may be here a little later on. Actually, I think he should be here for each meeting, and I hope that we may have him here, perhaps in a half hour or something like that. Would you like to continue on with the administration? The deputy minister and his officials of the department are here.

Mr. HARDIE: Has the evidence of the last meeting been printed?

The CHAIRMAN: I imagine that we will have it by tomorrow.

Mr. AIKEN: I am wondering under which item of the estimates we can discuss the matter at Aklavik and Inuvik.

The CHAIRMAN: That would come under the Northern Administration Branch, on item 275 on page 56 of the estimates.

Mr. HARDIE: Are we through with the type of questioning we were treated to the other day in respect of the personal views of civil servants?

The CHAIRMAN: Mr. Hardie, I think all the members here will concur in what I say: there is a similar situation to that which existed under the consideration of the estimates of the Department of Mines and Technical Surveys. Mind you, we are here to help, and not to hinder, the department. I will allow considerable latitude as long as it is relevant. I think the heads of the divisions in the Department of Mines and Technical Surveys made a marvellous contribution in pointing out the additional services which they wanted. That was brought out.

Your good friend sitting beside you is on the Steering Sub-committee. I believe that what we then discussed will be going forward in the report to the House. I hope it will not be what some persons might term a political report. We have had some political opinion—let us get away from that. If we analyze these estimates in a business-like fashion, I think we will all get along very nicely.

Mr. HARDIE: We shall see.

The CHAIRMAN: The minister and the deputy both said that the departmental officials are quite free to express their views. If they are not free their evidence would not be of any good. They said that they are free to explain their opinions regarding the administration of their own branches, the faults, and so on.

Mr. SMITH (*Calgary South*): What do you propose to do in respect of the Territorial Oil and Gas Regulations? When will we have the next meeting, if any, to consider that.

Mr. HARDIE: Have we had a reply from the oil companies?

The CHAIRMAN: I think the time to discuss this would be when the minister is here. I think he should be here.

Mr. SMITH (*Calgary South*): Yes. I just was not sure whether or not we were still going to hear from the officials in the industry. It is purely a matter of procedure in which I am interested.

The CHAIRMAN: The item is still open and we are free to discuss it. I think it should be brought up when the minister is here.

Mr. HARDIE: Have you, Mr. Chairman, received any communication from the industry to the invitation which you sent inviting them to send a representative from the oil and gas industry to appear before this committee. The secretary, Mr. Stuart, came up to see me a couple of times. He is communicating with his officials in Calgary. I believe they are coming down within the next few days.

Mr. DUMAS: Is that the Canadian Petroleum Association?

The CHAIRMAN: Yes. They are actually discussing the rules and regulations with the minister. They may not choose to appear before this committee. They have, however, been invited. I sent them a personal invitation.

Mr. HARDIE: Will we be advised beforehand if they do wish to appear? There may be other members of the committee who will wish to be present.

The CHAIRMAN: It appears that they may not be anxious to appear before the committee, in view of the fact that these regulations now are being discussed with the government.

Mr. NIELSEN: I thought it would be premature in view of the pending negotiations.

Mr. HARDIE: There was the motion.

The CHAIRMAN: I think when the motion was made it was quite in order. They have had an opportunity of appearing. I do not think at that time that the sponsor of the motion knew that they were coming down to have a meeting with the minister and the officials of the government.

Mr. SMITH (*Calgary South*): I believe they have indicated a willingness to meet with the committee at such time as their own views are formulated and after they have had an opportunity of giving some further study to the matter. I can understand the position of the Canadian Petroleum Association, because it represents a very broad range of opinion.

The CHAIRMAN: I did not see this previously—this is a letter dated May 6 from the Canadian Petroleum Association. One paragraph reads as follows:

> Mr. Murphy's letter indicated that arrangements could be made to have representatives appear during their visit early in May, but that if this were not possible, might be postponed to a later date.
>
> I am to advise your minister that the Canadian Petroleum Association has not, as yet, arrived at a firm policy regarding recommendations for amendments to the Northwest Territories regulations.

I assume that is what the meeting is for.

We are still on item 261, Departmental Administration. Would someone who was at the last meeting like to pursue the questioning? I am sorry I was not here then, and I do not know where you left off.

Mr. HARDIE: Could the deputy minister again give us the breakdown?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): It was asked that that be printed as a part of the proceedings. We have given the information to the clerk of the committee and it will be appearing in the printed proceedings. I could run over it again, but it is quite lengthy.

Mr. HARDIE: What I want is not lengthy. I just want the year by year total estimate of the department since the Department of Northern Affairs and National Resources was set up, I think, in November of 1953.

The CHAIRMAN: Each year from then on?

Mr. HARDIE: Yes.

Mr. NIELSEN: The figures given the last time went back to the time of the creation of the department of resources and development in 1949.

Mr. HARDIE: That is fine—we will have it from 1949.

Mr. ROBERTSON: As I explained at the last meeting, the figures in respect of the things which are no longer in the Department of Northern Affairs, such as the trans-Canada highway, which has gone to the Department of Public Works, have been subtracted from these figures, going back to 1949.

Starting in 1949-50, the figures for the total departmental appropriation are in rough millions, as follows: 1949-50, 24.8; 1950-51, 23.5; 1951-52, 19.8; 1952-53, 21.9; 1953-54, 21.6; 1954-55, 23.1; 1955-56, 28.7; 1956-57, 39.4; 1957-58, 53.7; 1958-59, 78.7 and 1959-60, 85.8.

Mr. NIELSEN: Will there be supplementary estimates in addition to the 1959-60 figure that you have given there?

Mr. ROBERTSON: Yes. We will be submitting certain requests to Treasury Board for supplementary estimates.

Mr. DUMAS: And the figures you have given for 1949-50 to 1958-59 include the supplementaries?

Mr. ROBERTSON: They include the supplementaries in all cases except the present year.

Mr. HARDIE: Therefore, since the department was set up in 1953-54 up until the end of the year ending March 31, 1958, the increase was over 100 per cent during that period?

Mr. ROBERTSON: That is correct.

Mr. HARDIE: And during the period 1959-60, which is the end of March of next year, it is estimated the increase will possibly be 60 per cent. It looks very much to me—at least since 1954-55—that the increase each year has been in the vicinity of anywhere from 30 per cent to 40 or 43 per cent.

Mr. ROBERTSON: During those years it has gone from 24.2 per cent to as high as 46 per cent.

Mr. HARDIE: But the marked change—

Mr. NIELSEN: The last two years.

Mr. HARDIE: No, the marked change was after the year 1954-55, after the Department of Northern Affairs and National Resources was originally set up. The marked change shows over 100 per cent during the period 1953-54 to 1957-58, also the last two years. If you average out those other years, you would find it was a normal change.

The CHAIRMAN: In connection with the increase, you are speaking of a period of five years?

Mr. HARDIE: Yes; it is a normal change.

Mr. SMITH (*Calgary South*): Percentages often can be misleading; will you again give the dollar value during the same period.

Mr. ROBERTSON: The same figures that I gave?

Mr. SMITH (*Calgary South*): Yes.

Mr. ROBERTSON: 1949-50, 24.8; 1950-51, 23.5; 1951-52, 19.8; 1952-53, 21.9; 1953-54, 21.6; 1954-55, 23.1; 1955-56, 28.7; 1956-57, 39.4; 1957-58, 53.7; 1958-59, 78.7 and 1959-60, 85.8.

Mr. SMITH (*Calgary South*): Thank you very much. I think the figures speak for themselves.

Mr. HARDIE: Further to that, Mr. Chairman, I would like a breakdown of the Northwest Territories Administration and Lands Branch for the same period.

Mr. NIELSEN: Northern Administration and Lands Branch?

Mr. ROBERTSON: I think it is the Northern Administration Branch you want, as a branch administration.

Mr. HARDIE: Yes, the Yukon and the Northwest Territories.

Mr. ROBERTSON: For the same period the figures in millions are as follows: 1949-50, 5.7; 1950-51, 5.9; 1951-52, 3.3; 1952-53, 4.2; 1953-54, 4.1; 1954-55, 4.8; 1955-56, 8.5; 1956-57, 12.6; 1957-58, 20.4; 1958-59, 40.6; 1959-60, 45.5.

Mr. HARDIE: I think the line of questioning that the member for the Yukon was working on the other day was to show that more money, or a great deal more money, had been spent on welfare and social problems in the north than had been spent on development. Have you a breakdown?

Mr. NIELSEN: You fix me with motives that were not mine at all.

Mr. HARDIE: That is the type of questioning you were carrying on.

Mr. NIELSEN: This is not so.

Mr. HARDIE: Could you give us a breakdown of what you call development expenditures versus the social expenditures? If you have not that information available at the present time perhaps you could get it for me at a later date.

Mr. ROBERTSON: We would have to work out some sort of a separation —I do not know. It is not simply a matter of construction versus administration, because on the education part, construction is an important part of the cost. We could give a breakdown of education plus welfare on the one hand, and road construction on the other—something like that.

Mr. HARDIE: Well, if you would do that.

Mr. ROBERTSON: We will try to get something of that kind for you.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. NIELSEN: I have some questions concerning the work of Northern Affairs in conjunction with other departments, and National Revenue, in regard to taxation policies in the north. Would it be just as well to bring that up under item 275?

The CHAIRMAN: I will ask the deputy minister how they handle this breakdown. He informs me it might be as well to deal with it under this item.

Mr. NIELSEN: I understand, Mr. Robertson, there is a committee on which Northern Affairs personnel has some representation, and which considers matters affecting revenue and taxation policies in the north. This has been brought out in the mines evidence.

Mr. ROBERTSON: There is no formally established committee for that purpose, Mr. Chairman. There have been discussions and meetings on *ad hoc* basis, but there is not a continuing committee which is simply on that.

Mr. NIELSEN: Have you ever had any discussions with any department of the government in regard to the question of implementing some sort of tax concessions for mining companies operating in the more remote northern areas of Canada, in order to enable the capital investment and resource development in these areas?

Mr. ROBERTSON: Yes, Mr. Chairman, we have, on a few occasions.

Mr. NIELSEN: Could you indicate to the committee what, if any, progress has been made in this connection?

Mr. ROBERTSON: Mr. Chairman, there really has not been very much progress, other than the clarification of the problem and seeing the number of difficulties that are involved.

A number of different proposals have been put forward. As the committee knows, there is a three-year tax exempt period for new mining operations opening in Canada.

Because the season is so much shorter up north, the costs so much higher and the difficulties so much greater, it has been suggested that this period should be extended. It is felt that if the three-year period is a fair one in the south, it is not in the north.

There have been various formulae suggested. One suggestion is that the period should be increased simply according to latitude. Another suggestion has been that the period of exemption should increase according to remoteness from rail transportation or other permanent types of transportation. And another suggestion has been that the period should increase particularly for mines, and so on, in the true Arctic outside the Pine Tree line.

There have been discussions with the Department of Finance regarding these proposals, and there are difficulties concerning all of them. So far nothing has been worked out that could be regarded as being satisfactory and acceptable.

Mr. HARDIE: This committee—

Mr. NIELSEN: If I might be allowed to continue along this line of questioning for a moment, Mr. Hardie: Is it your feeling that by granting this type of tax concession—whether it be by increasing the tax exempt period, or some other way—resource development could be accelerated in the north, and additional capital could be attracted to it?

Mr. ROBERTSON: I think there is no question about that at all. I think, definitely, that would be so. In fact, we have had discussions with more than one group interested in this development, and they have pointed out the limitation of this tax-free period makes the difference, or would make the difference, between being able to start up and not being able to start up. It would make a big difference.

Mr. NIELSEN: Just one more question before Mr. Hardie pursues it: would you say—and I think the answer to this is obvious—that otherwise marginal mines which now exist in some areas in the north would not come into production if such concessions were not available?

Mr. ROBERTSON: I think that is correct.

Mr. MCQUILLAN: I would suggest to the deputy minister, in the case of a marginal mine I do not see how tax exemption is going to help.

Mr. ROBERTSON: When Mr. Nielsen said "marginal", in some cases the capital which is available is not substantial, and initial capital costs are large and, sometimes, even more than a group can meet. If they can get over that initial capital problem they may have a viable operation.

Mr. NIELSEN: My question was not one concerning a marginal mine, in the sense of oil reserves, but "marginal" as to cost and operation.

Mr. ROBERTSON: We have had more than one approach on that basis.

Mr. MCQUILLAN: It is more a question of attracting large sums of capital rather than a question of developing a mine that would not have any particular tax benefit anyway?

Mr. ROBERTSON: That is correct.

Mr. MCQUILLAN: You have to make money to pay taxes?

Mr. ROBERTSON: That is correct. I understood Mr. Nielsen was referring to it in the other sense, and not in the sense of the marginal ore, which would not carry economically after that period.

Mr. NIELSEN: That was the sense in which I put my question.

Mr. HARDIE: Does this committee that discusses these taxes make recommendations to the government?

Mr. ROBERTSON: There is no formally established committee on this. What there has been is simply discussions with the interested departments, primarily the Department of Finance. The problem is to see if anything can be worked out; but there is no continuing committee on the problem.

Mr. HARDIE: So that the discussions are not in the form of recommendations, but on finance?

Mr. ROBERTSON: No, Mr. Chairman.

Mr. NIELSEN: Does the Advisory Committee on Northern Development consider these problems?

Mr. ROBERTSON: The advisory committee has discussed this problem in various occasions, but it has recognized it is primarily a matter of policy; and the substantive discussions have been between the Department of Northern Affairs and National Resources and the Department of Finance.

Mr. NIELSEN: Is there not an advisory committee on northern affairs in the cabinet as well?

Mr. ROBERTSON: There is no advisory committee on northern development, but there is a cabinet committee on development generally.

Mr. NIELSEN: Supposing this committee wanted to make recommendations in this regard, which body now set up in the government would consider the merits of such recommendations?

Mr. ROBERTSON: Mr. Chairman, I presume it would probably be the cabinet committee on development; but I would not know for sure.

Mr. NIELSEN: I see.

Mr. HARDIE: I just wanted to know whether there was any recommendation made by this committee to the government; but, apparently, they are not in that field anyway.

Mr. ROBERTSON: No.

Mr. HARDIE: They are just in discussion?

Mr. ROBERTSON: Yes.

Mr. NIELSEN: If we have finished with this subject, Mr. Chairman—

Mr. DUMAS: I have one question on this subject, Mr. Robertson. Have you had any requests to your department from mining companies, in order to try to extend the exemption of three years for new mines, let us say, to five years, for mines located in the Northwest Territories, the Yukon, or farther north?

Mr. ROBERTSON: Yes, Mr. Chairman.

Mr. DUMAS: You have?

Mr. ROBERTSON: Yes, we have.

Mr. DUMAS: Have you had any requests from North Rankin?

Mr. ROBERTSON: I could not answer for certain. I think the answer is, "yes", but I would have to check.

Mr. MCQUILLAN: Have you had any request for a greater depreciation allowance? To me that would seem more sensible in that sort of problem.

Mr. ROBERTSON: I do not recall any on that basis, Mr. Chairman. Again, I could be wrong. There have been a lot of discussions, but I do not recall that.

The CHAIRMAN: Are matters of this kind discussed with the Council of the Northwest Territories?

Mr. ROBERTSON: They have not been, Mr. Chairman. The resources in the two territories are federal, and the policy is federal. Of course, in this case, what we are talking about is federal taxation, so these discussions have been federal.

Mr. HARDIE: In the case of the revenue that the government receives on the sale of oil leases in the Northwest Territories, has any consideration been given by the department or the government to, say, channelling 20 or 25 per cent of this revenue to the councils of the Yukon and Northwest Territories?

Mr. ROBERTSON: No, Mr. Chairman, there has been no thought of doing that. The Department of Northern Affairs in administering resources regard themselves very much as a trustee for the two territories, but a trustee for the territories in the future, when the resources are turned over to them.

At the present time the expenditures on development work by the federal government are many times the revenues received.

Mr. HARDIE: Oh, yes.

Mr. ROBERTSON: So, it is really considered that we are in an investment period when capital plowed in exceeds the revenue coming out. Therefore, there is no particular advantage in trying to make a proportion of the revenues go into this kind of thing. If you put 100 per cent in, you would still be lower than the development costs at this time.

Mr. NIELSEN: I think, Mr. Robertson, both councils signed a financial agreement with the federal government similar to the provincial tax-sharing agreement, did they not?

Mr. ROBERTSON: Perhaps it is a little misleading to say it is "similar". It is on the same five-year basis, when they signed that agreement. It is to provide the basic revenues required over the five-year period. But in the case of the two territories, it is recognized that a straight provincial formula is quite inadequate.

Mr. HARDIE: As development moves into the area, the municipalities and administrative districts are saddled with responsibilities for services; and with the small population we have up there, I am sure you would agree that any assistance to the territorial council in the way of financial assistance would help the municipalities and the territorial council in providing these necessary services. I suggest that 25 per cent of the revenue, or some percentage of the revenue, that the government is taking out of oil leases should be funnelled into the treasuries of the two councils.

The CHAIRMAN: Would you mind directing your question to the minister when he comes? If you want an answer, you should make it clear for the record, and ask the minister when he comes.

Mr. HARDIE: My question was if any consideration had been given, and I got an answer.

Mr. SMITH (*Calgary South*): Mr. Hardie's point is an interesting one. May I put this in the form of a question? It presupposes two important points: first of all, one which we have covered in some detail—and I have some sympathy for his argument—that revenues, as has already been stated, should match expenditures, which of course they do not. In addition, your oil and gas administration is still in its infancy, and is very small. Surely you are going to meet the present development by increasing it. It looks as if it would, in the following years, perhaps double the amount of money which you have spent so far in meeting the demands of the operators processing the current permits and leases.

Another point, which is one of principle, and which every province has any oil and gas activity in it has argued, is that probably all these oil and gas revenues should be diverted to the municipality where they are contained.

The fact of the argument, as every province has argued, is that they are to be for the benefit of all the people; and that is exactly the argument which I can see that some of you may take insofar as the territories are concerned, that a diversion of revenues from crown land to a particular area is in opposition to that principle.

What I say—and it is a question surely which is going to be considered—is that even if this reaches the point where we are developing the expansion of oil and gas reserves surely there are a great many benefits which are inherent to the area itself, such as the employment of labour, and all that is thereby involved within these reserves, which would in turn be doubled. I for one would want to see the development of an area, but I would want to take a long look at it if it would involve taking any proportion of the revenue from the crown land and diverting it to a single area; because I think that is one of the difficulties in determining the future reserves policy insofar as the area in which they are located is concerned.

Mr. NIELSEN: Is it, or is it not a fact, that the expenditures in the Yukon and the Northwest Territories today exceed by twenty to twenty five per cent the oil revenues so far obtained?

Mr. ROBERTSON: They exceed it by three or four hundred per cent.

Mr. HARDIE: Definitely, and they always have. The expenditures have always been a great deal larger than the revenues. It seems to me that the few people who are in the north and have pioneered it deserve some portion of any revenue that is taken out of the resource industries.

Mr. Chairman, on this point, where I am being interrupted—it seems to me that on the question of oil and gas policy you have checked me when asking questions, and when a member of the committee answers them and makes observations. Are we going to run this thing on a question and answer basis, or are we to be allowed the latitude you claim we are allowed? Are we to have the same latitude to make observations that the others seem to have?

The CHAIRMAN: I think we are going to get through the estimates a lot faster. You have made marvellous observations, and I appreciate them; others have come from other sources; but I wish that in the course of your observations you would direct your questionings to the deputy minister; I think that would help us. In many cases he would have answered your observations.

Mr. HARDIE: Could he have answered Mr. Smith's observations?

The CHAIRMAN: I do not think Mr. Smith put them in the form of questions; I was waiting for his question.

Mr. ROBERGE: He said he did.

Mr. SMITH (*Calgary South*): All right, Mr. Chairman. May I ask the deputy minister whether or not there has been any intention on the part of the department, in the event that the government becomes in a profit condition with respect to oil and gas leases, to divert any portion of them to any particular area which may be allocated within the territorial areas.

Mr. ROBERTSON: We are so far short of that happy position that we have not wrestled with that problem yet. Our general approach thus far has been that the federal government should expend in the development whatever amounts are necessary, and which the federal government thinks can be appropriated in the development. We know that the revenues are much less than the expenditures, and that, rather than to divert a fraction of those revenues, the right approach is to determine what is needed generally for the territorial administration and to provide this on a regular five-year fiscal need basis, rather than to provide it subject to the expandable ups and downs of

sales in any particular year, or revenue in any particular year, or anything of that kind. It is not possible for the territories to budget really on a fortuitous or accidental basis. It may be all right for a province, with a large revenue, and where apportionments are probably small; but for the territories, where the revenues are proportionately small, this cannot be done.

The CHAIRMAN: I do not want to restrict any observations; the points you have raised are interesting, and if they had been asked in question form, I think the answers would be on the record.

Mr. AIKEN: May I make this comment: it appears to me that Mr. Nielsen had asked a question of the deputy minister, and before he had an opportunity to answer it, Mr. Hardie had started to answer it for him.

Mr. HARDIE: You are dreaming.

Mr. AIKEN: Mr. Nielsen had just completed his question and before the deputy minister had a chance to answer it Mr. Hardie started to answer it for him.

The CHAIRMAN: Let us proceed from there.

Mr. HARDIE: Could the deputy minister tell us whether or not the welfare division—as I see from its organization charts—is in the form of organized welfare, or is it something broader?

Mr. NIELSEN: I would like to revert to the tax question further.

The CHAIRMAN: Is it all right to hold your question for northern administration, Mr. Hardie? I think that is an important subject and one which will likely be gone into at some length.

Mr. NIELSEN: If we are through with questions on the possibility of tax concessions to mining companies, I would like now to raise the subject in regard to individuals in the north.

Many people feel that a different tax basis would induce settlement in the north. I think we are agreed that this is a desirable thing. Has any consideration been given to the possibility of northern residents being placed on a different tax basis than are residents in the southern areas of Canada: (a) for the purpose of inducing people to settle permanently in the north, and (b) to allow them to develop economically?

Mr. ROBERTSON: Mr. Chairman, I am not sure "consideration" is the right word. The question was raised, and thrown out with such alacrity that there was not much consideration involved.

The Department of Finance and the Department of National Revenue feel—and I must say it is a little difficult to argue against it—that the individual has to be treated the same in tax terms wherever he is in Canada, whether he is living in Newfoundland, Ungava, or another part of the country. So we were given very short shrift when this point was brought up, and I think this is not one of the more likely avenues for further consideration.

Mr. NIELSEN: I will put one more question on these lines to Mr. Robertson. If, indeed, all the people of Canada are to be treated the same from a tax point of view, how can this be reconciled with the northern allowances that are paid to government civil servants in the area in recognition of the fact that they require this extra money to maintain a position in the north equal to that which they left in the southern areas of Canada?

Mr. ROBERTSON: When I said, "being treated equally", at that point I was referring to tax treatment: they have, for tax purposes, to be treated the same.

With regard to northern allowances, these are simply the governmental counterpart of what Mr. Nielsen knows is the fact in industry and all other employment in the north. The industrial wage structure is higher in the

north than it is in the south. United Keno Hill Mines, or Giant Yellowknife Mines, pay a higher wage structure on the whole—and have to—than in the south.

In some cases it is a concealed wage; they provide housing, frequently at no cost; they provide meals for single employees at far less than cost. In one way or another, the fact of higher living costs, and also the need—in some cases—to have some inducement to get people to go up, are met by increases in the wage structure.

The northern allowances are simply the governmental equivalent of these various types of inducements that are built into the industrial wage structure of mines and others in the north. It is not something that is singular and separate for the government employee alone; it is only that it takes that particular form in his case.

Mr. NIELSEN: Apart from the very recent advances made in the fields of housing and schooling in the north, has the Advisory Committee on Northern Development, or the department, considered any specific methods of inducing permanent population north of the 60th parallel?

Mr. ROBERTSON: We have thought, Mr. Chairman, that one of the essential things is to get, to the greatest extent possible, the amenities of ordinary living up there; sewer and water systems, radio service, good schools, hospitals, improved communications, and that sort of thing.

People, in many cases, are not prepared to go and pioneer on the basis that they were on the prairies, with a sod-hut and none of the amenities. So the policy has been to try to provide within the necessary limits of cost, in a number of cases—at least at certain centres—these basic amenities of living, in the hope—and I think it has worked out—that people will be more inclined to settle permanently, to regard these areas as home, and to make permanent settlements than they otherwise would.

Mr. NIELSEN: Do you agree with the Gordon Commission report—as shortly as that report dealt with the matter; which I think was a shame—when the Gordon Commission said that it will take the "ruthlessness of a Peer the Great to populate the northern areas of Canada"?

Mr. ROBERTSON: I regarded that as poetic licence, Mr. Chairman. I do not agree with that.

Mr. MCQUILLAN: Mr. Chairman, first we must have the means of employment before there is any great growth in that regard; is that not correct?

Mr. ROBERTSON: That is correct, certainly.

The CHAIRMAN: Before we leave this item for the time being, Mr. Hardie a moment ago raised the question on certain aspects concerning the welfare of Eskimos, and asked under what item it should be discussed. I would suggest that, if any of the gentlemen of the committee are in doubt as to where they could discuss a certain item which they want to discuss, and do not know just under what section it should be discussed, if they raise the question now, we will advise them so that they will know when that particular item may be discussed.

Mr. NIELSEN: Mr. Chairman, I have just one further question on this taxation matter, and this involves speaking up for the civil servants involved.

I preface the question with the observation that I think northern allowances are proper in order to maintain the status of a civil servant who moves to the north from a southern area and who should not be prejudiced by that move.

But he feels—and I think there is some merit in it—that the northern allowances paid should not be taken away with the other hand in the form of taxation.

Would you inform the committee, Mr. Robertson, whether this problem has been considered in the department, or in any inter-departmental committee, with a view to recommending that the northern allowances be paid to civil servants tax free?

Mr. ROBERTSON: The northern allowances are not set on a departmental basis; they apply to government civil servants generally. The same structure applies to government servants, no matter what their department. This question of taxability has been raised, but the Department of Finance and the government, I think, feel that it is in accord with the general policies followed in relation to income taxation and should be taxable, and they have not been prepared to alter this basis.

Mr. NIELSEN: May I ask your personal opinion, Mr. Robertson? Do you feel it should be taxed?

The CHAIRMAN: You are asking his opinion as the deputy minister, are you not?

Mr. NIELSEN: I am asking his personal opinion.

Mr. ROBERTSON: Well, Mr. Chairman, it is a difficult question.

The CHAIRMAN: I think he should answer the question as deputy minister: he is here in that capacity.

Mr. HARDIE: It is a question for Mr. Robertson and the officials of his department; it is not a personal opinion. I do not see what right this committee has to ask any official of the department for a personal opinion.

Mr. NIELSEN: If Mr. Robertson says that he does not wish to answer, that is fine.

The CHAIRMAN: I think, Mr. Nielsen, as I observed a moment ago—and this is supported by Mr. Hardie—no official should be asked to give a personal opinion. He can give an opinion in his official capacity.

Mr. NIELSEN: Let me put the question in that way, then.

The CHAIRMAN: That is right.

Mr. ROBERTSON: Mr. Chairman, I think that on the whole I would be inclined to say to Mr. Nielsen that I think the allowance should be taxed, because in this way you do get some regard taken in the tax structure for the differences in family circumstances. The man who is receiving the northern allowance and who has just married, say, with no children, would receive a much larger benefit, if it were tax free. When it is taxed, regard is taken for the fact that another man may have four or five children. He gets a greater net benefit than the man without children. So I think there is, perhaps, some equity in it being taxed.

Mr. NIELSEN: Would not that same benefit prevail if he were left at the same comparable salary structure as in the south?

Mr. ROBERTSON: No, not really, because it is the marginal rate of tax that is the important thing. If the whole thing is taxed, the man with four children gets a greater benefit at his marginal rate of tax because of his deductions for the children. Therefore, I think there is a greater regard taken to family circumstances by these means.

What it really means is that the allowance has to be a bit higher to take account of the fact that it is taxed. On the whole—

Mr. NIELSEN: I was going to follow up with that question. Have you considered that?

Mr. ROBERTSON: Mr. Chairman, we are not entirely satisfied with the northern allowance structure at the present time: we feel that it works too

harshly in certain locations. We have made representations for some adjustments, and we will be making further representations.

Mr. HARDIE: I wonder if it would answer the question that Mr. Nielsen has asked if we had the Minister of Finance before the committee? Is there a possibility of that?

The CHAIRMAN: I am in the hands of the committee. We are discussing the estimates of this department. The deputy minister or the minister can state policy. I think we are on the right track when we ask them to report their views in an official capacity.

Mr. HARDIE: I would like to come back to the question of labour rates. Would the deputy minister tell us what the real rate is for a labourer in the various parts of the north.

Mr. ROBERTSON: I think we could find that out and submit a table of rates.

Mr. NIELSEN: For government employees?

Mr. HARDIE: No; for all employees. I believe the point made was that industry is paying higher rates of pay than the government.

Mr. ROBERTSON: Not than the government.

Mr. HARDIE: I understood you to say that the northern allowance was to raise the civil servants' rates of pay in line with industry.

Mr. ROBERTSON: No. What I meant is that all employers in the north have to pay more than similar employers in the south. In the case of the government that difference appears as the northern allowance. In the case of industry, for instance a mining company, it may appear as higher wage rates; it may also appear as subsidized meals, free housing, and so on.

The point I was making is that the north has a higher cost, and in one way or another employers have to meet it.

Mr. HARDIE: In the case of construction, do we meet this higher cost with higher wages?

Mr. ROBERTSON: Yes, I think so. What we have are certain approved wage rates for different areas. We could obtain those.

Mr. HARDIE: I would like to know what rate your department pays for, say, a labourer or a carpenter, in the different zones. How does this compare with those below the sixtieth parallel?

Mr. ROBERTSON: What we can do would be to select a few north, and a few south, of sixty degrees, and obtain some wage figures on that.

Mr. AIKEN: I would like to pursue a question Mr. Nielsen raised, concerning an influx of population into the north. I would like to ask the deputy minister if there has been any noticeable increase in the number of persons who are settling in the northern areas which are being developed.

Mr. ROBERTSON: Certainly, the answer is yes. As Mr. McQuillan pointed out, the first essential is to have employment or a means of livelihood. The population of the two territories, however, has been going up quite markedly. It went up quite markedly from the 1951 to the 1956 census and I think it will be found to be up again when the 1961 census comes along. We are facing it in the experience of places like Whitehorse and Yellowknife.

Mr. SMITH (*Calgary South*): Having seen recently the National Film Board film, is not the answer one which I feel you are pursuing, that is, a program to convince the people that the north is not purely a large sheet of ice? Are we not going to have to continue to convince great numbers of our population that this is a very rich land and one which does not contain the hardships which many people feel are involved? I think we are making tremendous strides in the education program, but it has to be maintained and continued.

Mr. ROBERTSON: That is correct. I believe the film to which Mr. Smith referred is, "Down North", which the committee saw at the beginning of these sessions. Part of it is to give people an idea of, in this case, the economics of the Mackenzie valley. The purpose is to show it is not really "Lower Slobovia", and is a livable area.

Mr. AIKEN: Are there people going in there with their families: that is, workmen who are coming into the various projects which the government is undertaking?

Mr. ROBERTSON: I think we can best demonstrate this by the way we have had to build schools. Even in places like Yellowknife and Whitehorse where there have been schools for years, it is a problem to keep up with the increase. When the school house was built in Whitehorse, it was thought to be too large, but it had to be enlarged before it was finished.

In the case of Hay River, we set what we thought were liberal estimates for school purposes, and yet I do not think a year goes by when we do not have to add to that school.

Mr. AIKEN: Are these predominantly Eskimo and Indian people, or are they predominantly others?

Mr. ROBERTSON: In the case of Yellowknife, Whitehorse and Hay River, they are predominantly others.

Mr. AIKEN: How about Frobisher? Has there been an influx of families into that area?

Mr. ROBERTSON: No, not families. There may have been families of some airline employees. It is really just in the initial stages of development.

Mr. AIKEN: Would you have any figures in respect of the numbers of persons going into the Northwest Territories?

Mr. ROBERTSON: We do not have any figures other than could be found in the census figures, or which could be deduced from, say, the growth of Yellowknife and other centres as well as the school figures.

Mr. AIKEN: I realize there is no necessity to keep track of such a movement. I wondered if there were any figures.

Mr. ROBERTSON: No. It would be very difficult to arrive at it other than, as I say, from these indices.

Mr. AIKEN: The only way to examine it would be by the population as it was and is?

Mr. ROBERTSON: Yes; plus, I think, the school population in centres where you know you have been covering the whole school population. It would give you quite an index. It is not an index, say, in the eastern Arctic where we are trying to cover a small fraction of the population and know we are not covering 50 per cent of it.

Mr. NIELSEN: In view of the birth rate, the accuracy of this index would also be doubtful?

Mr. AIKEN: When we reach the estimates of the Northern Administration Branch, I would like to ask about schools.

Mr. HARDIE: Will questions on Frobisher also be handled at that time?

Mr. ROBERTSON: I would suggest, Mr. Chairman, under the Northern Administration Branch estimates.

The CHAIRMAN: That will be an interesting division.

Mr. NIELSEN: I have one further line of questioning which I would like to open here. Many persons in the north in business and other pursuits feel that an advisory committee, composed of residents of the north and composed of engineers and other technical people who have had experience in northern

development projects, should be set up for the express purpose of advising the government in connection with the projects which the government undertakes in the north. They feel the government could avoid a lot of pitfalls by having such an advisory body upon which to call for advice.

I am wondering whether or not this ever has been broached with the department by any public body such as a chamber of commerce, board of trade or by the council of either of the territories, and if so, has any consideration been given to it.

Mr. ROBERTSON: The answer is, yes. It has been brought up at least on one occasion. I think it was at a development conference at Edmonton, if I recall rightly. I do not think it has been brought up by either territorial council, of which I am aware, but I could be wrong.

The matter, however, has been considered. My minister felt that views and information from industry are very important; but he also felt that there should not be any formally established body, because decisions and so on really have to be decisions of government. He felt there might be some doubt as to the situation if you had a formally established advisory body, the views of which either had to be adopted or not. He felt an informal discussion, perhaps, is better.

There is a tremendous amount of informal discussion being carried on with industry. I do not think a day passes when the minister, or myself, or a branch, does not have some industrial group in, discussing plans, projects and needs in the north. It constantly goes on. I do not know whether or not it would be desirable to go beyond that to some informal group for group discussion.

Mr. Hamilton, however, rather felt if there is anything, it should be of informal character rather than of a formal character.

Mr. NIELSEN: Do you think that a committee such as I suggest, let us call it an advisory committee on northern projects, set up and composed as I have suggested, and having a formal status such as that of a chamber of commerce or a board of trade, could serve any useful purpose in so far as government planning is concerned?

Mr. ROBERTSON: I would like to think a bit about that. Offhand, I do not know the answer. I think that conferences like the Edmonton development conference are extremely useful. The resolutions they passed have all been gone into and several of them in fact have been implemented. This sort of thing certainly is useful. I believe they are planning to make that a biennial conference. I spoke about it with Mr. Finland, the secretary. Resolutions from that sort of an organization, I think, are certainly helpful.

The CHAIRMAN: Are there any further questions. We will hold this item over.

Item stands.

Item 262 Northern Research Co-ordination Centre, including a Grant of $10,000 to the Arctic Institute of North America; and an amount of $5,000 for grants in aid of northern research subject to allocation by Treasury Board $96,785

Mr. NIELSEN: May I lead off here?

The CHAIRMAN: Yes.

Mr. NIELSEN: Mr. Rowley, would I be correct in saying that past policy regarding Canadian resources in the Canadian Arctic appears consistently to have been to do the minimum possible? If I am not correct, why am I not correct?

Mr. G. W. ROWLEY (*Secretary, Advisory Committee on Northern Development*): Well, Mr. Chairman, that may be, but I would not like to make such a sweeping statement as that. However, I think that inference could be

drawn from what has been done. I do not think enough has been done in almost every aspect of research in the Canadian northland.

Mr. NIELSEN: Mr. Rowley, would I be correct in saying that the policy in the past has been a mixture, or perhaps a vacillation between inaction and reaction—inaction in not doing the things that obviously had to be done, and reaction in doing things only when we are pushed into them by the activities of other countries.

Mr. ROWLEY: Yes, Mr. Chairman, I think it is a fair statement that most of the research which we have carried out was initiated and appears to have been inspired by outside influence—by a fear that other people would do it, or an obvious need to keep up with one's neighbours.

The CHAIRMAN: You mean other countries, Mr. Rowley? You mentioned "other people"; you mean other countries?

Mr. ROWLEY: Yes, largely other countries.

Mr. NIELSEN: If this is not too sweeping a question to ask you, Mr. Rowley, just what do you conceive to be Canada's responsibility as a polar nation; first, in so far as resource development is concerned—well, let us stick to the item, in so far as scientific research is concerned for the area north of the sixtieth parallel?

Mr. ROWLEY: Well, I think, Mr. Chairman, that it is quite obvious we have a very large core of the Arctic region, and with our possession of that part goes the responsibility of carrying out a full program of research. As we have a very large part, I think we should be a leading nation in so far as research in the Arctic is concerned.

Mr. NIELSEN: Have we been a leading nation in this field for the past ten years?

Mr. ROWLEY: No, Mr. Chairman, we have not been a leading nation. I think we have been improving our position. We have been doing more since the war. We have been increasing the amount we have been doing, but we started from virtually nothing.

Mr. NIELSEN: What in your view would be the reason for not taking the lead in this research; would it be a lack of funds, a lack of attention, or what would it be?

Mr. ROWLEY: Of course, it has been a lack of funds and a lack of people; but I think one must remember, in saying this, that it is a particularly large country with a comparatively small population, and the demands of the rest of the country are very pressing, which has had the effect of putting research in the north in the background. There are so many things more pressing, more immediate, and more obviously of practical importance that research in the north would sometimes fall behind.

Mr. NIELSEN: Are you expressing the reason as you see it, or are you expressing an opinion in your capacity in the department?

Mr. ROWLEY: I am expressing my opinion as I have seen it, because my opinion goes back to the time when I was not in the department. It is an opinion I have held for the last twenty years or more.

Mr. NIELSEN: How long have you been in the department?

Mr. ROWLEY: Between five and six years.

Mr. NIELSEN: Have you lived in the Arctic, in the northern areas, at all?

Mr. ROWLEY: Yes, before the war.

Mr. NIELSEN: For how long a period?

Mr. ROWLEY: I lived in the Arctic itself for approximately three years.

Mr. ROBERTSON: I think it is only fair to Mr. Rowley that I should point out that his association with the Arctic goes back for a long distance; in fact, he was one of the persons who was an explorer in the Arctic. He is one of the few living persons who have discovered an island, and he has a large island named after him. He spent a great deal of time doing exploration work in Foxe Basin. He is one who undertook on his own part some scientific work up there for a number of years.

Mr. NIELSEN: Are you familiar with Captain Joseph Bernier's work in the Arctic years ago?

Mr. ROWLEY: Yes, I am familiar with that.

Mr. NIELSEN: I believe he died in 1934. Do you feel we have made any substantial progress in our Arctic areas, since the death of Captain Bernier, along the lines on which he was thinking?

Mr. ROWLEY: Yes, we have made substantial progress, Mr. Chairman. Captain Bernier really was carrying out exploration, and he was the end, in many ways, of one phase. He really came into it too late, because most of the original exploration had been carried out by the time he came along. This exploration has taken a different form since; it is a scientific exploration, dealing with the details of various scientific disciplines, rather than finding out where the land and water lie. Since then we have done quite a lot, and I think the geological survey particularly has been the most active agency in the government in this respect.

Mr. NIELSEN: Do you find you are restricted in the department with what you want to do or what you feel we should be doing in the Arctic because of restrictions placed on other departments, because of inability to obtain information from other departments such as that of Mines and Technical Surveys?

Mr. ROWLEY: Do you mean so far as development is concerned, and not so far as research is concerned?

Mr. NIELSEN: Scientific research.

Mr. ROWLEY: Yes, I think we are. All scientific research depends on basic scientific data and there is a great shortage of basic facts about the Arctic. I think this goes into all phases of research and it affects all development, either resource development or social development. We do not know enough facts. In the case of resource development, I think to some extent it is rather better because they are well established and have extremely effective agencies gathering facts. They are not gathering them as fast as we would like, but certainly this collection of scientific data is going on.

Mr. NIELSEN: Do you feel we have sufficient field laboratories in the north to accomplish the gathering of this scientific information?

Mr. ROWLEY: No, Mr. Chairman, my opinion is that we do not have sufficient field laboratories. I do not want to imply that I support large research laboratories in the Arctic; I would sooner call them stations. I prefer small stations, because in due course one exhausts the scientific possibilities of an area. I do not think we have enough small scientific stations in the Arctic, stations to which scientists from various disciplines can go.

Mr. FLEMING (*Okanagan-Revelstoke*): We are talking about scientific development in general terms at the moment. It covers a wide field. Could you explain to us in some detail exactly what scientific research is going on and the specific fields that are of particular value in the north; also, what work they would undertake? When we talk of scientific research it is a broad field and to members of the committee, such as myself, who are in the southern areas of the country, it would he helpful to know now what scientific information you want to gather, what priority you want to give to it, and the value

this research will have. If we could have some detail of the nature of the research you envisage, it would be very helpful.

Mr. ROWLEY: Well, Mr. Chairman, I would like to see the stations concerned, firstly with the collection of what you might call the natural history of the area, and expanding that to the study of biology—the relationship between the animals and the vegetation, and I would also see the stations used as a basis from which investigations in other disciplines could be carried out—in archeology and so on.

Mr. NIELSEN: Perhaps, if you could follow one specific point for Mr. Fleming—for instance, what is the importance of biological research to human life in the north, specifically in regard to vegetation as related to the animal life? What is the human importance of this?

Mr. ROWLEY: Well, it is very basic research rather than applied research. If we knew what research was going to find out, there would be no purpose in carrying out the research in many cases. I do not think one should always look for the end product before you carry out research. To some extent it compromises the research if you know what you are trying to find out before you start. I think there is a great weakness in the fact that we have not carried out enough basic research.

Mr. NIELSEN: What I mean—and I will put it directly to you: does it have any bearing on the future development of caribou, musk-oxen and reindeer herds for the purpose of providing food for the people of the north?

Mr. ROWLEY: Yes, this is the basic information on which advancement in resource management and such things as herding new animals would be built. It requires this basic information.

Mr. FLEMING (*Okanagan-Revelstoke*): What degree of progress has been achieved? I understand there has been a depletion of the caribou herds, and this involves hardship. Is the purpose of this research to get at the root of the problem, or is there still a prolonged amount of work to be done before an answer can be found to that particular problem?

Mr. ROWLEY: Certainly some answers have been found, but I would prefer not to answer that because the Canadian Wildlife Service, which is part of this department, has been responsible for this research; it would be in a better position to answer your question than I am.

The CHAIRMAN: That would come under item 270, Mr. Fleming?

Mr. FLEMING (*Okanagan-Revelstoke*): Mr. Chairman, this ties in with what Mr. Rowley has had to say. Where is the headquarters of the Arctic Institute of North America?

Mr. ROWLEY: The headquarters of the institute are in Montreal.

Mr. FLEMING (*Okanagan-Revelstoke*): What specific function are they performing in the northern area?

Mr. ROWLEY: The Arctic Institute of North America is a bi-national organization, partly American and partly Canadian. It has its head office in Montreal; and it also has offices in New York and in Washington.

Its objects are to encourage scientific investigation in the north and also, I believe, now, in the Antarctic; to publish results and to disseminate information gained from these investigations.

It is carried out to a large extent by obtaining money from various organizations and it makes many arrangements for research to be carried out.

Mr. FLEMING (*Okanagan-Revelstoke*): In fact, they supplement government research?

Mr. ROWLEY: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): Their idea is to broaden the field, is that correct?

Mr. ROWLEY: Yes, I believe it could be described in that way.

Mr. FLEMING (*Okanagan-Revelstoke*): To broaden the interest, rather?

Mr. ROWLEY: Yes.

The CHAIRMAN: Are we through with item 262?

Mr. NIELSEN: I have one more question, Mr. Chairman.

What role do you see, Mr. Rowley, the universities playing in any expanded program of northern research?

Mr. ROWLEY: I would like to see all the Canadian universities encouraged to increase the amount of northern research they carry out. I would like to see this in all universities, rather than centred in one or two universities, because I think it is such an important part of the country's responsibilities.

Mr. NIELSEN: Do you feel there should be any specific course in Canadian universities laying emphasis on northern research and allied problems?

Mr. ROWLEY: I would only like to see such a course as a very general course. For instance, I think that Arctic geology must be considered as part of geology; and Arctic oceanography as part of oceanography; I do not think one could have a degree in Arctic knowledge, as such. I think that one must specialize in one particular discipline; and that is how the greatest advances will come.

Mr. NIELSEN: From the evidence adduced before the committee when we were examining the estimates of the Department of Mines and Technical Surveys, it appeared that scientific research in Canada, generally, was lagging substantially behind. In this connection the Polar Continental Shelf Project has been launched, and the officials there have asked for certain expansions with which they hope to achieve their objective in northern research. While this discussion was going on, Canada's problem of strengthening her sovereignty over her Arctic lands arose. I understand there are weather stations in the Arctic at various points, manned jointly by Canada and the United States.

Would I be correct in saying that one of the ways in which our sovereignty could be strengthened in Canada's north, would be to have these weather stations maintained by Canada solely, rather than jointly with the United States?

Mr. ROWLEY: I would like to preface anything I say on this by this statement that there has never been any dispute about the sovereignty of these lands. I think it is obvious that they are under our sovereignty. Our effective occupation of those lands would be increased if these stations were run solely by Canada.

Mr. HARDIE: Does the gentleman think we should be out of NORAD? Does he think the Americans should be pushed out of NORAD?

Mr. ROWLEY: I would prefer not to answer that question.

The CHAIRMAN: I think this question should be directed, again, to the minister. It is, actually, government policy.

Mr. NIELSEN: I was classing weather stations as scientific stations in the north, and maybe I was wrong in doing so. I have no further questions, Mr. Chairman.

Item 262 agreed to.

The CHAIRMAN: We will now go on to item 263.

Item 263 Contributions to the Provinces pursuant to agreements entered into with the approval of the Governor in Council, by Canada with the Provinces, of amounts equal to one-half of the amounts confirmed by the Provinces as having been spent by them for Campground and Picnic Area Developments $1,500,000

The CHAIRMAN: This is an item of $1,500,000, a decrease of $1 million under the main estimate of last year; and the details are on page 364.

Mr. ROBERGE: I note that the wording of the item is a little different from that of last year. Last year the item spoke of "agreement entered into or to be entered into". It speaks now only of "agreement entered into". Does that mean that all the provinces interested have now signed an agreement on that? If I remember correctly it was "entered into or to be entered into" in the last year's estimates.

Mr. ROBERTSON: You refer to the wording of item 263?

Mr. ROBERGE: That is right.

Mr. ROBERTSON: Nine of the ten provinces have participated in that.

Mr. ROBERGE: And they have signed an agreement?

Mr. ROBERTSON: Not actually a formal agreement. What was done was to have a letter setting out the federal offer, and then the individual province accepted in a subsequent letter. All those together were taken as being the agreement. There was an exchange of letters.

Mr. ROBERGE: You have said that nine provinces entered into that agreement?

Mr. ROBERTSON: That is correct.

Mr. ROBERGE: What province did not?

Mr. ROBERTSON: Quebec.

Mr. MCQUILLAN: Mr. Chairman, I wonder if the deputy minister could tell us why there was the cut in appropriation, because the need, I think, is still there for the increasing of facilities of picnic sites and camp grounds.

Mr. ROBERTSON: You want to know why it was reduced?

Mr. MCQUILLAN: Yes.

Mr. ROBERTSON: In the first place, the figure that was put in the first year was purely and simply a guess, because we had no experience on which to go. In actual fact, the way it worked out was that in the first year of the program—from January 2, 1958 to May 31, 1958—the actual federal expenditure was $1,312,000.

As I said, the original $2½ million was purely and simply a guess. So, what we have done is to put the year's figure more in accord with experience.

Mr. MCQUILLAN: In other words, the federal government made $2½ million available to the provinces, but the provinces did not make use of the full amount of that offer?

Mr. ROBERTSON: It would depend to an extent on which provinces undertook the two different projects. Perhaps I ought to make it clear that this vote really covers two separate things. One is a program of picnic area assistance, which was really a winter-work program. Those picnic areas were virtually anywhere in the province, and that work is being continued this year.

Secondly, there is a new project which is for the establishment of picnic areas along the trans-Canada highway, and that is not limited to the winter period. That can be used any time of the year. So the vote really covers two different types of project, both of which relate to picnic areas.

Mr. MCQUILLAN: Are those picnic areas along the trans-Canada highway shared by the provinces in the same proportion as these other facilities?

Mr. ROBERTSON: Yes, but with the winter-work program there was a requirement that the labour content was to be 50 per cent of the total cost. This does not apply with regard to the trans-Canada highway program.

Mr. HARDIE: I wonder, Mr. Chairman, if the deputy minister could tell us how many men were employed in the picnic area program last year?

Mr. ROBERTSON: This past year?

Mr. HARDIE: Yes.

Mr. ROBERTSON: Yes, Mr. Chairman. Perhaps Mr. Hardie will also be interested in the actual amount of dollars spent this year; and I could give the employment figures as well.

Mr. HARDIE: Yes.

Mr. ROBERTSON: The dollars expenditures for the program to May 31, 1957—that is, carrying forward known claims with what we expect still to come in, up to March 31—total $947,623.

The employment provided under the program, to March 31, is 3,632.

Mr. HARDIE: That was the first year?

Mr. ROBERTSON: No, this is the second year. This is the year we are now in. It goes to the end of this month. This is the present year we are talking about.

Mr. NIELSEN: Do the Yukon and Northwest Territories come in for any of this vote?

Mr. ROBERTSON: Not under this vote. In the Northern Administration Branch appropriation there is a 50/50 arrangement that has been offered to the two territories.

I am told the estimate is that by the end of this month the total for this year will be an amount of $1,600,000. That is slightly above last year, which was $1,300,000.

Mr. ROBERGE: There would be a need for supplementary estimates?

Mr. ROBERTSON: Yes, I would think so, Mr. Chairman.

The CHAIRMAN: Would you want the breakdown, by provinces, of the amounts spent, Mr. Hardie?

Mr. HARDIE: Yes.

Mr. ROBERTSON: Mr. Chairman, I have not got the figures for Newfoundland. For Nova Scotia—and this is just this year—to the end of March, $15,900. This is the amount of the federal grant. New Brunswick, $5,300—these figures are rounded off. Ontario is divided into different departmental allotments under the Ontario government: Department of Highways, $378,000; Department of Lands and Forests, $35,000; St. Lawrence Development Commission, $48,500.

Province of Manitoba, $55,700; province of Saskatchewan, $44,800; province of Alberta, $73,400; and province of British Columbia, $43,800.

These are the March figures which total $701,000. Then there were expenditures in the previous months, for which I do not have the provincial breakdown, but which total $246,000, making a total of $947,000.

I do not know whether the proportions were just the same in the previous months. I cannot say, but I could get them for you.

Mr. HARDIE: There is nothing here for Prince Edward Island or Newfoundland?

Mr. ROBERTSON: I have no Newfoundland figures. I am told that the Prince Edward Island one will be by way of participation in the new trans-Canada highway part, rather than in relation to the winter work part.

The CHAIRMAN: Would you like this table to be included in our printed proceedings?

Agreed.

CAMPGROUNDS—PICNIC AREAS PROGRAM

November 1st, 1958, to May 31st, 1959

Province	Date of Letter of Acceptance	Date and Amount of Claim Received — Claim for Month of						
		November	December	January	February	March	April	May
		$	$	$	$	$	$	$
Newfoundland	November 7, 1958	Not likely Nfld. will be taking part						
Nova Scotia	January 26, 1959					15,975.84		
New Brunswick	December 6, 1958					5,287.65		
Ontario	November 24, 1958							
Dept. of Highways				63,261.66		378,384.94		
Dept. of Lands and Forests	December 2, 1958					35,556.75		
Ont. St. Lawrence Dev. Comm.				7,509.53	24,024.04	48,574.31		
Manitoba	November 6, 1958					55,706.95		
Saskatchewan	November 5, 1958		Jan. 19/59	Feb. 12/59				
Dept. of Natural Res.	November 24, 1958		1,554.16	15,541.94	13,892.73	44,794.16		
Dept. of Travel and Information		not participating—see letter of April 10th, 1959						
Alberta	November 20, 1958					73,389.76		
British Columbia	January 9, 1959	33,156.27	26,830.03	34,077.05	26,317.12	43,788.80		
TOTALS		(33,156.27	28,384.19	120,390.18	64,233.89)	701,459.16 246,164.53		
						947,623.69		

MAN MONTHS OF EMPLOYMENT PROVIDED UNDER CAMPGROUNDS—PICNIC AREAS PROGRAM

NOVEMBER 1ST, 1958 TO MAY 31ST, 1959

Province	November	December	January	February	March	Sub-Total	April	May	Sub-Total	Total
Newfoundland	Newfoundland not likely to take part									
Nova Scotia						(178.0)				
New Brunswick	4.4	4.0	2.2	4.4	5.2	(20.2)				
Prince Edward Island	Prince Edward Island not likely to take part									
Ontario										
Dept. of Hwys.										
Dept. of Lands and Forests		88	342	790	644	(1,864)				
Dept. of Planning and Development										
Ontario St. L. Development Comm.			50	124.25	247	(421.25)				
Manitoba		53.25	125.25	63.50	86.50	(328.50)				
Saskatchewan Dept. of Nat. Res.		16.5	136.75	107.5		(260.75)				
Alberta	figures not available									
British Columbia	125	135	60	95	145	(560)				
	129.40	296.75	716.20	1,184.65	1,127.70	((3,632.70))				

Mr. NIELSEN: Would it be possible to find out how much the department has contributed to the Yukon and the Northwest Territories?

Mr. ROBERTSON: There is no contribution as yet. The items are simply in the appropriation for this year. I think the Northwest Territorial Council applied to take advantage of it, but I am not sure about the Yukon Council. It is not limited to winter work in the territories. It is all year. I doubt if there has been any expenditure yet, because it would take place in the summer.

Mr. MCQUILLAN: I would like to ask about requests for the ensuing year. Are they such that they will be able to provide assistance to this camp-site work, and will they be taken care of by this vote?

Mr. ROBERTSON: You mean requests for the coming year?

Mr. MCQUILLAN: Yes.

Mr. ROBERTSON: As far as the trans-Canada highway part of the program is concerned, the answer is yes; they can be taken care of. As far as winter work is concerned, it would depend upon the government decision at the time as to whether that program is going to be renewed, and that, I take it, would not be taken until later in the year.

Mr. HARDIE: Does that mean that the $1,500,000 is only for the trans-Canada highway part?

Mr. ROBERTSON: No. It is for April and May of 1959, the months we are now in. They appear in the appropriation here; and then there is the remainder for the trans-Canada highway estimate and the picnic part of it. If there is to be a winter work program next winter, it will have to be provided for at that stage.

Mr. HARDIE: I wonder if the deputy minister could tell us why, in Ontario, they break down their payments to highways and forests, St. Lawrence seaway, or St. Lawrence development.

Mr. ROBERTSON: I think it is simply because Ontario has decided to have different agencies doing the different picnicing area programs, whereas in other provinces, they lump them all together. This is purely and simply a provincial decision and as long as standards and conditions are met the federal government participates.

Mr. HARDIE: Does this participation cover roads?

Mr. ROBERTSON: No, this is purely picnic areas. These are picnicing areas in connection with the department of highways. It may be that there are picnic areas along the Ontario highways, in connection with the Department of Lands and Forests, and I suppose there are picnic areas in the provincial parks; and in the case of Ontario and the St. Lawrence Development Commission, I think there are special picnic areas for which the St. Lawrence Seaway Authority expropriated the land in connection with the construction of the seaway.

Mr. HARDIE: You would know what the money was spent on?

Mr. ROBERTSON: Definitely; in all cases they are picnic areas.

Mr. HARDIE: Is anything included in it for roads?

Mr. ROBERTSON: No, nothing at all.

Mr. ROBERGE: Does the province confirm the spending of their half in these cases?

Mr. ROBERTSON: Yes. The province participating submits a claim with a statement as to the character of the expenditure, the labour content, the employment, and the money specifically claimed in an exchange of letters. Then it is analyzed and checked, and if necessary it is adjusted in any way, and then payment is made.

Mr. ROBERGE: That was made last year up to May 31?

Mr. ROBERTSON: Up to May 31 of 1958, and up to May 31, 1959.

Mr. ROBERGE: So in this program there is an overlap from fiscal year to fiscal year?

Mr. ROBERTSON: That is correct. The claims are paid up to the end of March, and then a new set of claims is paid for the next fiscal year.

Item 263 agreed to.

National Parks Branch

Item 264. Branch Administration ..... $ 199,400
National Parks and Historic

The CHAIRMAN: Let us deal with the item under branch administration first. We will discuss your question, Mr. Fleming, when we come to it.

Mr. AIKEN: Are we going to have a statement from the minister on national parks in the way of an overall statement of policy?

Mr. ROBERTSON: The minister had planned, if he had been able to be here, to make a short statement on parks. I could, perhaps, touch on some of the highlights that I know he was planning to mention.

The main point in connection with parks is the steadily increasing attendance and the even more rapidly increasing demands for camping facilities in the parks.

The increased mobility of the population with cars and better roads, the increased general level of income, and the increased leisure available, are making the planning for parks go up at a fantastic rate; and along with this there has been a great increase in the desire to use the campsites and other facilities in the parks.

The net result is that the expenditures on parks have had to be increased very rapidly to try to keep pace with this. If the committee wishes, I could give you a breakdown of the parks expenditures over the last seven years, to show where this increase has taken place, if you think that would be helpful.

The CHAIRMAN: Yes, I think that is agreed, and we will have the table printed in our proceedings.

NATIONAL PARKS BRANCH

Fiscal Years	Vote totals	% of increase over previous year	Full-time staff	% increase over previous year
1953-54	7,781,519		551	
1954-55	9,000,930	15.6	526	(−) 4.5
1955-56	11,036,348	22.6	603	14.6
1956-57	16,928,868	53.4	679	12.6
1957-58	19,097,248	12.8	732	7.8
1958-59	25,074,845	31.3	764	4.3
1959-60	26,443,275	5.4	831	8.7

Mr. ROBERTSON: These expenditures simply start with the establishment of the Department of Northern Affairs and National Resources, and these are the totals for national parks year by year:

	Million
1953-54	$ 7.8
1954-55	9
1955-56	11
1956-57	16.9
1957-58	19
1958-59	25
1959-60	26.4

Mr. Chairman, the notable thing is that the total expenditure has multiplied neary fourfold in that period; and I would say that notwithstanding

that rate of expenditure, we are still barely catching up with the demands for park use. Virtually the whole of the highway system in the parks was totally inadequate for present requirements. Virtually all the parks have not had adequate campsites—as for example, the case of Banff park, where last year there was campsite space for anly 600 tents, while in the summer season we had 1,500 camp tents in the camping area. Those facilities have had to be expanded at a tremendous rate.

So far as we can judge, having regard to the needs, having regard to the demand, we are going to find that attendance is going to increase even faster in the next few years than it has in the last few. There is a substantial program still to be done.

Now the department is giving attention to future requirements. At the present time there are no national parks in the Yukon or in the Northwest Territories. We feel that now is the time to take a look at the needs which may develop 25, 30, or 40 years from now in the Northwest Territories and in the Yukon. Last summer a survey was undertaken with a view to determining what recommendations should be made with respect to the Yukon, and this year we had hoped to have a group in the Northwest Territories, but we find we are not able to do so. So we will have to postpone that for one year. However, we visualize at least one or possibly two parks in each of the territories, and that they should be set up in the near future. Perhaps development should not go very far, but they should be available for the future.

One of the other things which I think the minister wanted to mention is the fact that we have this year established a planning organization for the parks. We have found that is quite inadequate, quite unsatisfactory, to proceed without an organization that is taking a long look to the future. This organization is to be completely divorced from administration, so that they do not get stalled with routine things to the neglect of things which are really important in the long term view. So we have set up a planning organization which is divorced from administration. What we aim to do is to have a land-use program in every park, and a long term development program for every park, and to stick to it, so that we will be in a position to know that 50 or 100 years from now we will have the right kind of park development to take care of the needs at that time, and not just the needs of today. I think that is one important point which the minister wished to deal with.

Mr. AIKEN: As I understand it, last year was considered to be a planning year with respect to the facilities at Jasper, Banff and Mount Revelstoke park. Would it be possible to have a report on some of the major conclusions which were drawn from the first year's experience of a planning program, with instances of what would be undertaken for future development? May we have some idea of the major conclusions that were drawn up in the principal parks in the country?

Mr. ROBERTSON: It has not been possible to get it down to a park-by-park analysis as yet, as to what has been done. I think this very substantial progress will produce a general over-all policy for the parks as a whole. Why do the parks exist; what kind of things do we foresee developing in the parks; on what kind of basis; what should our plans be as to the basis of charging for different kinds of facilities; what kind of camp-sites should we try to provide; what standards should we set; what should relation with business organizations be—and that sort of thing. We have a general policy program as a result of this first year's work.

Mr. FLEMING (*Okanagan-Revelstoke*): Has attention specifically been given to the problem of townsites within the parks, such as Banff and Jasper, for the future?

Mr. ROBERTSON: Yes. On that there is quite an interesting development. The minister and I visited Banff, Jasper and Waterton Lakes last September in order to discuss with the chambers of commerce and the local advisory councils the townsite problems in those parks, because they have the most serious problems.

As a result of those discussions, the minister agreed that we should retain the Institute of Local Government of Queens University to have a team go to the mountain parks in order to investigate the townsite problems, which include a vast array of problems. There is the problem, in the first place, of administration in an area where you may not have the ordinary local government set-up because of the park set-up. That is what you might call a political problem.

Then there are the commercial problems of people trying to carry out developments in the parks, when they cannot get freehold for their land and, therefore, there are problems of financing. There are problems of rentals and charges that ought to be levied, and so forth.

We had a meeting with local governments just last week. They will be visiting the parks this summer, and we hope to have at least an initial report from them in the fall.

Mr. FLEMING (*Okanagan-Revelstoke*): Has there never been a study of this kind before?

Mr. ROBERTSON: There has never been a study of this kind. Each townsite has a physical plan for development and there have been policies with regard to land holding, the establishment and relations of advisory councils, the levels of charges, and so on. But they are not, by any means, satisfactory. There are a lot of problems and we will try to deal with all of them.

Mr. FLEMING (*Okanagan-Revelstoke*): You did mention something about this; but in each community is there some form of representative group that maintains liaison with the department? What is your contact with the people who live in these areas?

Mr. ROBERTSON: Each one has a chamber of commerce. The chambers of commerce send in representations and they also have discussions with the park superintendents. Banff has an advisory council, in addition to the chamber of commerce.

Mr. FLEMING (*Okanagan-Revelstoke*): How is it constituted; is it elected?

Mr. ROBERTSON: Yes, it is elected. Jasper did have an advisory council, but it dissolved itself about last October or November. I think it is likely that it will be reconstituted after this inquiry is completed. I think it depends largely on what comes out of that as to what form it will take.

Mr. FLEMING (*Okanagan-Revelstoke*): I would like to know if some consideration has been given to this, and this is the reason I am asking these questions. In view of the fact that the trans-Canada highway completion is envisaged for the end of 1960 through Glacier National Park, while you have not a properly constituted townsite in that park, it is possible one will come into being a Glacier Station, where the present employees of the C.P.R. are concerned.

I am wondering whether in that particular park, plans will be formulated in time to create a townsite there. I think it will possibly be essential, perhaps not in the immediate future, but certainly in years to come. It seems a logical place for a townsite to develop. Is part of the study the matter of the creation of new townsites where they are likely to be developed?

Mr. ROBERTSON: That will not be part of this particular study. This Institute of Local Government study is directed at Banff, Jasper and Waterton

parks, because there we have immediate, pressing townsite problems. But the parks planning organization will, as part of its planning function, get into the question of Glacier development.

Mr. FLEMING (*Okanagan-Revelstoke*): That is the only one that I know of. Are there others in the country where you are likely to have a similar condition prevail?

Mr. ROBERTSON: I think the answer is "no", Mr. Chairman; we do not visualize it at the others.

Mr. FLEMING (*Okanagan-Revelstoke*): But there is a strong possibility of that problem arising in Glacier?

Mr. ROBERTSON: Perhaps Mr. Coleman, the director of the National Parks Branch, could answer that better than I, because he is more familiar with Glacier park.

Mr. J. R. B. COLEMAN (*Director, National Parks Branch*): Mr. Chairman, I just came in, and am not too well briefed on what has gone ahead; but, as I understand the question, it is: is there a possibility of a townsite developing in Glacier national park?

Mr. FLEMING (*Okanagan-Revelstoke*): Yes. It would appear to be a possibility that should be planned for.

Mr. COLEMAN: That is something we cannot forsee and, quite frankly, the terrain there is such that we are very confined by the mountains. There is virtually no level land; there are high avalanche hazards in the area, and I could never see a townsite developing there.

Mr. FLEMING (*Okanagan-Revelstoke*): When I say a "townsite", what I have in mind is this: when the highway is completed, if for 12 months of the year traffic is maintained, if Glacier station is to remain the central point from which all parts of Glacier park are reached during the season, and if the skiing facilities in that area develop—with access 12 months of the year by highway—is it not likely that at some point in that park—most probably, Glacier station—something in the nature of a townsite will develop? Or, what alternative location is likely to be chosen as a centre for development in that park? There are bound to be people there.

Mr. COLEMAN: Mr. Chairman, there would be tourist accommodation provided in the vicinity of Glacier Station, because that is the only area in which there is any level ground at all. I believe it amounts to something like 12 acres. It is the old C.P.R. Glacier House hotel site.

While we have not got around to doing any long-term planning yet for Glacier Park, I have no doubt but that there will be tourist accommodation provided in the vicinity of Glacier Station. That is necessary, not only for skiers in the wintertime, but for summer visitors, and also for people using the highway during the wintertime, in the event of avalanches blocking the road, or heavy snow storms.

Mr. FLEMING (*Okanagan-Revelstoke*): That is what I have in mind, Mr. Chairman. In that particular location there are likely to develop a great many facilities—that is, relatively, compared with what exists there now—simply because the highway is going to force them into providing facilities somewhere. It is right in the heart of the local avalanche country, and there will have to be road-clearance establishments, garages and maintenance people somewhere.

It is likely that there will be a large number of people centered somewhere, and I wondered if plans had advanced with regard to where that centre will be, and what facilities will be provided in that development.

Mr. COLEMAN: Yes, plans have been advanced to that stage. We will have a highway maintenance establishment right in Rogers Pass, on top of the summit; and we will then work with our maintenance equipment both ways down the grade.

Mr. FLEMING (*Okanagan-Revelstoke*): I am fairly familiar with that country there, and it struck me that there is likely to become a centre of population in that area, located wholly in the heart of the park. It is probably the only centre around which any permanent population is likely to persist in the park area.

I wondered about the policy that the branch is following to take care of this new, permanent—you cannot exactly call it a townsite, I realize—centre of population in the park, where at the present time there is a relatively small problem, but which will be a difficult problem. There is no provision for sewerage, water supply, and so on, and all these facilities will have to be provided. That is part of the reason for this planning; is that correct?

Mr. ROBERTSON: That is correct, Mr. Chairman.

The CHAIRMAN: Gentlemen, there are two large items to follow this; item 265 of over $6 million and item 266 of over $18 million. Maybe you will be interested in that.

Our meeting is adjourned until 11 o'clock on Wednesday.

Mr. MCQUILLAN: Mr. Chairman, before we go, I would like to ask this: is it the intention to go on with the Forestry Branch estimates on Wednesday next?

The CHAIRMAN: Yes, on Wednesday and an Thursday. Your people are coming then, Mr. McQuillan.

Mr. ROBERGE: On Wednesday, at what time?

The CHAIRMAN: At 9:00 o'clock. These people are coming a long way, and we will have to have meetings to suit their convenience.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 19

RECEIVED
MAY 25 1959
Library of Parliament

TUESDAY, MAY 12, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

The Honourable Alvin Hamilton, Minister; Mr. R. G. Robertson, Deputy Minister; Mr. J. R. B. Coleman, Director, and Mr. G. L. Scott, Chief, Engineering Service, both of National Parks Branch; and Mr. W. W. Mair, Chief, Canadian Wildlife Service.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21195-3—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, May 12, 1959
(20)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Dumas, Fisher, Fleming (*Okanagan-Revelstoke*), Godin, Granger, Gundlock, Kindt, Leduc, MacRae, Martel, Martineau, McFarlane, McGregor, McQuillan, Murphy, Nielsen, Payne, Roberge and Simpson—(21).

In attendance, of the Department of Northern Affairs and National Resources: The Honourable Alvin Hamilton, Minister; Messrs. R. G. Robertson, Deputy Minister; J. R. B. Coleman, Director, National Parks Branch; Mr. B. I. M. Strong, Chief, National Parks Division; G. L. Scott, Chief, Engineering Service Division; and A. J. H. Richardson, Chief, National Historic Sites Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Continuing on Item 264, Branch Administration, National Parks Branch, it was moved by Mr. Fisher, seconded by Mr. Dumas, and

Resolved,—That the following witnesses be called to appear before the Committee in regard to matters relating to forestry, namely, Mr. D. W. Ambridge, President, Abitibi Power and Paper Company Limited, Toronto; Professor David Love, Faculty of Forestry, University of Toronto; Mr. Robert Prettie, President, Northern Wood Preservers Limited, Port Arthur, and Mr. Armstrong Boyle, Chairman, N. W. Ontario Section, Canadian Institute of Forestry, Port Arthur.

The Minister and Messrs. Robertson and Coleman were questioned on the said item which was subsequently approved.

Items 265 to 270 inclusive were severally called, considered and approved. On Items 266 and 270 Messrs. Scott and Mair were respectively questioned.

During the proceedings certain requested information regarding campgrounds and picnic areas programs was ordered to be printed to this day's Minutes of Proceedings and Evidence. (*See Appendix "A" hereto.*)

At 1.05 o'clock p.m. the Committee adjourned until 9.00 o'clock a.m. on Wednesday, May 13, 1959.

Eric H. Jones,
Clerk of the Committee.

21195-3—1½

EVIDENCE

TUESDAY, May 12, 1959.
11.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum, so we will proceed. Yesterday we were on item 264 relating to the National Parks Branch. This item covers branch administration, and further down there are two quite large figures under items 266 and 267. You can get the particulars of those figures from public accounts. I hope you brought it with you. One is over $6 million and the other is $18 million.

Mr. FISHER: At this time, Mr. Chairman, would it be in order for me to bring up the question of having four witnesses from the forestry industry appear before this committee?

The CHAIRMAN: Yes.

Mr. FISHER: I have discussed this with some members of the committee. As you probably know, forestry is the be-all and end-all in our part of the country, and I wanted to have four witnesses called by the committee. I would like to give you their names, positions and the reasons for calling them.

Mr. D. W. Ambridge, president of Abitibi, one of the largest pulp and paper companies. I have been in touch with Mr. Ambridge and he is anxious to appear before the committee. He feels he has some viewpoints that should be considered by the committee and officials of the department.

The second witness I would like called is Professor David Love, of the University of Toronto forestry school. Together with another man a short time ago he made a study of the American utilization of their forests in the lake states and the New England states. He is very interested in the impact of American competition in the field of pulp and paper. He has expressed his willingness to appear before the committee.

The third witness is Mr. Armstrong Boyle, chairman of the Northwestern Ontario Section, Canadian Institute of Forestry. This is one branch that has put through some strong resolutions with regard to the role that not only the provincial government, but that the federal government should play in so far as forestry is concerned. They have taken a most active part and I thought his evidence would be very worth while.

The fourth wintness is Mr. Robert Prettie, president of Northern Wood Preserves Limited. This is an all-purpose company that operates on the Lakehead. Mr. Prettie has some views in connection with Russian competition and the position of Canadian firms in relation to development. I know it would be worth while for the committee to hear Mr. Prettie.

Those are the four persons I would like to have called before the committee. May I have a seconder.

The CHAIRMAN: It has been moved by Mr. Fisher and seconded by Mr. Dumas that the four persons mentioned by him be called to give evidence before the committee.

Mr. NIELSEN: Perhaps Mr. Dumas is better informed in connection with this than I am; but I have noticed that some particular Quebec problems have arisen. I wonder if there is a Quebec forest or reforestation association which could be contacted?

Mr. DUMAS: We comply with Mr. Nielsen's request. I think it might be easier to get some of the Quebec people here from either the forestry association or from other organizations in Quebec. I would like to suggest—and Mr. Fisher is aware of this—that perhaps the Canadian Lumber Men's Association could be invited and, if it is agreeable, I will contact Mr. Schryburt by telephone, and he could come here.

Mr. FISHER: He asked me and I suggested he get in touch with a government member.

Mr. DUMAS: I can get in touch with Mr. Schryburt and also with the forestry association.

Mr. MARTINEAU: So far as Mr. Schryburt is concerned, Mr. Martel and I contacted him last week and he said he would be glad to appear before the committee at a time when it would suit us. If it is agreeable we could include his name with the names suggested by Mr. Fisher.

Mr. DUMAS: When are these witnesses coming?

Mr. FISHER: I cannot get these people here immediately. They all wanted three to four days' notice. I believe Mr. McQuillan also has some representatives who will be appearing.

Mr. MCQUILLAN: Mr. Chairman, in connection with those who are coming from British Columbia, I doubt, with all the information they have to present, that they would get through in one meeting; if they did there would be no time to ask questions after they had made their submissions. They will be representing the pulp and paper industry in what we call the Pacific division. They are: the British Columbia Lumbermen's Association, the British Columbia Loggers' Association, the British Columbia Plywood Association, the Red Cedar Shingle Bureau, the Interior Lumbermen's Association, the Northern Interior Lumbermen's Association and the Truck Loggers' Association, which gives a very comprehensive coverage of all sections of the industry in the province. They will be able to cover the various forestry problems.

The CHAIRMAN: Gentlemen, I think you will all agree that these persons will make a marvellous contribution to this committee and while it is customary that suggestions of this kind be brought up in the steering committee, it has been our policy to have it brought before the whole committee; because this suggestion is of such vast importance that I think it would be appropriate to have the approval of the members of our committee. Are you all agreeable to asking the gentlemen, who have been enumerated, to appear as witnesses, say, next Monday.

Agreed to.

Mr. DUMAS: So there will not be any witnesses tomorrow?

Mr. FISHER: Oh yes, the British Columbia witnesses will be here.

The CHAIRMAN: They will be here tomorrow morning, and that will be an important session.

Mr. NIELSEN: At this time, could we ask the clerk to prepare a memorandum for the use of all committee members setting forth the names of these forestry witnesses and their association with those concerned, so as to facilitate us in our research. I believe a number of papers have been submitted by some of these individuals in the past to various resource conferences.

The CHAIRMAN: Yes, that is a very good idea. Mr. Fisher, would the people you have suggested be bringing along prepared briefs?

Mr. FISHER: Well, I know that Mr. Boyle will be and, I am sure, Mr. Love will have a presentation.

The CHAIRMAN: Would you take the responsibility of contacting them and asking them to have enough copies prepared, say fifty or sixty?

Mr. FISHER: Yes. There is one other point I would like to make at this point. I wanted to have someone here from the Ontario forest industrial association. They presented a printed brief to the Senate in connection with land use, which I wanted to bring to the attention of the members. I think if someone looked at it, possibly we could have their brief printed with our minutes, because I think there will be considerable interest in this committee's reports and it would be handy to have this brief. It goes into quite a number of recommendations in which they think the federal government should take the initiative. It is set forth in one of the last reports of the Senate land use committee.

The CHAIRMAN: We will have to ascertain the proper procedure in connection with this. It is a good idea and I hope we can arrange to do that.

Mr. MARTINEAU: Will Mr. Schryburt be invited to attend next Monday also?

Mr. DUMAS: Yes, I think Mr. Schryburt would like to be here tomorrow, and I will call him immediately after this meeting is over.

Mr. FLEMING (*Okanagan-Revelstoke*): Mr. Chairman, I have a suggestion which I would like to make. When we come to the consideration of the estimates of the Dominion Travel Bureau, I would like to suggest we call as witnesses, Mr. McAvity, the president of the Canadian Tourist Association, and Mr. John Fisher, the director. I make this suggestion so we can take into account while we are considering this, the recommendations they made in the report to the conference last fall and also the previous statement they made to the Minister of Finance. I wonder if that would be agreeable to the committee.

Mr. AIKEN: Mr. Chairman, Mr. Fleming advised me of his intention to ask that these witness be called; I agree that these two gentlemen should be called, and there may be others. We are certainly going into a number of things very thoroughly this year and we are certainly hoping the committee will give detailed attention to the tourist industry this year as well. I will concur entirely in Mr. Fleming's suggestion.

Mr. FLEMING (*Okanagan-Revelstoke*): The reason I have suggested those is because I have noticed a number of small briefs we have received from regional or provincial organizations indicate they are associated with the parent body, and possibly the one organization could speak on behalf of them.

The CHAIRMAN: Is there any further discussion?

Mr. MCFARLANE: Are we going to discuss the water situation at all in this committee?

The CHAIRMAN: I will have to hesitate in answering that at the moment. Are you referring to the Columbia River?

Mr. MCFARLANE: Yes.

The CHAIRMAN: I thought you were. In view of the studies being made, the steering committee will consider that situation, and we will have to accept some advice from those who probably are in a position to indicate the procedure we should follow. I have my doubts that we could go into it very far; however, we will consider it and perhaps at the next meeting I can give you further information.

Mr. MCFARLANE: The report put out by the Montreal Engineering Corporation has already been made public. I believe there is an article in the *Financial Post* and in one or two other papers, so it must have been released to the press. I was wondering if we were going to give it any further consideration?

Hon. ALVIN G. HAMILTON (*Minister of Northern Affairs and National Resources*): I wonder, Mr. Chairman, if I could say a word at this time. The committee knows that the matter of the Columbia river development is now under active negotiation between the federal government of Canada and the federal government of the United States. When we come to the water resources estimates, I think the best procedure would be for me to make a statement which will go as far as I can in describing what has happened to date. I will then subject myself to questioning and it will have to be left to my discretion as to what I can say and what I cannot say.

Mr. FLEMING (*Okanagan-Revelstoke*): General McNaughton's evidence before the External Affairs committee is available, and it could be used as a reference. I note that there is a great deal of detail in that report on the different phases and it does seem to me that the requirements of this committee are equal to those of the Department of External Affairs in connection with water resources.

The CHAIRMAN: Well, in view of the publicity that already has been given the project, the minister probably could make a statement which will be satisfactory to the committee. Due to the importance of the project, it could be a brief statement and you would then be free to question him in connection with anything that has been published and in connection with the statement he will make.

Mr. GUNDLOCK: In connection with the question of water problems, some of us in the west are greatly concerned with water conservation as related to irrigated districts. I wonder if you could indicate whether this is a proper place to discuss such matters. Actually that problem in itself is an orphan; no one wants to claim it. It is a serious problem in irrigated areas particularly, and we are looking forward to a great increase in irrigated areas in the future.

The CHAIRMAN: I do not know why you should be limited in your discussion under item 271.

Mr. GUNDLOCK: It is a very serious matter and I think much useful knowledge could be gained in looking forward to the increased areas, as I said before. I think it would be very valuable to have some witness, who has a great deal of practical experience, called to give information in connection with this matter.

The CHAIRMAN: Will you discuss that with me later?

Mr. GUNDLOCK: Yes, I will.

Mr. KINDT: I would like to add another footnote and point out that the industrial development of such cities as Lethbridge, where the hon. member comes from, is up against the proposition of having a river that flows by there which just about dries up in the month of January, and the continuity of the flow in that river ties up with the industrial development of that area. It is an extremely important problem which should be brought before this committee and discussed.

The CHAIRMAN: As you know, Mr. Kindt, the province has some responsibility. The federal department does measure the flow of waters.

Mr. KINDT: Yes, but the riparian rights on water become a federal problem when it crosses provincial lines; it is a problem which is not only provincial but also federal.

The CHAIRMAN: There is a legality involved between the jurisdiction of the province and the federal government. Shall we also consider that later?

Mr. KINDT: All right, Mr. Chairman.

The CHAIRMAN: Before we proceed further, I would like to say that if there are any other representatives from other provinces who would like

briefs presented from their own province in connection with the item under forestry, they would be very welcome before this committee. Gentlemen, we are on item 265 as well as 264 on page 54, the details of which are on page 366.

Item 265 Administration, Operation and Maintenance including a grant of $25,000 towards the commemoration of Fort MacLeod as a Royal North West Mounted Police Post subject to such terms and conditions as may be approved by the Governor in Council..... $6,663,934

Mr. DUMAS: What is the total personnel of the National Parks Branch?

Mr. J. R. B. COLEMAN (*Director, National Parks Branch*): It is 2,268.

Mr. DUMAS: How many of those are seasonal?

Mr. HAMILTON (*Qu'Appelle*): I think you will find the answers at page 368 of your estimates.

Mr. COLEMAN: 1,541 are seasonal positions.

Mr. DUMAS: I notice there is an increase in the permanent employees and also in the seasonal employees; is that due to the organization of new parks?

Mr. COLEMAN: It is partly due to the organization of new parks.

Mr. DUMAS: Established in Newfoundland?

Mr. COLEMAN: Yes, in Newfoundland. There has also been an increase brought about due to the implementation of the 40-hour week.

Mr. NIELSEN: Might I ask the deputy minister, in connection with his announcement at our last meeting that certain investigations had been carried on in the Yukon with a view to establishing a park, and because of the interest displayed by Yukon residents in this proposal, two questions: one, why have a park in the Yukon at all; and two, a number of people in the Yukon are concerned with the extent to which the mineral resources in the territory will be tied up within the boundaries of such a park. Can you deal with these questions, please?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): On the question of why have a park, I think there are a number of reasons why a park would be highly desirable. In the first place the Yukon is, I think, one of the most attractive parts of North America physically. I think it will have a tremendous attraction for tourists and for travel which is increasing in its direction now.

There are more people in the Yukon and coming to it than there have ever been before, and I think this is only the start. I think that with Alaska being a state, more and more people will want to visit Alaska; and with the population of Alaska growing, and the highways and so on steadily improving, we can expect more people will want to visit the Yukon.

A national park is obviously a great attraction for the tourist industry, and from the point of view of sheer economics I would say that a national park in the Yukon as an added attraction for the tourist industry would be worth a great many millions of dollars for years after it has been established, and after the tourist industry is operating at full tilt, if you want to call it that.

Beyond the tourist aspect of this park, the purpose of national parks is to preserve highly desirable areas of the country unspoiled in perpetuity for Canadians. As I have said there is a variety of superb areas in the Yukon, and I think it is advisable to select one of the very finest of those areas and to see that it is preserved in perpetuity.

Referring to the second part of Mr. Nielsen's question, about the concern which some may feel over the withdrawing of such an area from mineral exploitation,—because minerals are such an important industry in the Yukon at the present time,—I think it is clear that the tourist industry and the mining industry are the two important industries of the Yukon. In that connection, it has been suggested to the minister that what might be done is to take the

area that is recommended as being the best one for a park and to adjust its boundaries as much as possible to exclude the mineral claims and other existing interests, and then to have the remaining area withdrawn from staking for a long enough period to have a mineral survey undertaken. In this way an intensive survey could be done to ascertain whether there are any mineral possibilities of a substantial character in that area; and if there are not—that is, if it is found that there are no mineral possibilities of a substantial character—then we would know that by taking that area we are probably putting it, not only to its best use in preserving it, but also to its best economic use.

This is the proposal which is in front of the minister at the present time, and I think it would avoid any staking of mineral land or mineral disruption, and at the same time make provision for a long-term development of a park which I think is desirable and important to the Yukon.

Mr. NIELSEN: I am very grateful for your views on that, and I am very happy to learn that it is the intention to have a geological assessment made before fixing the permanent boundaries of any proposed park.

Mr. ROBERTSON: That is correct.

Mr. NIELSEN: I have one other question. Is it the intention of the branch to investigate any other areas in the Yukon in your long range plan for establishing a second park?

Mr. ROBERTSON: The team which went up there last year examined, I think, six areas and they have given a recommendation as to the area which they think is the best. This does not mean that it is impossible to have more than one park at one stage. That would be a matter for government policy.

In Alberta there are five parks. It would depend, I think, entirely upon a government decision, and government policy.

Mr. DUMAS: I wonder if Mr. Robertson could tell us perhaps the area of this new park in the Yukon.

Mr. HAMILTON (*Qu'Appelle*): I think it would be improper to ask that question of my deputy minister, because there are four or five areas under consideration, and if you name a particular area publicly, you thereby produce all sorts of difficulties for the department. You do not mind, Mr. Dumas?

Mr. DUMAS: No; I take it you are investigating many areas?

Mr. ROBERTSON: Six areas are being investigated.

Mr. PAYNE: In view of the statement made regarding future park planning in the Yukon, and in view of the discussions which have gone forward, I would like to ask the minister what, if any, consideration is being given to the establishment of a national park on the west coast of Canada in British Columbia in an area which I do not think the deputy minister would challenge, could be equalled in beauty anywhere in the world.

The area I have in mind is within short driving distance, some 250 miles, of almost 3½ million people. It would be a tremendous asset to British Columbia in the future, and it would be a tremendous dollar earner to Canada.

Could the minister say a word regarding any plans which may be possible in this connection?

Mr. HAMILTON (*Qu'Appelle*): I am searching my memory, because I do not have all the files with me, but it seems to me that I spoke about this before, publicly. There were representations made to me for the setting up of a national park in an area not too distant from Vancouver. This was an area known as the Garibaldi park area.

Mr. PAYNE: Yes, I discussed it with you.

Mr. HAMILTON (*Qu'Appelle*): Yes, you were one of the members who made representations. It was on the basis of the government of British Columbia offering to consider this as a national park, and if they would fulfil the provisions demanded, of turning the land over from any encumbrance.

We have not heard from the province, to my recollection, so I presume the matter is either still under consideration by the government of British Columbia, or that they have decided to keep it as provincial lands.

Mr. PAYNE: In the event that British Columbia should turn the area of Garibaldi park over, with its current boundaries, would the federal government be prepared to come forward with the development of a national park in that site?

Mr. HAMILTON (*Qu'Appelle*): Yes, I have said that I would. I wonder if I might add, for the information of the committee, that some of the problems of the province in this regard, are as follows: when land comes under a national park, they have to give up all rights to timber, minerals, and all resources, and we put them out of circulation.

This has caused us a good deal of thought, because I think everyone accepts the idea that Canada has a great deal to do in expanding its tourist industry. That was the argument for some sort of move to something between a national or provincial park and a campsite. In other words, I am thinking in terms of a recreational area set aside where it could be for the benefit of the people of Canada moving back and forth about the country, and for all those people who come into the country, so that they may have the advantages of a recreational area which is a primary need of people from our industrial and urban areas at the present time.

Mr. PAYNE: You envisage a possible program of recreational areas in which the federal and provincial governments would cooperate?

Mr. HAMILTON (*Qu'Appelle*): I have not explored the idea too far, but I have discussed it with several of the ministers across the country, and with one or two premiers, and the reactions that I got from them in general discussions have been favourable.

As you know, the setting aside of recreational areas is a provincial responsibility. We have a conference coming up next year on conservation which will deal with renewable resources. I would regard recreation as coming under that classification, and I was hoping that this could be one of the major subjects under discussion at that time, that is, how we could coordinate the efforts of the provinces to move towards the provision of more recreational areas, particularly close to those large urban centres where the situation in most cases is becoming most desperate.

Mr. PAYNE: Let me assure the minister that the area we are speaking of, Garibaldi park, is one of the few areas within easy access of one of our major cities. It has mountain terrain, and it drops to the sea. It has skiing for twelve months of the year, and at this time of the year it has the most profuse alpine floral growth that I know of anywhere in the world. I wanted to check up with the minister on certain of these aspects of Garibaldi park.

Mr. HAMILTON (*Qu'Appelle*): All I can say in answer is that I think that if the provincial government is concerned about losing its potential mineral or forest wealth in such an area, there will be something come out of our discussions of the idea of a recreational area which would preserve much of the beauty, but which would not be too tightly controlled, as would be the case with a national park.

Mr. PAYNE: Has any survey of the area been undertaken to ascertain its perimeters?

Mr. HAMILTON (*Qu'Appelle*): I cannot answer that question authoritatively, but I recall a conversation with the minister in British Columbia in which it was said that they were doing their own planning, or planning to do some kind of land use survey of the area. I am speaking from memory and I cannot be too sure how active it is.

Mr. PAYNE: My reason for asking is that the boundary is very much up in the high land, and as it drops down to the Howe sound area a great deal of the land is timbered, but it could well be used in park development; whereas with the eastern limits, very little of them would be accessible for park use. So some of that area could be retained outside the park for lumbering purposes.

Mr. FLEMING (*Okanagan-Revelstoke*): I should like to ask the minister a question or two. I know he is familiar with this problem, and I fear that I am tramping over old ground; but I am somewhat troubled about the situation which prevails in Glacier National Park, and which is likely to exist two years from now. Glacier National Park had a registration of 222 people in 1957-58, which is very small; I suppose it was the smallest number of visitors at any of our parks. But by midsummer of 1961 it can be assumed that that number will increase to many thousands if the trans-Canada highway is completed through that area.

At the present time the facilities which are built to accommodate people there are very limited. May I ask if plans are advanced for development to meet that probable influx within two years?

Mr. HAMILTON (*Qu'Appelle*): The answer is no. This is one of the conundrums we are up against in park work at the present time. You will be meeting this difficulty in two or three years at Glacier. We are now meeting it at Banff and at Jasper, because we spent all this money building beautiful roads in, and we have no facilities to look after the people when they come. So there is a period of adjustment which is very difficult.

At the present time with the parks planning group just getting started I can say that to my knowledge there is no plan. Mr. Coleman does not know of any.

Mr. FLEMING (*Okanagan-Revelstoke*): I wish to reemphasize the difficulties which the branch may encounter because between Revelstoke and Golden there are no accommodations whatsoever to deal with people, and that is the one place where they are likely to seek accommodation. It is in the heart of the national park, and I emphasize the fact that the present campsite can accommodate only about 150 people, and that it is probable that when the highway opens, there will be a tremendous influx.

Let me give you my reasons: when the big Banff highway was opened, it was just a gravel road, and there were thousands upon thousands of people who poured over that road—who came in that one year. But the number has been diminishing ever since, because there is no accommodation.

I feel strongly that unless consideration is given to this matter now, the parks branch will find itself with an absolutely hopeless situation when the park opens, because it will be the focal point for people going into the region. I think that cannot be overemphasized.

Mr. HAMILTON (*Qu'Appelle*): I certainly understand the predicament the hon. member has outlined, and I would like to point this up, that there is pressure being put upon me to get this trans-Canada highway built, and that the building of the highway has meant a tremendous expenditure in respect to my department.

This is causing us a great deal of concern; because with the pressure to build this road quickly, there is so much going into the parks for construction that we do not have enough to provide the amenities. Since I cannot increase the budget beyond a certain point, because it is linked to the over-all policy of the country, we have to take this in limited stages. I will make a note of what the hon. member has said and take a look at it, but at the moment I cannot be too hopeful that we can avoid the predicament, which I can see.

Mr. FLEMING (*Okanagan-Revelstoke*): The reason I want to emphasize this so strongly is the difficulty with the limited number of people who go in to

Glacier now—as Mr. Coleman or his representatives on the staff in that park will know. Since this park is very close to the Glacier station, adults and children are going in to that park, and if there is no provision made to hold them in a given area, in view of the bear population—and they have caused trouble in the past there, in the very centre where people are likely to want to go—I am concerned about the problem which your staff will have in the way of providing accommodation to receive these people and regulate the flow of visitors in that area. You will have them strewn all over the country, and your park staff will have very great difficulty in handling the situation, unless they can confine the people to certain regions which attract them, or to certain centres where they will be under regulations.

Mr. HAMILTON (*Qu'Appelle*): I am grateful to the hon. member for raising a very good point. We will make it a point to see that this thing is not only looked into but that action is taken to prevent any serious trouble there.

Mr. GUNDLOCK: I have a question relating to the last question under discussion, and that is the difficulty which private people have in financing accommodation, particularly by way of motels and one thing and another, due to the difficulty of financing through mortgage schemes, in particular, because of the land titles. May the committee be brought up to date on the subject? I understand there have been some new regulations?

Mr. HAMILTON (*Qu'Appelle*): I do not know of any new regulations, but what we have been doing is to hear representations from the various interests in the parks. There is no question at all that a person who is in business operations in a park does have extraordinary difficulty in getting credit, because there is no fee simple title on which they usually can borrow.

This is one of the major problems we have turned over for study at Queens University by the group of professors who are experts in municipal government. I have spoken frankly and in some detail to tourist representatives, and to motel operators in the mountain parks, about this question of credit when I pointed out to them that we considered it to be one of the greatest hurdles we had to overcome.

We have the difficulty of land tenure which has to be straightened out, and the question of rental rates; but the question of credit will also be a very difficult one. I have asked them to make full representations to the group of men who are doing the study for us at Queens, and I have asked them to put very positive ideas forward as to how we can meet it. I think that is all I can say about that.

Mr. GUNDLOCK: It would greatly facilitate this pressure for accommodation in some of the western and southern parts, where at present they are undergoing growing pains, and where astute business operators are having great difficulty. It seems to me there must be some way, or some sort of solution possible.

Mr. HAMILTON (*Qu'Appelle*): I might say that the representatives of the mountain hotel and motel association are quite confident that they can sit down with a group of knowledgeable people and work out some way, and set up regulations which will give them credit security. My own department feels that they can come up with something which will work out, but I myself do not know just how they are going to do it. So I leave it to the experts, because they are quite confident they can meet the difficulty. It is a tough problem, as far as I am concerned.

Mr. MCFARLANE: Is there any truth in the statement that the motel operators in the parks are being granted only a year to year lease on their property? I understand there has been quite a controversy especially at Yoho and Kootenay parks with the motel operators in those areas.

Mr. HAMILTON (*Qu'Appelle*): I think that statement is entirely untrue. They are granted leases on a 21-year basis with the right to renew; and the only condition is that they would lose their licence if they did not conduct their business within the regulations under which they operate.

Since I have been minister there has been only one question of a person losing his licence, and that was resolved reasonably and satisfactorily.

Mr. MCFARLANE: There seems to be a misunderstanding, and that they can only obtain a lease on a year to year basis.

Mr. HAMILTON (*Qu'Appelle*): That is quite wrong. The lease is granted for twenty-one years and the policy is that there is no question of renewal. It is a continuing lease, except he has to renew it every twenty-one years.

Mr. FISHER: It appears it may be part of the minister's responsibilities when there is a time lag or there is some real problem in the over-all sense. Do I take it from the minister's remarks in answering Mr. Fleming that there is a real time gap between the kind of performance that the department wants to deliver or give and what they can deliver because of money and personnel?

Mr. HAMILTON (*Qu'Appelle*): Well, I do not want to answer that in the category of yes or no. I will put it this way. If you build a good road through an area from A to B where no people have been able to get in before—except possibly the odd person—you automatically bring people in and they want facilities such as camping areas, motels and so on, as well as supervision to see they do not get into trouble with the wild animals or fall over a cliff into the river. There are two extreme things you can do. One is to go in and build all these things first and then build the road through. In many cases these facilities are privately-owned or leased to private individuals. Then there is a question if you put the road through first there is a rush of people who follow; but there is a time lag in between. I accept Mr. Fleming's point that when it comes to supervision and safety of the public, we have to move fast. But when it comes to building the requirements of the national park, with all the tremendous quantities of money which go into the building of the physical plant in a park, it entails a large program. We have spent thirty years working on the plant in Banff, and it is still incomplete. You cannot build it up in a year and have everything tied together before you get the big rush. There is a time lag, and it causes considerable trouble in the early stages. In the case of Glacier, it has the trans-Canada highway, and the traffic may amount to hundreds of thousands; it might jump 400 times in the first year.

Mr. FISHER: From the point of view of the committee, are you having difficulty in getting the money to carry out these projects.

Mr. HAMILTON (*Qu'Appelle*): To be very obvious about it, as a government we have a deficit this year of some $393 million and the government would not like to see that deficit made any larger. We think the growth factor will pick up, but we do not want to get into the position where we are going into debt.

Mr. FISHER: What is the revenue picture in so far as the parks are concerned as a whole?

Mr. HAMILTON (*Qu'Appelle*): There is no possibility ever, and there is no intention ever, of the park revenue meeting the expenditures. The figures are so far apart at the present time. I think we are spending $18 million in the parks this year; the coming year is $26 million, and the revenue would be about $2 million. We never catch up at the present rate of expenditure.

The CHAIRMAN: Would you like to ask the minister if he thinks in his own opinion that this time lag should be avoided?

Mr. FISHER: That is the key to the whole matter. If the principle on which these parks are established, and the reasons why we think we have them are solid and good, why allow a tremendous fear of a deficit to get in the way of a reasonable and rational planning approach to take care of this.

Mr. HAMILTON (*Qu'Appelle*): Do not take this one item of the Glacier Park as a thing the government backed away from. For instance, we have commitments in Terra Nova. We are getting the plant in there in plenty of time, because the progress in building the trans-Canada highway was so slow that we got ahead with the plant. In other parks, like Jasper and Banff we built the plant first and improved the roads later. Of course, the improved roads made the plant out of date and we had to enlarge the plant. In most cases we built the plant first. But Glacier is a completely undeveloped area and national and British Columbia policy is to ram this trans-Canada highway through by 1960. This put the parks in a position, with our budgeting and planning, where there will be a lag of one or two seasons in getting the plant pushed forward.

Mr. FISHER: From a revenue point of view, many of these parks must have forested land which would be revenue-producing. If it was approached from that point of view, is there any possibility of increasing your revenue in that respect in order to put say, an individual park that did have a fair quantity of forested land, on more of a paying proposition.

Mr. HAMILTON (*Qu'Appelle*): That goes contrary to the purposes of the parks. It goes against the policy of the national parks. As I made clear at last year's meetings of this committee, the purpose of the national parks is to preserve these beautiful areas, and their integrity must be preserved. The second purpose is to give employment and pleasure to the people of Canada. Is it your suggestion that we should take the forests and make them into a revenue-producing proposition?

Mr. FISHER: Well, looking at it from the point of view that trees are a perishable item, I have never been able to see, unless you want to produce what is called straight wilderness areas, any reason why a limited amount of cutting could be not only revenue-producing but would improve many of the features in a park.

Mr. HAMILTON (*Qu'Appelle*): I am forgetting Riding Mountain and Wood Buffalo Park, which are exceptions. In these two parks there are cuttings. In the one they have mills and are cutting for the purpose of preserving the forests. In the case of Riding Mountain we give permits to farmers to take out so much wood for their winter use. We watch that all the time to see that they do not abuse the beauty of the park and that they cut to a point where the forest benefits. There are certain areas which we have set aside completely as wildlife areas. There is a continual debate back and forth between the forestry management people and the parks people as to how far they should go for, say, sanitation cutting along the roads, which is better for the forest and better for the scenery. Generally, I do not think there is any intention or plan at the present time to open up the vast timber areas of the national parks for commercial use. The exceptions would be when you decide you want to clean out a certain area for the health of the forest or some other reason, such as disease prevention and so on. But this is done on a forest management basis and to a limited degree because the parks people jealously guard the purposes of their parks.

Mr. FISHER: Coming at it from another point of view, is there any way in which you can make exploitation of the parks for private people more attractive so they will provide the facilities?

Mr. HAMILTON (*Qu'Appelle*): Do you mean in connection with accommodation?

Mr. FISHER: Yes. I suppose this is the problem Mr. Hemlock brought up.

Mr. HAMILTON (*Qu'Appelle*): That is the problem we are faced with in connection with this municipal committee. Besides setting up a form of democratic government in Jasper and Waterton, efforts are being directed to set up an economic system so that the people who are in there get enough security of tenure that they feel they have the right to take a risk commitment to expand their business. But the final test of any development on a private enterprise basis is the dollars and cents limit. They operate on a seasonal basis and before they expand their facilities they have to see some opportunity of getting a return on their invested money. To put it very simply, if a man sets up a motel outside of the city of Ottawa he can operate that motel at full use for five or six months of the year and partial use for the other six or seven months; but in Banff, Waterton or Jasper, they would get about three or four months at the most. Business falls to nil and they must close up shop. However, the capital expense runs on. His concern is how can he provide the accommodation at the standard the traveller expects in the parks when he only operates for such a short season. We recognize the problem and are doing what we can to help these marginal activities so that these accommodations can survive and expand.

Mr. FISHER: I have one last question. We have heard rumblings in the house in connection with some of the parks, Terra Nova, Cape Breton and Fundy, in relation to the question of patronage, especially in connection with the employment of seasonal employees. Could the minister give any statement as to whether this is a difficult situation or how the department has approached this?

Mr. HAMILTON (*Qu'Appelle*): Yes. I will be repeating what I have said before in the house. Generally speaking, the question of seasonal employees at the parks was looked upon as a way of providing jobs and recommendations came from local members and so on. This problem was taken up by myself as the minister and by my predecessor, Mr. Harkness. We tried to work out what we thought would be an acceptable solution to this problem. I think it is fair enough to say that the great majority of members of parliament recognize in the long run the job of selecting people is a difficult one, and for every friend you make you make fifty enemies; and that is putting it simply.

This is what we did. First of all, there were no dismissals—perhaps there were four or five. It is either three or five. These were dismissed—in one case on the recommendation of a member, and so on—thus there were practically no dismissals, and roughly 1500 of the employees in 1957 were left as they were. Then in 1957-58 we entered into the winter works program. We wanted to make sure there was fair play here because when you are dealing with people in need there is no question of patronage or politics. We tried to get neutral people to do the recommending. In some areas it was easier than in others. In some areas it was possible for them to go to their employment service; in others recommendations were taken from heads of churches, Legion branches, and so on. As a result, we have received letters of commendation. In one case the president of the Liberal association in the county which embraces Cape Breton Park approved of the way we were doing it. As a result of this procedure everything seems to be quiet down there. Everything was working out well. There are just the two parties there and they all agreed we were making a fair effort in trying to deal with this by taking it out of the political level and employing local people who were in need. In one case we picked two clergymen of different faiths

who made recommendations. Then a fuss developed around January 1 in Manitoba. I have been unable to get the full facts straight, but apparently some people from Brandon got a chap to make a statement to the effect that he hired and fired people and handed out the jobs. Well, I immediately set out to find out what was going on, because I had agreed with the members in that area to help the farmers and the unemployed people around there. They came down and reported to me, saying they had done a fair job of getting people from all groups. One of them handed me a letter. This was a letter to Mr. Mandziuk of Marquette. This letter was addressed to Mr. Mandziuk and sent to him by the mayor of Shoal Lake. It reads as follows:

Re: Winter employment in Riding Mountain National Park.

As mayor of the village of Shoal Lake, this letter is being written to you.

For your information, when the council considered the list to be considered for employment in the park, there was never any mention of politics and all those from the village of Shoal Lake or this area available for work were listed.

Speaking for myself, I am satisfied that the handling of employment for Riding Mountain national park from this area is impartial and commendable.

You can make whatever use you wish of this letter.

Yours truly,

(Sgd.) George A. Lauman,
Mayor of Shoal Lake.

We have received other letters of the same nature. At the time I read this report in the paper I asked them to change it. It was at the suggestion of their own group that we changed it, so that it would be the same as the other western parks—that being that they would go to the national employment service in Brandon. It was my hope that this would end it all. If people make statements in regard to patronage, it leads to headlines in the papers, and I am proud of the way the parks department has helped me lift this matter up to a fairly high level.

Mr. FISHER: There is only one follow-up question on which I want to be clear and that is the question of the right of people who may be seasonal or occasional employees under schemes like this to take a fairly active part politically. What are the views of the department in this particular regard?

Mr. HAMILTON (*Qu'Appelle*): Well, I tried to explain my feelings in that connection in the house during the estimates last year, when the member for Bonavista-Twillingate, Mr. Pickersgill, was questioning me about that dismissal in Jasper. I do not want to mention the woman's name. She had been a seasonal employee, and her job was to give information out at the gate. She was asked to come back. But an election had been called in the meantime, in March, 1958, and this woman did not limit her activities while waiting for her job to start. She began working as a poll captain for the opposition. She did not limit it even to that, but went around making some pretty candid remarks about the sitting member. Well, the sitting member has a certain sensitivity on this point and he recommended that it was improper for a person to be handing out information and political advice at the same time. He recommended she not be re-employed. The parks department wrote to her and advised her that her instructions to go to work were now cancelled. That is the full story.

Mr. FISHER: That is an individual case. I am thinking of the general principle. I hate to see anyone who is a seasonal or occasional employee being kept from taking an active part in politics. This is a hard thing to define. What is an active part?

Mr. HAMILTON (*Qu'Appelle*): We have this debate regularly in Saskatchewan. Under provincial law our civil servants have the right to speak their mind and take part in politics. I think in some cases they act as candidates. Quite frankly, as a citizen, I do not like it. I have seen it in operation and from what I have noticed the only civil servants who take part in politics are the ones supporting the party in power. I do not recall a single case where one has gone to work for the opposition. They only work for the government in power. If you are running against a fellow politically and have to deal with him on matters of business, it is difficult to keep the thing separate, and it has caused animosity.

Now, the question of seasonal workers comes in. No one bothers how they vote. No one bothers them. I suppose they talk to their friends. But when they get on the street corner and begin saying the candidate is this and that, it is too much for the sitting member to take.

Mr. NIELSEN: As this problem applies in connection with all branches and all departments of government, may I suggest we are perhaps removing ourselves a little from the national parks discussion.

Mr. FISHER: Well, in so far as the house is concerned, it is developed or focused there. I would like to suggest that the government give some sort of definition of what they call political activity.

The CHAIRMAN: Mr. Fisher, we will deal with that on another occasion.

Mr. GUNDLOCK: Mr. Chairman, I would like to ask a question. How much emphasis is placed on the desirability or the need in the parks branch, particularly as related to superintendents and permanent employees, in connection wtih public relations within a park? As you know, some of the superintendents and permanent employees in the parks almost need to be super-salesmen when dealing with tourists, particularly foreign tourists. I am not saying this in a critical way. If I may, while I am speaking, I would like to say how deeply I appreciate the considerations the departmental officials have given in the parks in my area. However, I feel that is a very important aspect of parks administration.

Mr. HAMILTON (*Qu'Appelle*): I think I can speak with some confidence on this point. I share your view entirely. This spring or winter we had a meeting in Ottawa of the superintendents of the national parks from all across Canada. The main subject on the agenda was the public relations of superintendents. This matter was given very serious consideration. Techniques were discussed and we endeavoured to find out what we should do about it.

I want to say a word or two on behalf of the superintendents. First of all, when you are in the construction stage of a national park the type of man you want for a superintendent, during that stage, is primarily an engineer. You do not want an animal lover or a bird watcher at that stage. You want a man to help you save some money on these projects, which run into the millions. Ordinarily, engineers are not trained in public relations; but because they have to meet the public in large numbers, they do have to have a modicum of social graces and a little experience. To help solve part of this problem, we have appointed in the western parks a western supervisor. He is an experienced superintendent who has been through the construction stages and the stages of consolidating a park—one who has had experience in handling the public and getting along with people. We have asked him to go around and visit the parks sufficiently often during the year and to stay sufficiently

long each time so that he has a chance to deal with difficult problems in the park, and to try to help the superintendent over any difficulty which he may have. Then at the same time he can discuss with the superintendent some of his difficulties in relation to public relations. The reason for appointing that western supervisor is twofold. The first is as I enunciated, and the second is to try to coordinate the engineering and maintenance problems of the parks in order to reduce our cost. I hope that if this works as well as it seems to we will look at the eastern parks and see what we can do there.

Mr. McGREGOR: Did I understand correctly a while ago that the minister said they built the park before they built the roads?

Mr. HAMILTON (*Qu'Appelle*): It is a question of which comes first, the hen or the egg, sort of thing. In setting up national parks in remote areas—and I am thinking of Terra Nova Park in Newfoundland or Glacier Park, for example—at the beginning there are simply boundaries and nothing is done within them at all. Then the parks branch begins to work out a plan for developing a park, such as the establishment of offices for wardens, fire protection, and so on. Then you need accommodations for the persons coming into the park. Part of that planning is the building of access roads. That is being done in Terra Nova, not only with the trans-Canada highway but also other access roads. In the case of Glacier the trans-Canada highway has suddenly come to its edge. At the present rate of progress it will be right through it in two years.

In respect of Terra Nova we are in the position that the ordinary step-by-step planning of a park did not follow the slow process it normally follows, as in the case of Glacier. The highway comes up and if the planning is not complete there will be a lag in establishing the accommodation for the persons coming in, and there will be gas stations and motels and other things to be built.

Mr. McGREGOR: Do you mean to say they build gas stations and motels without a road into the park?

Mr. HAMILTON (*Qu'Appelle*): That sometimes is what happens. The parties of people do not come in before the road comes in; but what I am speaking about are the facilities such as camp grounds, picnic facilities, supervision, trailer parks, and things like that.

Mr. McGREGOR: If you build a trailer park there must be a road.

Mr. HAMILTON (*Qu'Appelle*): That is right.

Mr. McGREGOR: That is the question I am asking. Do you build the park before you build the road?

Mr. HAMILTON (*Qu'Appelle*): No.

Mr. McGREGOR: You are speaking about trailers, and so on. Surely if there is a trailer there must be a road in order to get in.

Mr. HAMILTON (*Qu'Appelle*): We are talking about the same thing but in a different way. The question Mr. Fleming has been asking is this: do we intend to wait until the road goes through before we build a trailer park. I have said, yes. He has pointed out there will be a lag before we get that trailer park built, and he is suggesting we should speed up our planning in order to have the trailer parks in there ahead of the roads.

Mr. McGREGOR: How can you get them in there?

Mr. HAMILTON (*Qu'Appelle*): The construction crews are working through there now, building the road.

Mr. FLEMING (*Okanagan-Revelstoke*): There has been no haste in Glacier Park. It was established in 1874.

Mr. HAMILTON (*Qu'Appelle*): There is haste at this end.

Mr. McGREGOR: I think the thing is very simple. You build your road first and your park afterwards. I cannot understand how you can build a camp first and then later bring through a road.

Mr. HAMILTON (*Qu'Appelle*): There is a main line of the C.P.R. and it is not hard to get the materials in.

Mr. KINDT: If we are through, I would like to go on to the historic sites.

Mr. GRANGER: I have one question. Has provision been made for the development of the marine facilities in Terra Nova national park? I imagine there has been. I would like, however, to bring something to your attention. While a lot of attention has been given to the catching of trout, salmon and so on, I think the attractions of the salt water have been neglected. The Terra Nova national park is partly bounded by the sea. It seems to me it would be a good idea if small inexpensive boats were available so that a family could have a day of salt water fishing.

Mr. COLEMAN: I think that one of the prime attractions in Terra Nova national park will be deep-sea fishing. We have been planning on that for some time. It is a thought which is in our minds and which will be developed.

Mr. GRANGER: Thank you very much.

Mr. KINDT: Mr. Chairman—

The CHAIRMAN: I believe you wish to raise another matter.

Mr. KINDT: —it is a branch under national parks.

Mr. McFARLANE: Has any thought been given to a facility such as the post office in Radium national park? We feel, with the terrific expansion in that area, that some consideration should be given to moving the post office out of the park entirely so that the people in that area have the facilities available to them without having to go into the park. Even if a party goes into the park to discuss business with the superintendent, he still has to pay the required fee.

There is a considerable amount of animosity being developed in that area due to the expansion outside the park area. Has any consideration been given to that matter?

Mr. HAMILTON (*Qu'Appelle*): I will not deal with the question of paying fees for getting in and out; it is a minor matter. We have, however, had conversations with the responsible minister and the deputy minister in British Columbia as to what we can do about this business of development outside Kootenay park on the road leading out of the park. They have promised favourable consideration to some sort of a zoning provision which will satisfy standards, so that we will not have too large a gap between the standards in the park and the standards outside the park. This is a very interesting area. It is building up very rapidly.

As to the post office, I have not had an opportunity to consider the merits of having it outside or inside the park. It is just a mile out and in there.

Mr. Coleman informs me he does not know of any post office within the park.

Mr. McFARLANE: The information I have is they have to go to the post office which is situated in Radium park. They are asking for a new post office outside the park area.

Mr. HAMILTON (*Qu'Appelle*): We will look into it and find out what the arrangements are. At the moment I do not know of any post office within the park.

Mr. McFARLANE: A lot of pressure has been brought to bear to increase the parking facility at Radium. I myself believe when you increase the parking area the department will be up against a situation which will require that you increase the facilities in that area.

Mr. HAMILTON (*Qu'Appelle*): This is a very serious matter at Radium hot springs. We have done a considerable amount of work on it. Mr. Coleman could bring you up to date on the planning at Radium hot springs.

Mr. COLEMAN: Parking, as you say, is a terrific problem in such a confined area. In order to attempt to resolve it, we very recently had a large relief map made on the scale of one inch to fifty feet covering the distance of three miles through the town site, the canyon and up towards Sinclair summit. From that relief map we hope to be able to do our planning and endeavour to provide more parking facilities. As is well recognized it is a most difficult situation because there just is no place to park except on the aquacourt. The remainder of the land is almost vertical.

We do hope somehow, however, to partially resolve the problem to provide parking space for another 100 or 200 cars. On the face of it, without making an underground parking area, I do not know how we ever can accommodate large numbers of cars.

Mr. MCFARLANE: If you do increase the parking facilities up there are you taking into consideration the extension of the pools and other facilities in that area? Once you increase the parking accommodation you will have more people in there.

Mr. COLEMAN: We feel the capacity of our pools now is adequate for a great many years to come. Again, because of the confined area it would be difficult to increase the capacity of those pools.

Mr. MCFARLANE: I would like to take you up there some time during the summer when the season is at its peak in order to see whether or not you think the capacity is suitable. I do not think it will be.

The CHAIRMAN: Mr. Kindt, the historic sites comes under vote 265 as well as 266. If you have questions on historic sites they could come under either one.

Mr. KINDT: I should like to ask one of the witnesses, perhaps Mr. Coleman or Mr. Richardson, for the breakdown of that figure of $740,000, which is the appropriation for 1959-1960, or go to the figure for 1958-1959, which is $746,000 and show the breakdown.

Mr. HAMILTON (*Qu'Appelle*): Would you locate those figures?

Mr. KINDT: Page 370.

The CHAIRMAN: Mr. Kindt, would you mind first taking up page 369 and then perhaps we might be able to pass item 265. It is the second heading, further details for administration, operation and maintenance of national parks and historic sites services. Do you see it?

Mr. KINDT: No.

The CHAIRMAN: It is on page 369. That comes under vote 265.

Mr. KINDT: May I change my question just a little. Could I obtain a little more information on that item of $345,000? How does it relate to the total vote of $746,000?

Mr. HAMILTON (*Qu'Appelle*): Where is the item $746,000?

Mr. KINDT: On the following page, under historic sites.

Mr. ROBERTSON: On page 369 the items are under administration. On page 370 the items are on construction and acquisition of buildings and equipment. The votes are divided between an administrative vote and what you might call a capital vote. On page 369 it is an administrative vote.

Mr. HAMILTON (*Qu'Appelle*): You add those two together to get the total amount spent.

Mr. KINDT: Can Mr. Coleman or Mr. Richardson break down the capital expenditures by provinces for the year 1958-1959?

Mr. ROBERTSON: We can get the 1958-1959 capital expenditure on a project basis with each historic park separate. It would take a few minutes. Apparently the problem is the books have not been completely closed. However, we can obtain for you the best estimate on the basis of each park separately.

Mr. KINDT: Then, while you are doing that—

Mr. ROBERTSON: This is historic parks you want?

Mr. KINDT: Yes; historic sites.

Mr. ROBERTSON: If we do it by sites, there are about 562. There are only about 17 historic parks. It is not hard to do it on an historic park basis.

The CHAIRMAN: Would it be satisfactory to have it by provinces?

Mr. KINDT: Yes.

Mr. ROBERTSON: The breakdown for the historic parks is not too difficult, but there are about 562 historic sites and they are not organized on a provincial basis. Therefore to separate the tiny expenditures on each of the 562 sites and allocate them province by province would be pretty difficult and almost impossible. We can do it, however, for the historic parks.

Mr. KINDT: What I am getting at is, in respect of the vote on historic sites, where throughout the dominion has the effort been put?

Mr. ROBERTSON: I think we can give you an estimate. We cannot give it to you in detail. We can come very close.

Mr. HAMILTON (*Qu'Appelle*): If you asked for it in the original form of your question it would require a tremendous amount of work. If you want to compare where the money has gone, say over the last two years, I imagine in respect of the historical parks it would be very easy to obtain.

Mr. ROBERTSON: Yes.

Mr. HAMILTON (*Qu'Appelle*): These are the projects. We can give you the actual capital expenditure; but the administration of the whole thing is put in this other vote.

Mr. KINDT: What I am interested in is the capital cost which connotes the new development.

The CHAIRMAN: For one year?

Mr. KINDT: It would be nice if we had it for two years.

Mr. ROBERTSON: Would it be all right if we obtained it for two years?

Mr. KINDT: Yes. In the absence of those figures, or while they are being put together, may I go on to say that this topic of national historic sites, to me, connotes a very, very important branch of the department. We are all proud of the history of Canada. We are all interested in preserving the relics of these great national historical sites before they pass out of existence.

I have in mind two sites in the west. One is the Franks Slide in the Crowsnest Pass, which is an area which was part of a large study in 1904. As you all know, the Franks Slide occurred in 1903. The government made another study of that slide in 1911. It has focused national attention on that slide. It is part of that whole Crowsnest Pass area which the Palliser expedition visited back in the 1870's. Also the coal industry in the west had its birth there. What I am endeavouring to say is that from a point of view of preserving the relics of that Franks Slide I should like to see a development there. The people have organized an historical association in the Crowsnest Pass area for the very purpose of prosecuting that. I would like to call it to the attention of this committee and point out how important it is to have some immediate action taken to back up the people who have formed the historical association there in order to preserve these relics and build a suitable museum to bring together whatever relics remain of that Palliser triangle expedition and perhaps something of the coal industry.

There is one other historical site in the west; that is the Turner valley. That area represents the cradle of the oil industry in Canada. If you speak about pipelines, or the network of pipelines, they, of course, had their birth right there in Turner valley. The local people there have been pressing me ever since I came to Ottawa to have something done about it. They have organized an historical association. They would like to have a museum erected there where they could house certain relics of the oil industry in western Canada.

What I am trying to say is this. These are two extremely important historical sites. On this point I might add that the association at Turner valley have purchased an old log building which is very much in a state of disrepair but they have set about to have it restored as part of the historical development. I would like to say that in the past, in Alberta at any rate—and I can speak from first-hand information—there has not been quite enough emphasis placed on this type of thing. Perhaps it could be that the person who has been representing Alberta on the board has failed to bring these historical sites to the attention of the board so that some action might be taken. I feel there should be a certain amount of public relations and that, to a certain extent, public relations have been neglected. I feel that I can give it to the committee as my own opinion that whoever is asked to serve on that board should improve the public relations of the historic sites and monuments services, certainly in the province of Alberta. I would like to ask one other question while I am on this subject, and it is this: I want to compliment the department on the picnic grounds and campsites, and the work and money which has been spent in that field; and if I am not asking for something out of the ordinary, or if I may go back, I would like to ask what the breakdown is by provinces, in connection with this $1,500,000?

The CHAIRMAN: That was put on the record yesterday, Mr. Kindt.

Mr. KINDT: I am sorry.

The CHAIRMAN: You will find it in the record of yesterday's proceedings.

Mr. KINDT: Was it broken down by provinces?

Mr. ROBERTSON: Yes, it was.

Mr. HAMILTON (*Qu'Appelle*): I will not take too long to answer the first part. Mr. Kindt knows—because he has gone through this mill before—that when you have a historic feature which you would like to preserve, you make application to me. I then present it to the Historic Sites and Monuments Board. You know this procedure, because you have followed it; and you know that the question of whether the place is of national historic interest or not is in the hands of the board. I take their advice on the subject. If they decide that it is, then I have to work out what we can with it.

In some cases it is just a plaque, and in some cases a local group will want to get into it and provide a museum. Then we have to negotiate to see how far we can go along with such a project in helping them out. The success or failure in the commemoration of these historic sites depends 90 per cent on the local people. If they have a good group, they can make it a very nice part of their district, and they will have done a great service to the people of Canada in preserving their district.

Mr. KINDT: I would like to add a footnote. Where you have local people organized into a historical association, and where they have thought enough about the thing they are setting about to organize an association, you have the enthusiasm and the time, and in connection with the two items I mentioned, the people are all organized and ready to go. I refer to the Frank Slide, and the Turner valley.

The CHAIRMAN: Are there any other questions? You may combine items 265 and 266.

Item 266 Construction or Acquisition of Buildings, Works, Land and Equipment $18,694,912

Mr. AIKEN: If we are on national parks, buildings and works, I would like to inquire as to the increase in connection with the Georgian Bay Islands Park. I see that this year there is to be construction in the area in the amount of $54,200, which is quite a bit more than it was last year. I wondered if there was any significant change in connection with this park. They are very small, but I feel they are important.

The CHAIRMAN: The item under discussion is on page 370 of your estimates.

Mr. HAMILTON (*Qu'Appelle*): You want the main items under construction this year?

Mr. AIKEN: Yes. I do not want a breakdown, but I wondered if there were one or two major projects which had not been undertaken before.

Mr. ROBERTSON: There are two items. Part of the reason why the change looks significant is that the amount was relatively small before. The main item in the coming year is for redesigning and construction of the campground. That was the same situation last year, but then it was $26,000, while this year it is $25,000; and then there is the construction of a new caretaker's residence at $15,000, which makes up almost the total of the increase. There are a number of other small items.

Mr. AIKEN: It would be the construction of the caretaker's residence that accounts for the difference?

Mr. ROBERTSON: That is right.

Mr. FLEMING (*Okanagan-Revelstoke*): May I inquire how plans are proceeding in connection with the possible development of road facilities to Mount Revelstoke Park? I know this has caused some concern and I wondered how planning was going along?

Mr. G. L. SCOTT (*Chief, Engineering Service Division, National Parks Branch*): That is to the summit from the city of Revelstoke?

Mr. FLEMING (*Okanagan-Revelstoke*): With the present road there is the problem of overcrowding with two-way traffic.

Mr. SCOTT: Some consideration has been given, but I do not know whether it is possible to make it a one-way road. Whether it is possible or not, I do not know, but that is one possibility.

Mr. FLEMING (*Okanagan-Revelstoke*): Has a survey been conducted?

Mr. SCOTT: No; we will have to make a reconnaissance to see if it is possible.

Mr. FLEMING (*Okanagan-Revelstoke*): This park is in the same position as Glacier, in that there will be an increase in traffic when the highway is completed. There will be two years before the highway is completed, but Mount Revelstoke park will have the same pressure placed on it as will be placed upon Glacier. It is a peculiar situation, but it is all coming to a head in a very short period of time.

The CHAIRMAN: Are we through, gentlemen? You have an item in that vote for engineering services, national parks, trunk highways, $10 million? Is there any comment?

Mr. MCFARLANE: I would like to have some explanation as to what this item covers?

Mr. ROBERTSON: This is just for trunk highways.

Mr. MCFARLANE: Trunk highway projects?

Mr. ROBERTSON: The main items in the coming year are the Banff-Jasper highway, $5,300,000; these are only estimates, of course; Banff-Windermere highway, $2,530,000; the Cabot trail in Cape Breton Island park, $1,420,000; the gulf shore road in Prince Edward Island national park, $1,256,000; and number ten highway, Riding Mountain park—this is just for location surveys and for clearing at this stage.

Mr. MCFARLANE: You gave me $2,300,000 for Banff-Windermere.

Mr. ROBERTSON: No, I said $2,530,000.

Mr. MCFARLANE: What does that entail? Are you planning to strengthen the two bridges in that area where they are now limited to a capacity load of 20 tons?

Mr. ROBERTSON: Mr. Scott will give you the details.

Mr. SCOTT: May I read what has been done on the Banff-Windermere highway, and what we propose to do this year?

Mr. MCFARLANE: I am interested in those two bridges. Can you help me out?

Mr. SCOTT: What is that?

Mr. MCFARLANE: They are at mileage 61.4 and 62.4. Is there anything being done? I ask, because it is tying up our section of the country.

Mr. SCOTT: The Department of Public Works plans—I do not know whether they will be able to do it—to award a contract this year between mile 56 and mile 62. That would take in these two bridges.

Mr. MCFARLANE: I think it would miss one of them, because one bridge is at mile 61.4 while the other is at mile 62.4.

Mr. SCOTT: That is the tough section about which we were speaking, and where we will have to do some pretty basic planning.

Mr. MCFARLANE: I wondered if any consideration could be given to having those two bridges renewed or strengthened, or whatever the engineering problem is, because we are up against the situation there where our parks are pretty well the border point of the eastern section at the end of the province, and it is practically impossible to get through there with loads heavier than the present limit, which is now 27 tons, I think.

Mr. SCOTT: Yes.

Mr. ROBERTSON: Both these projects are to be rebuilt. The question is: in which year. That is the point which is really being raised. The final portion of the road, as has been said, is the more difficult one, and the reason for holding it to the end, and for going ahead rather slowly is that any mistakes made there will compromise things for virtually all time to come. Mistakes could be exceedingly expensive. That is one of the reasons it has been left to the end. There is a desire not to take it all in one bite.

The CHAIRMAN: Are there any other questions?

Mr. AIKEN: There is one matter I would like to bring up. I am not sure whether it comes under this particular item, but it refers to crown reserves on mining and other rights in connection with patented land.

Mr. HAMILTON (*Qu'Appelle*): You do not touch it here. You touch it under northern administration of land, because we have two acts, the Yukon mining regulations, and those for the Northwest Territories.

Mr. AIKEN: I was concerned about crown reserves in other lands in the Northwest Territories. That is under the province?

Mr. HAMILTON (*Qu'Appelle*): It is still under the provinces.

Mr. MCGREGOR: Could the minister give us some estimate of cost, and say what kind of roads they are building there, and what is the cost per mile?

Mr. HAMILTON (*Qu'Appelle*): You are referring to these mountain park roads?

Mr. MCGREGOR: I am referring to this $10 million item in the estimates.

Mr. HAMILTON (*Qu'Appelle*): There is a tremendous difference in the type of roads, for example, in Cape Breton, Fundy, and in Prince Edward Island parks. What can we do to get these rough costs? You do not want it down to the last dollar?

Mr. MCGREGOR: No; but I want some kind of intelligent estimate of what these roads are going to cost. What type of roads are they; what do they cost per mile in the different provinces?

Mr. SCOTT: The Banff-Jasper road, for instance, is a 40 to 44 foot road, with a 24 foot driving surface.

Mr. MCGREGOR: Maybe you could put this in the record, and then we will have it there for everybody to see.

The CHAIRMAN: You want the different road projects?

Mr. MCGREGOR: Yes, in the different provinces, included in this item of $10 million—the type of road; what it costs per mile. Are they calling for tenders in regard to all this?

Mr. HAMILTON (*Qu'Appelle*): All of them, yes.

Mr. ROBERTSON: I think we might try to put in the main roads, the standards and the cost per mile, road by road. If you average them out, you get a very misleading picture, because the cost in some difficult place in the mountains is very different to the cost in Prince Albert National Park, or something of that kind.

Mr. MCGREGOR: Say you are putting through two main roads—which is the longest?

Mr. HAMILTON (*Qu'Appelle*): That is the reason it was suggested—to keep it simple—that you take a road such as the Banff-Jasper road. There you know the total number of miles and you have an estimate of cost. If you divide the number of miles into the estimate, it will give you the estimated cost per mile.

Mr. MCGREGOR: On that particular road?

Mr. HAMILTON (*Qu'Appelle*): Yes.

The CHAIRMAN: And you want it on the others?

Mr. MCGREGOR: I want it on the others too.

Mr. ROBERTSON: We can do that.

Mr. HAMILTON (*Qu'Appelle*): The cost will not be any less than the estimate.

Mr. MCGREGOR: While we are on that, perhaps you can answer this. All this seems to be a great deal of equipment to be bought. Has all that been bought?

Mr. HAMILTON (*Qu'Appelle*): We have millions of dollars worth of equipment in these parks. There is a constant problem of replacement, and with these new parks coming in—Terra Nova, Cape Breton Highlands, Glacier, Kootenay; Glacier particularly—the equipment inventory will go up considerably.

That is one of the main reasons we put Mr. Dempster—who is an experienced engineer and equipment man—on supervising these mountain parks, to see how we could synchronize the use of this equipment to get the most out of it. It involves a tremendous cost to keep all this equipment on this mileage of roads.

Mr. McGREGOR: You anticipate buying about $1 million worth of that equipment this year?

Mr. ROBERTSON: Perhaps, Mr. Chairman, I should say something about the basis on which the equipment operation is handled. A few years ago we found that the equipment situation had got to a very bad state because the replacement was not on what you might call a really scientific basis. We worked out carefully, in consultation with the equipment companies and operators—who are familiar with this sort of thing—what were realistic replacement rates, to achieve the maximum economy, because you can get some very false economies by not replacing your equipment. You get reduced capital costs, but you find your maintenance costs, your losses in labour time, your inefficiencies, are going up tremendously.

So the replacements were placed on a very carefully calculated basis for each type of equipment. This was approved by treasury board, and we stick to that as our basis for replacement. We find it works out very well on the whole. It is a sensible scheme of replacement for each type of equipment, on a calculated basis.

Mr. McGREGOR: How do you mean—"on a calculated basis"?

Mr. ROBERTSON: With regard to heavy trucks, on the average they become uneconomical to maintain after they have gone a certain mileage. An individual truck may be all right, but on the average it is better to replace them after a certain mileage when you are dealing with a couple of hundred trucks. The same applies to light cars, or panel trucks, and there is that type of thing with certain tractors.

Mr. McGREGOR: At what mileage are they replaced?

Mr. ROBERTSON: It differs. We replace cars at 60,000 miles. But there is a sort of norm on this, and we try to stick to this norm as a replacement rate.

Mr. McGREGOR: What do you do with bulldozers and that sort of thing?

Mr. COLEMAN: When the maintenance costs reach such a point that it is uneconomical to repair them, then we replace them.

Mr. FLEMING (*Okanagan-Revelstoke*): Does this norm apply throughout all branches of the department: is it the same in National Parks Branch, the Forestry Branch, and so on? Do you have a basic norm?

Mr. ROBERTSON: We do, for cars, because cars are prety well the same sort of thing all the way through: 60,000 miles is the replacement norm. An individual car may be so decrepit that it has to be replaced before 60,000 miles.

Mr. FLEMING (*Okanagan-Revelstoke*): In certain circumstances cars may be used on forest field work. I know they are used in the Forestry Branch in the country north of Prince George. A car operating in that area is obviously not going to go 60,000 miles.

Mr. ROBERTSON: That is correct. As Mr. Coleman said, if a certain vehicle is for some reason at a point where repair is obviously going to be too costly, it can be replaced before its norm is reached. Actually, we secured a piece of equipment this year: because of breakages it had reached its replacement point when it was about six weeks old. But this was one of those exceptional things.

The CHAIRMAN: Do you buy your cars from dealers, or from the factory?

Mr. ROBERTSON: Through dealers, on a tender basis.

The CHAIRMAN: The same applies to other equipment?

Mr. ROBERTSON: Yes.

Mr. KINDT: Mr. Chairman, I have just asked the clerk, Mr. Jones, to obtain certain figures on picnic grounds, and I would request that those be added as an appendix of the proceedings.

The CHAIRMAN: For each park?

Mr. KINDT: No; it is just four or five figures—very small.

The CHAIRMAN: Is that agreeable, gentlemen?

Agreed to.

(*See appendix "A"*)

The CHAIRMAN: Are we through with items 265 and 266, except for the inclusion of tables?

Items 265 and 266 agreed to.

The CHAIRMAN: Item 267, gentlemen—the same as last year.

Item 267 Grant to Jack Miner Migratory Bird Foundation ..... $ 5,000

Mr. MCGREGOR: I move we adjourn.

Mr. HAMILTON (*Qu'Appelle*): Let me get my parks people out of here before you do so. There are only a couple of items left.

The CHAIRMAN: Is item 267 agreed to?

Item agreed to.

The CHAIRMAN: Item 268—the same as last year.

Item 268 Grant in aid of the development of the International Peace Garden in Manitoba ..... $ 15,000

Item agreed to.

The CHAIRMAN: Item 269?

Item 269 To authorize payment to the National Battlefields Commission for the purposes and subject to the provisions of an Act respecting the National Battlefields at Quebec (Chap. 57, Statutes of 1908, as amended) ..... $ 178,290

Mr. AIKEN: That is the same as last year too.

Item agreed to.

The CHAIRMAN: Item 270, Canadian Wildlife Service.

Item 270 Canadian Wildlife Service—Wildlife Resources Conservation and Development, including Administration of the Migratory Birds Convention Act.. $ 686,739

Mr. MCGREGOR: I would like to ask how that money is spent. Could you give us a report at the next meeting?

Mr. HAMILTON (*Qu'Appelle*): On the Canadian Wildlife Services?

Mr. MCGREGOR: Yes, this $686,000.

Mr. HAMILTON (*Qu'Appelle*): This is one of our very important divisions. Do you want it now? It would not take too long.

Mr. AIKEN: Yes, let us have it now.

Mr. HAMILTON (*Qu'Appelle*): First of all, perhaps you will turn to the details on page 371 and page 372. The total vote is $686,000. The salaries are $399,000, as compared with $373,000 last year; that is an increase of $27,000. Professional services—which is what it implies; the hiring of outside help—field expenses are up $6,000. Travelling and removal expenses are up $9,000.

Do you want all the items? There are a lot of small items here. Jumping down to materials and supplies, they are up $13,600. Here is another one up, on equipment acquisition, $22,000. What was the type of equipment you got on that?

Mr. MCGREGOR: Rental of equipment, $73,000?

Mr. ROBERTSON: Rental of equipment was mainly for aircraft. In the north, for wildlife work, most of it has to be done on a basis of chartered aircraft. For example, the caribou studies; and that is the main type of equipment which is rented. It is aircraft.

Mr. HAMILTON (*Qu'Appelle*): We have been spending a good deal of money this last year trying to find out where the caribou have gone. The native peoples lived off them.

Mr. MCGREGOR: What type of aircraft do you use?

Mr. HAMILTON (*Qu'Appelle*): They are mostly fixed wing aircraft.

Mr. ROBERTSON: They are light aircraft, simply to get the wildlife experts there, and to keep them supplied, and that sort of thing.

Mr. MCGREGOR: How many men would there be in the plane?

Mr. W. W. MAIR (*Chief, Canadian Wildlife Service*): The number of men would vary from project to project. In some cases the aircraft might carry three of four individuals, while in other cases it might be just a man and his guide.

Mr. MCGREGOR: How would you rent that plane which you say would carry three or four? Would it be by the hour?

Mr. MAIR: By the hour.

Mr. MCGREGOR: How much per hour?

Mr. MAIR: It would depend on the area where you contracted it for. It varies, having regard to how far north you are; it would run from between $75 to $90 or $100 per hour for a small aircraft.

The CHAIRMAN: Is that done by tender?

Mr. ROBERTSON: It is usually controlled by the air transport board. Only certain companies—one or two companies—would have the right to charter within a particular area.

Mr. MCGREGOR: And they would supply all the fuel?

Mr. ROBERTSON: That is right.

The CHAIRMAN: Is that all, Mr. McGregor? If so, are we through with item 270?

Agreed.

We did not approve item 264, Branch Administration, the first item under National Parks Branch. Is that now agreed?

Agreed.

We shall meet tomorrow morning at nine o'clock.

APPENDIX "A"

CAMPGROUNDS AND PICNIC AREAS PROGRAM

Altogether apart from the construction of campgrounds and picnic areas in National Parks—which is entirely a federal responsibility—the government has embarked on two separate programs under which the federal government shares with the provinces the cost of constructing campgrounds and picnic areas. The first of these is a winter works program begun in the winter of 1957-58 (January 2, 1958 to May 31, 1958) and repeated in the winter of 1958-59 (November 1, 1958 to May 31, 1959). The other program, which was begun late in 1958, and which has no terminal date, is for the construction of campgrounds and picnic areas along the route of the Trans-Canada Highway. Under both programs, the costs of constructing campgrounds and picnic areas to agreed conditions and specifications are shared equally by both levels of government.

WINTER WORKS PROGRAM

A summary of federal contributions for campgrounds and picnic areas under the winter works program for the four western provinces is given below:

Province	1st Program	2nd Program	
			Estimates
	January 2, 1958 to	Nov. 1, 1958 to	April 1, 1959 to
Province	May 31, 1958	March 31, 1959	May 31, 1959
British Columbia	$ 367,096.60	$164,169.27	$175,000.00
Alberta	104,397.81	73,389.76	187,500.00
Saskatchewan	36,049.39	75,782.99*	42,500.00
Manitoba	90,211.95	55,706.95	52,500.00
Total for all provinces	$ 1,312,257.47	$947,623.69	$811,911.00

*$44,794.16 of which is from 1959-60 funds.

TRANS-CANADA HIGHWAY PROGRAM

No contributions have yet been made to provinces taking part in this program, but a sum of $2,000,000 is available. This figure has been apportioned to the various provinces on the basis of the amount of the Trans-Canada Highway mileage within the boundaries of the province concerned. The amounts allotted to each of the four western provinces are as follows:

British Columbia	$241,379.00
Alberta	137,931.00
Saskatchewan	172,414.00
Manitoba	137,931.00

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAY 26 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 20

WEDNESDAY, MAY 13, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

WITNESSES:

Mr. T. N. Beaupré, Chairman, British Columbia Division, Canadian Pulp and Paper Association; Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; Mr. John Burke, Secretary-Manager, British Columbia Loggers' Association; Mr. J. D. B. Harrison, Director, Forestry Branch; Mr. Ross Douglas, Vice-President, Forestry, Alaska Pine and Cellulose Limited; The Honourable J. V. Clyne, Chairman of the Board, MacMillan and Bloedel Limited; Mr. Charles Chambers, Comptroller, MacMillan and Bloedel Limited; and The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21197-9—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.
and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*)
Payne,
Richard (*Saint Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

CORRIGENDA (*English Edition only*)

Minutes of Proceedings and Evidence No. 17, May 7, 1959.

Front cover page: for "Estimates 1959-60 of the Department of Mines and Technical Surveys" substitute "Estimates 1959-60 of the Department of Northern Affairs and National Resources".

Page 446, top table, 5th column, line 5: for "−4.7%" substitute "+4.7%".

MINUTES OF PROCEEDINGS

WEDNESDAY, May 13, 1959
(21)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs, Aiken, Baskin, Dumas, Fisher, Fleming (*Okanagan-Revelstoke*), Granger, Kindt, Martel, Martineau, McQuillan, Murphy, Nielsen, Payne, Roberge, Simpson and Stearns—16.

In attendance: The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources: *representing the British Columbia Forest Industry Associations*: Mr. T. N. Beaupré, Chairman, British Columbia Division, Canadian Pulp and Paper Association; The Honourable J. V. Clyne, Chairman of the Board, MacMillan & Bloedel Limited; Mr. M. J. Foley, President, Powell River Co. Limited; Mr. W. Breitenbach, President, Alaska Pine & Cellulose Limited; Mr. Charles Dickey, President, British Columbia Forest Products Limited; Mr. Charles Chambers, Comptroller, MacMillan & Bloedel Limited; Mr. John Burke, Secretary-Manager, British Columbia Loggers' Association; Mr. L. R. Andrews, Executive Vice-President, British Columbia Lumber Manufacturers Association; and Mr. Ross Douglas, Vice-President, Forestry, Alaska Pine & Cellulose Limited: *of the Department of Northern Affairs and National Resources*: Mr. R. G. Robertson, Deputy Minister; Mr. J. D. B. Harrison, Director, Forestry Branch; Mr. J. H. Jenkins, Chief, Forest Products Laboratories Division; Mr. H. W. Beall, Chief, Forestry Operations Division; Mr. D. R. Redmond, Chief, Forest Research Division; and Mr. G. M. Carty, Chief Administrative Officer.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

The Chairman recorded certain revisions to printing No. 17 of the Minutes of Proceedings and Evidence of the Committee of Thursday, May 7, 1959, as follows:

On the front cover page of the said No. 17 printing, for "Estimates 1959-60 of the Department of Mines and Technical Surveys" there should be substituted "Estimates 1959-60 of the Department of Northern Affairs and National Resources".

On page 446 of printing No. 17, in the statistical table at the top of the page, in the fifth column, in line four, "−4.7%", there should be substituted "+4.7%".

The Committee agreed that the said corrigenda be recorded. (*See corrigenda in this printing*).

The Chairman presented the report of the Subcommittee on Agenda and Procedure, in which it was recommended that, if it were necessary to do so to complete the examination of out-of-town witnesses, the Committee sit also on the afternoon of Wednesday, May 13, and likewise on the afternoon of Thursday, May 14 and on Monday May 18, if the same circumstances then prevailed. The Committee concurred in the said recommendation of the Subcommittee.

21197-9—1½

At the invitation of the Committee, Mr. H. W. Herridge, M.P., not being a member of the Committee, being present, took a seat at the table and participated in the questioning that followed.

Item 281, Forestry Branch, Branch Administration, was called.

The Chairman welcomed the gentlemen representing the Forest Industry Associations of British Columbia.

Mr. Beaupré was called; he read the brief of the said associations. Messrs. Beaupré, Burke, Douglas, Clyne and Chambers were questioned thereon.

Messrs. Robertson and Harrison answered questions arising from the brief.

At 11.00 o'clock a.m. the Committee adjourned until 3.00 o'clock p.m. this day, or as soon thereafter as Routine Proceedings in the House have been disposed of.

AFTERNOON SITTING

WEDNESDAY, May 13, 1959
(22)

At 4.00 o'clock p.m. this day, the Standing Committee on Mines, Forests and Waters resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Fisher, Fleming (*Okanagan-Revelstoke*), Granger, Martel, McGregor, McQuillan, Murphy, Payne, Richard (*Saint-Maurice-Laflèche*), Roberge, Simpson and Stearns—14.

In attendance: The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources: *representing the British Columbia Forest Industry Associations:* Mr. T. N. Beaupré, Chairman, British Columbia Division, Canadian Pulp and Paper Association; The Honourable J. V. Clyne, Chairman of the Board, MacMillan & Bloedel Limited; Mr. M. J. Foley, President, Powell River Co. Limited; Mr. W. Breitenbach, President, Alaska Pine & Cellulose Limited; Mr. Charles Dickey, President, British Columbia Forest Products Limited; Mr. Charles Chambers, Comptroller, MacMillan & Bloedel Limited; Mr. John Burke, Secretary-Manager, British Columbia Loggers' Association; Mr. L. R. Andrews, Executive Vice-President, British Columbia Lumber Manufacturers Association; and Mr. Ross Douglas, Vice-President, Forestry, Alaska Pine & Cellulose Limited; *and of the Department of Northern Affairs and National Resources:* Mr. R. G. Robertson, Deputy Minister; Mr. J. D. B. Harrison, Director Forestry Branch; Mr J. H. Jenkins, Chief, Forest Products Laboratories Division; Mr. D. R. Redmond, Chief, Forest Research Division; and Mr. H. W. Beall, Chief, Forestry Operations Division.

Mr. H. W. Herridge, M.P. again being present, by agreement of the Committee, sat at the table and took part in the questioning.

Continuing on Item 281, Forestry Branch, Branch Administration, Mr. Beaupré continued his presentation of the brief of the Forest Industry Associations of British Columbia. Mr. Beaupré, the Honourable Mr. Clyne, Messrs, Douglas and Harrison, the Honourable Alvin Hamilton and Mr. Chambers answered questions arising from the brief.

The Committee directed that a table of wage rates in the forest industry in British Columbia be obtained, and that the same be put on the record of the Committee.

At 5.40 o'clock p.m. the Committee adjourned to the call of the Chair.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

WEDNESDAY, May 13, 1959.
9.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

First of all I would like to call your attention to a correction which is required in the printing. On the front page of the report of our minutes of proceedings and evidence of Thursday, May 17, the words "Estimates, 1959-1960 of the Department of Mines and Technical Surveys" should read, "Estimates 1959-1960 of the Department of Northern Affairs and National Resources." This is in report No. 17 of our proceedings.

Also on page 446 of that issue, in the statistical table at the top of the page in the fifth column, fourth line, "—4.7 per cent" should read "+4.7 per cent".

These corrections will be made in the official report of today's proceedings.

Yesterday your subcommittee met at 5:15 p.m., the following members being present: Messrs. Dumas, Fisher, Martineau, Mitchell, Murphy, Nielsen, and McQuillan representing Mr. Coates, who was unable to attend. Your subcommittee recommends that, if it is necessary to do so to complete the examination of out-of-town witnesses, the committee sit also on the afternoon of Wednesday May 13, and likewise on the afternoons of Thursday, May 14 and of Monday May 18, if the same circumstances then prevail. Is the report concurred in?

Agreed.

As you know, today we are honoured by having with us representatives from the British Columbia Forest Industry Associations, at the suggestion I might say of one of our committee members, Mr. McQuillan. To you, Mr. McQuillan, we are very indebted.

Also I may say, as you already know, on Monday next we hope to have Mr. D. W. Ambridge, president of the Abitibi Power and Paper Company, Limited, of Toronto, Professor David Love of the Faculty of Forestry, University of Toronto, Robert Prettie, president, Northern Wood Preservers Limited, of Port Arthur, Ontario and Mr. Armstrong Boyle, chairman of the Northwest Ontario section of the Canadian Institute of Forestry, of Port Arthur, Ontario.

With your concurrence, as we now are discussing forestry for the first time, probably it would be advisable if this morning we should start on item 281 and continue our examination into the estimates of the Forestry Branch, until we have concluded. Is that agreeable?

Agreed.

FORESTRY BRANCH

Item 281 Branch administration ..... $ 163,785

The CHAIRMAN: Gentlemen, we have with us the Hon. J. V. Clyne, chairman of the board of MacMillan & Bloedel Limited; Mr. M. J. Foley, president, Powell River Co. Limited; Mr. W. Breitenbach, president, Alaska Pine & Cellulose Limited; Mr. Charles Dickey, president, B.C. Forest Products Limited; Mr. Charles Chambers, comptroller, MacMillan & Bloedel Limited; Mr. John Burke, secretary-manager, B. C. Loggers' Association; Mr. L. R. Andrews, executive vice-president, B. C. Lumber Manufacturers Association; Mr. Ross

Douglas, vice-president, forestry, Alaska Pine & Cellulose Limited, and Mr. T. N. Beaupré, chairman, B. C. Division, Canadian Pulp and Paper Association. I may not have given you the full designation for each one of these companies.

To you, gentlemen, I may say that the committee welcomes all of you here. You will be giving evidence pertaining to a very important segment of our Canadian economy.

To the members of the committee I say if any member of any party, C.C.F., Liberal or Conservative, would like to have any other members of the industry here we would welcome them and also give them an opportunity to participate. Mr. Herridge, I am sure the committee would welcome you at the table.

Now we have to begin with brief submitted to the Standing Committee of the House of Commons on Mines, Forests and Waters, a copy of which you each have. I am sorry but I did not have an opportunity of going through the brief earlier. Due to the importance of the brief, the material in it and the length of it, would you give the Chair your ideas with respect to its examination?

The brief will be read, and it may be your wish, rather than wait until the brief is completely read, to examine any of the witnesses who are here to give evidence on a particular point, and then to proceed from there, if we think there are some special topics.

Mr. T. M. BEAUPRÉ (*Chairman, Canadian Pulp and Paper Association, British Columbia Division*): I think it does divide itself into five or six sections. Obviously, we are at the convenience of the committee to answer questions at any time, but members may find it more convenient if we stop at the end of each section and review the subject matter contained therein.

Item 281. Branch administration 163,785

As you have said, we have several people here who will probably add to the substance of the brief in response to questions.

Mr. DUMAS: I would suggest that we take it section by section. Let us say, from page 1 to page 7, this would be one section; then, from page 8 to page 12, would be another section. That is, the forest as a resource, pulp and paper, and so on. I think this would be a good idea.

THE CHAIRMAN: Any other comments, gentlemen?

Mr. KINDT: Mr. Chairman, is it understood there will be no objection to interruptions during the reading of each section?

The CHAIRMAN: I think we will allow latitude. If you think it is advisable to interrupt while a paragraph is being read—we will start out on that basis.

Mr. BEAUPRÉ: Otherwise, if possible it could be held until the end of that particular section.

The CHAIRMAN: If you feel you should ask a question for clarification, do not hesitate.

Gentlemen, Mr. Beaupré, who is chairman of the British Columbia Division of the Canadian Pulp and Paper Association, will commence to read the brief.

Mr. BEAUPRÉ: Mr. Chairman, Mr. Minister and members of the committee, we, of course, welcome the opportunity of appearing before you, and we would like to handle our material to best suit your convenience.

I might just say this, that those of us who are here—although members of individual pulp and paper companies in British Columbia—are essentially here representing the signatory associations of the brief, which associations pretty well cover all aspects of the forest industry in British Columbia.

At the outset may we say that we have taken into consideration the scope of this committee and if we needed any encouragement to approach it we find it in the words of your Chairman who last year on June 9 made the following remarks:

I hope, sir, you will permit us to quote you.

"As its name indicates, it is a committee whose terms of reference cover a very large portion of the entire resources field. Indeed, it is my understanding that it is not intended that the committee should even limit the matters under consideration to the items technically included with the terms 'mines, forest and waters'. The committee will be giving consideration to questions that relate to the development of the vast northern regions of Canada and to the field of natural resources in general. Natural resources are the foundation of economic wealth. The way in which we develop or fail to develop them, the way in which we use them with wisdom or with folly, will determine the character, the wealth and the strength of this country in years to come. It is thus no exaggeration to say that the subject matter of this committee is fundamentally the subject matter on which the basis of our nation's future depends."

We appreciate the opportunity of appearing before you to review some of the problems of our industry. Before launching upon these problems and their effect on the national welfare, however, we felt it would be useful to describe our industry briefly and the place it holds in the national economy.

Because this brief is presented by the British Columbia forest industry we would like, also, to outline briefly the place of the forest industry in our home province and some of the problems that are peculiar to B.C. These comments will serve as an introduction to more detailed discussions of various aspects of the industry by my colleagues here who have special knowledge and background in various fields.

We stress the importance of the forest industry only to demonstrate that it forms a large part of the Canadian economy and particularly of Canada's vital export trade. A large part of the Canadian economy grows or stagnates as the forest industry grows or stagnates.

We believe that insufficient recognition has been given to Canada's present dependence on the forest industry or its potentialities for continued growth provided farsighted governments help the industry in meeting increasingly competitive conditions. In recent years metal mining, oil, natural gas and power projects have received much attention. Yet they are smaller in the national economy in relation to forest production.

One out of every 12 Canadians working in the nation's goods-producing industries is concerned with forestry or the manufacture of forest products. Value of wood products is $2.3 billion (1). Approximately one-third of Canada's total export earnings comes from the sale of forest products outside our boundaries. We have, at the back of this brief, attached certain exhibits which I think are useful in emphasizing some of the points that are made in the body of the brief. I think now would be the appropriate time to look at exhibits A and B. They merely show what we have just mentioned about the value of Canadian products exported and the percentage of wood, wood products and pulp and paper to total exports. You will see, throughout the years from 1950 to 1958, how they show by comparison.

(1) 1957—Adjusted value of shipments, D. B. S.

Of all the manufacturing industries in Canada, pulp and paper alone stand first in employment, in terms of wages paid, in new investment and in net value of output. Its production in dollar terms is greater than that of the nation's wheat crop; more than twice that of all the nation's metal mines.

The forest industry loads more freight than any other industry, making up more than 17 per cent of all car loadings in 1957. This figure excludes the great rail traffic created by the industry for fuel, chemicals and other supplies required at the mills and in the woods. Pulp and paper industries alone use one-fifth of all electric power generated in Canada.

Canada's productive forest land represents 45 per cent of all the nation's productive land.

The Gordon Commission indicated over-all demand for forest products could—and we underline "could"—permit Canada's forest industries to double their output by 1980 and stated that Canada's forest resources were adequate to supply the demand. It added, however—and we quote from the commission report:

> To assume that the marketing of Canadian forest products will present no serious problem would be naive. Higher transportation costs and a continuing shortage of dollars, arising in part from North America's reluctance to import non-dollar goods, will probably limit overseas sales.....
>
> Then there is also the possibility that the manufacture of newsprint and other pulps from alternative materials will become an economic reality; that potential markets in a number of relatively underdeveloped countries will be shut off by the erection there of newsprint mills based on extensive local resources such as bagasse (sugar-cane waste) or tropical hardwoods; and that, as lumber grows scarcer and its price rises, tariff-protected substitutes, many based on wood formerly regarded as of inferior quality, will continue to take its place.
>
> Finally, there is what is probably the greatest enigma of all, the possibility of greater competition from the Iron Curtain countries, particularly from Russia herself with her forest resource wealth.

Mr. Gordon Robertson, the deputy minister of Northern Affairs and National Resources, in a speech at the opening of the new forest products laboratory at Vancouver, February, made the following statement:

> The value of the forest industries to Canada is obvious—in the great addition they make to our national income; in the employment that they provide; and in their very large contribution to Canada's balance of international payments.
>
> In such circumstances it must be a matter of general concern that Canada's forest industries are tending to become high-cost industries. We are tending to lose our competitve position in the marketing of our forest products abroad. We are also becoming increasingly vulnerable to inroads by foreign competitors in our domestic market. Our forest product exports are encountering problems and growing competition in our largest market, the United States. These are, in large part, due to high production costs in Canada and, in one particular case, to increasing newsprint production in the Southern United States. In European markets the Soviet Union is becoming an increasingly serious competitive threat.
>
> These are, as I say, circumstances that must be a matter of concern to Canadians generally and especially to those of us who are connected in one way or another with the forest industries.....

Naturally, we thoroughly concur in Mr. Robertson's approach.

British Columbia

In British Columbia the forest industry is even more important in proportion to the total provincial economy and in possibilities for future growth. It is estimated that more than 95 per cent of the productive land in British

Columbia is suitable mainly for forestry. British Columbia depends on the forests for some 50 cents for every dollar earned. Net value of forest production (i.e. the gross or sale value less the cost of materials, supplies, fuel and electricity) is estimated at 40 per cent of the total net value of production in British Columbia. More than 70 per cent of all forest products are exported. In recent years approximately 65 per cent of the value of all exports from British Columbia have been wood products.

At this point I would like to refer members of the committee to exhibits "C" and "D", which are in graph form and show the value of British Columbia products exported and the comparison between wood pulp products and pulp and paper to the total exports.

You will see that the percentages range from 51 per cent up through 50 per cent and 59 per cent and it is still very close to 60 per cent.

The value of forest products exports from the province are nearly double the total exports of all other products combined.

British Columbia produces 60 per cent of Canada's sawn lumber and 85-90 per cent of all plywood and 100 per cent of all red cedar shingles produced in Canada.

British Columbia has certain advantages in climate and tree species, but also serious disadvantages—a principal one being that it is a long way from many major consuming markets. The accompanying sketch map, (Exhibit "E") actually prepared for another purpose, gives an indication of these geographic disadvantages.

Exhibit "E" is a rather small reproduction of the original sketch, but it shows very closely the British Columbia producing area and its relationship to its main markets. It also shows how other important producing areas are located much more advantageously, from the point of view of distance.

The late Honourable Gordon McG. Sloan in 1956 concluded his second monumental report in the royal commission of enquiry into the forest resources of British Columbia. The following remarks, selected from pages 411-413, and page 416, are pertinent to this discussion:

> The global look, sketchy as it must be for inclusion within the limits of a report of this size and nature, demonstrates, at least to my own satisfaction, the validity of my previous comment that the prosperity of our forest industry is in direct relation to the measure of our exports to the markets of the world . . .
>
> The production of lumber in this province is only between 4 and 5 per cent of world lumber production. It follows that we cannot control prices on world markets. On the other hand, we ought to be able to maintain this relative position in terms of supply. But to do so we must remain competitive in terms of price, and as price is beyond our control we must produce at a cost which permits us to sell profitably at world prices. Industry does have some control over the costs of production by, among other things, operating at the peak of efficiency, with close utilization and diversification of products, provided, however, that the other partners in the deal—government and labour—exercise an intelligent cooperation in maintaining the stability of our economy.
>
> This province is extremely sensitive to the impact of world conditions. The decline in our lumber sales in the United Kingdom, the United States, and Canada clearly demonstrates our vulnerability, to outside influence over which we have no control . . .
>
> The same conclusions apply to our plywood and shingle production.
>
> One fact is undoubtedly true: competitive sources of low-cost pulpsupply are rapidly becoming available to world buyers . . .
>
> What then is the summation of what I have been saying? It is simply this: Our forest policies as they relate to stumpage rates,

> taxation in its different forms on forest land and forest products, tenures and the assured supply of raw material at realistic cost levels, regeneration, and other related matters must all be guided by an informed and sympathetic understanding of the vulnerability of our forest industry, its reaction to and dependence upon foreign markets—many of which are even now slipping away from us —and its sheer inability, standing alone, to alter the ineluctable forces operating in the market-places of the world. It must be stressed that the only place open to us in which we can forge, sharpen, and improve our weapons for our forays into the tournaments of world trade is in our own domestic sphere of influence, in which government policy will of necessity play a major and decisive part. The pattern of crown ownership and virtual monopoly of our forest resources permits of no other rational conclusion.

Gentlemen, that is the end of the quotation from Mr. Sloan's report.

In summary then, it can be said:

(1) The production of forest products is, by a wide margin, Canada's largest industry.

(2) It is an export industry vital to the national welfare which must meet highly competitive conditions in price and quality on the world market.

(3) As a natural resource industry it is an industry in which government policies have a decisive role.

(4) It is an industry with a high employment potential, capable of substantial expansion.

When it is remembered that export of forest products makes up one-third of all Canada's exports, the importance of maintaining and expanding this export trade will be apparent.

Unlike many other major industries, it receives no special subsidies or allowances or support from either national or provincial governments. On the contrary, we will show that our industry is singled out for tax burdens higher than any other industry in Canada.

From the quotations from impartial persons cited previously and from the submissions which will be made later in this brief, it will become apparent that our industry is facing difficult problems, that developments in science and technology are tending to reduce the world's interest in Canada's great softwood forests, and that we are losing many important export markets.

I hope you will find our submissions worthy of your closest attention in the national interest and that you will agree with us on the need for serious study by government.

That, Mr. Chairman, is the end of the first section, which is essentially an introductory section for the purpose of trying to place the industry in perspective. As we go along we will support and enlarge upon certain statements.

The CHAIRMAN: Gentlemen, you may not have any questions to ask at this time, but in all probability you will have. I think it is quite important that we have either the minister or the deputy minister of the department with us while this brief is being presented and examined. There are going to be a lot of policy matters discussed here and a representative of the government should be on hand. Now, gentlemen, you may ask your questions.

Mr. AIKEN: There is just one matter that I do not find in this statement so far. My recollection of the export market is that pulp and paper is first, lumber products second and wheat is third. There was not any attempt here to divide pulp and paper from lumber products. In other words, of the whole production two forest products come first and second in the national economy, and wheat third.

Mr. BEAUPRÉ: That is a fair statement, and as we go on we will see a division between pulp and paper exports and other product exports; we will show the values for them.

Mr. FISHER: Arising out of your paragraph just below the middle of page 6 with regard to forest taxation: last year I made a request in this committee to the minister that a study be carried out by the federal government of the forest taxation problem in Canada, and asked that consideration be given to the problem of how government policy could be changed. Is that the sort of study you have in mind; is that the kind of thing you have in mind when you make this statement in this paragraph?

Mr. BEAUPRÉ: I think so, yes. As we go into the brief a little more, we will expand to some extent on forest taxation aspects as they affect our industry.

I think many people are aware of some of the anomalies that do exist. We recognize the problems in writing regarding some of these things, and we solicit the earnest attention of this committee to this problem and ask you, in our final recommendations, to ask the government to do what you apparently have been suggesting should be done, to consider this a problem not only for study, but for solution.

Mr. FISHER: Mr. Robertson, could you explain to us what has happened to that particular study?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Study has been undertaken since Mr. Fisher made his comments a year or so ago. It has not reached any point of conclusion as yet. The question has been discussed with the Department of Northern Affairs, with the Department of Finance and also with the Department of Trade and Commerce. I do not know that there is anything further I can say. The minister might feel free to say something further. But that is what has happened since the last meeting of this committee.

The CHAIRMAN: Are there any other questions, gentlemen? We will proceed, Mr. Beaupré.

Mr. BEAUPRÉ:

The Forest as a Resource

The forest resource is frequently looked upon as being in the same category as mineral or petroleum resources. There are similarities, but there are also basic differences. Mining and petroleum are recognized as high risk industries. The forest industry is also a high risk industry. Timber land investments are of usually long duration. Notwithstanding high costs of protecting them and increasing their growth, they suffer unpredictable losses from fire, insects and disease. For example, in British Columbia last year 2 million acres of forests were destroyed by fire. The damage to forest in New Brunswick by the spruce budworm, and the costs of attempting to control this epidemic is an example of the risk from insects.

The difference between the mineral and petroleum industries on the one hand, and the forest industry on the other, is also important. Minerals and petroleum, once taken from the ground are gone. They leave an empty hole.

In contrast, the forest is a renewable resource. Under modern sustained yield management it is a crop similar to wheat or apples or any other crop. The annual harvest is limited to annual growth potential. This permissible annual harvest, which can be maintained without eating into forest capital, is called the annual allowable cut.

Canada has huge unused forest areas which could be utilized to provide thousands of jobs without diminishing our forest resource. Government taxation policies encourage investment in the mineral and petroleum industries but, as we will demonstrate, fails to offer similar incentive to investment in the

forest industry. Considered in the broad national interest these differences in government policy present a puzzling anomaly. If it is in the national interest to encourage the production and export of mineral and petroleum resources which are irreplaceable, is it not even more desirable to encourage the use of the forest potential which is now wasting and which can be utilized without depletion of the forest resource?

The Gordon Commission on Canada's Economic Prospects, (1), estimated that if forecast market potentials were realized, the Canadian forest industries could increase their output by 120% above 1955 in terms of constant dollars. The commission estimated that at that time Canada would still be using only 57 per cent of its total forest potential. The report said, and we quote: (2)

> In an attempt to assess the available wood supply in Canada, "allowable cut" estimates were obtained from government sources. This information, adjusted so as to take into account the additional volume of wood resulting from expected improvements in forest management, indicated a potential available (annual) supply of 9.5 billion cubic feet in 1980. Of this some 7.3 billion cubic feet may exist on what are classified as accessible forest lands. Another 2.2 billion cubic feet, considered to be available in potentially accessible areas, represents an additional reserve for the future.
>
> As previously stated, the commercial requirements in 1980 (3) may be in the vicinity of 4.9 billion cubic feet. To this must be added expected annual epidemic losses from fire, insects and disease. The total drain is forecast as being in the order of 5.4 billion cubic feet 25 years from now. Were this to be the case, total depletion in Canada in 1980 would represent 74% of the productive capacity of the forests now considered as accessible, and only 57% of the total forest potential.

(1) The Outlook for the Canadian Forest Industries, Page IX

(2) Ibid, Page VIII

(3) Assuming markets grow by 120% of 1955 in constant dollars.

Canada has no monopoly of forest wealth. Exhibit F shows the major forest areas of the world. The back of this brief shows the world forest area as being 9.6 billion acres. It shows the soviet bloc with 22 per cent, North America with 19 per cent of which Canada has only 10 per cent—Latin America with 22 per cent, and other countries 37 per cent.

It should be noted that although Canada is shown as having 10% of the area it has only 7% of the volume due to the sparseness of the northerly forests. The foregoing refers to total wood volume. Canada's portion of the softwood volume is higher, being 10% of the total world volume.

In recent years more than half the wood reported removed from the world's forests was coniferous. The importance of coniferous forests as a source of fibre for pulp, textiles or chemicals, however, is declining due to technological advances. Within the last few years, for example, it has become possible to make pulp from hardwoods of the mid latitudes. This has greatly expanded the forest potential of these regions, especially of the Eastern United States. Great quantities of formerly uncommercial species or grades of hardwoods are now usable for pulping.

It must be expected that similar technological progress will ultimately make possible the use of enormous tropical hardwood forests. A number of countries have embarked upon planting of coniferous trees, suitable not only for pulping but lumber production. Growth rates of these trees are frequently many times Canadian growth rates.

Canada already suffers many disadvantages in costs and distances from markets. It is presently harvesting only its most accessible forests. Raw

material costs are mounting rapidly as wood must be brought further and further to existing mills. It is our belief that Canada is already losing out to countries where more enlightened and aggressive government policies have been adopted.

In the matter of forest research and protection, last July 15th a B. C. forester, Mr. Ian Mahood, presented to this Committee a case for increased activity by the Federal Government in British Columbia. His major recommendations, which we endorse, we would like to repeat, with your permission. Mr. Mahood said:

> The federal forest service, with its long experience and competent staff, should provide leadership in analysing the research needs of British Columbia. A committee of experienced foresters representing the federal government, the provincial government, industry and the University of British Columbia, under the chairmanship of a qualified layman, should make a comprehensive study of programs now in existence.
>
> A working plan should be developed. It should cover the items of greatest urgency and be applicable for the next ten years.
>
> The federal government should be prepared to increase its participation. This participation should be adequate to the tremendous need; relative to its interest in the substantial revenue it draws from British Columbia's forests; and, at the very least, commensurate with the expenditure it undertakes in other Canadian provinces.

While recognizing the important work done by the Canadian Government on research in the following areas:

Forest Products
Insect Infestation (as it affects Forests)
Plant disease (as it affects Forests)

It is submitted that there are other equally important research fields requiring study which Mahood listed as:

(a) Tree Seed production and collection.
(b) Development of strains of trees best suited to geographic climate and soil condition.
(c) Suitability of species to site.
(d) Plant ecology.
(e) Fire protection.

The research conducted by the Federal Government in these fields in other parts of Canada far exceeds that provided for British Columbia, yet in B. C. the population's dependence on the forest for its livelihood exceeds the dependence of Canada as a whole on the forest, by more than three to one.

Research into fire protection would include study of danger rating; the influence of weather; study of firefighting equipment, and the use of it.

Turning from research to protection, the accompanying tables, which are an extension of statistics included in the Sloan report of 1956, show, in table 62—which is shown as exhibit G—that industry ("other agencies") spent $1,846,971 on forest fire protection and suppression, in the year ending March 1958. I do not know if you would like to turn to that table at this stage. In this period the B. C. Forest Service spent $2,858,207. British Columbia's total expenditure of $4,705,175 compares with the Dominion Government's grant of $128,000. The terms of the Federal contribution require that it be confined to capital expenditure for protection,—lookouts, radio equipment, etc. Use of the money is denied to actual fire fighting.

Surely this disproportionate contribution by Ottawa—less than 3%—should lead to a re-examination and fairer sharing of fire-fighting costs.

Dominion Government assistance towards the building of access roads into timberland is valuable to B.C., but cannot be described as parmanent policy, rather it is emergent and temporary, being visualized as an aid to

winter employment. Access roads into timber lands are a necessity in harvesting the crop, and are equally important before and after logging, for fire protection of the area.

Here, Mr. Chairman, we come to the end of what might be considered a section of our submission.

Mr. McQUILLAN: I have one or two questions, Mr. Chairman. On the subject of fire control, I understand there has been a joint group of the industry—I forget what they call it; the forest protection council, or something like that—that has banded together with the forest service to try and improve the method of fire protection.

One of the things with which they have been most concerned is the question of weather reports during the fire season. I have a copy of a letter here written recently by the British Columbia Loggers Association to the Minister of Transport. I know this question of meteorologists comes under his jurisdiction. They are pressing for the appointment of a top meteorologist so that weather forecasts can be intelligently given to cover the forest areas of British Columbia.

Is there anyone who can tell me whether you expect to have any assistance in this regard? I am referring to the request for this appointment. Perhaps Mr. Douglas or Mr. Burke could tell me.

Mr. BEAUPRÉ: You say that the letter was from the British Columbia Loggers Association. Perhaps Mr. Burke may have heard of some reply to that.

Mr. J. N. BURKE (*Sectretary-Manager, British Columbia Loggers' Association*): The letter was written on May 1. I had not had a reply by the time I left Vancouver. It goes back a little further than that, because last year this forest protection group, which consists of fire wardens of companies and representatives of the British Columbia forest service, made some recommendations regarding the improvement of weather forecasting to help in the protection from fire of British Columbia forests.

As far as seemed possible, the recommendations were followed, at least last year. We had a much better forest forecast. We had a special forecast like the fishermen get. In our letter this year we asked that a man be appointed to do nothing but that work in the weather bureau at Vancouver. They have a man there for air service forecasts; that is, for aeroplanes. That was in our letter to the minister, to which I had not had a reply when I left Vancouver.

But I would like to assure this committee that it is most important that the man who is trying to keep fire order for us knows every day, to the best of anybody's ability, what the weather is going to be. We are asking that the government do everything it can. We have had some assurance from the minister that they will do everything they can to help us.

Mr. HERRIDGE: Mr. Chairman, may I ask Mr. Burke a question?

The CHAIRMAN: Yes.

Mr. HERRIDGE: Have representations been made for the same service in the interior?

Mr. BURKE: Yes.

Mr. HERRIDGE: There are a number of places in the interior that cannot hear the Vancouver station or the C.B.C. and must depend on local information.

Mr. BURKE: Mr. Chairman and Mr. Herridge, the representations made to the government, while they are made by people mostly residing and working on the coast include the interior, and I have the line-up which the government has issued to their various radio stations throughout British Columbia. The

forecast is made separately for the lower coast, northern coast and for half a dozen different areas in the interior, so that each one gets its own forecast. That is the way it lines up.

We get one at six o'clock in the morning—and, incidentally, I might add about the lower part of the British Columbia, they have provisions to pick up Washington state issues and forecasts, which is a fire weather forecast such as we are talking about. It is a five-day forecast, concerning what the prospects are.

They are now actually quoting that Washington station forecast on the south end of British Columbia whenever and as often as they think it might possibly apply to British Columbia. However, as yet we have not a man in British Columbia to make a similar forecast. Does that answer your question?

Mr. HERRIDGE: Yes.

Mr. KINDT: Is it thought that would be public information?

Mr. BURKE: It is broadcast over the radio stations at 6:00 to 6:30 in the morning and, again, in the afternoon from 5:00 to 6:00. Forecasts are broadcast in the widest terms, on radio, as to what the weather is going to be.

Mr. FISHER: Mr. Chairman, I would like to ask Mr. Harrison for comments with regard to the paragraph on page 10 which reads as follows:

> The research conducted by the federal government in these fields in other parts of Canada far exceed that provided for British Columbia.

Do you recognize the validity of this statement?

Mr. HARRISON (*Director, Forestry Branch*): For many years we have operated a forests products research laboratory in Vancouver. But in forest research our understanding was, up to about 1955, that the British Columbia forest service preferred to do its own forest research itself.

At that time a request was made that we should establish what we call a district office in British Columbia and undertake certain particular lines of research. The general idea is that we should concentrate on those lines which can be properly referred to as fundamental research and long-term work, whereas the forestry people in British Columbia will continue to concentrate on the problems arising directly from forest management.

The immediate problem we had to tackle was related to tree physiology, specifically seed production. That is one of the subjects mentioned here. It extends also into part of the second item, the development of better strains of trees. A start has been made on this project. We sent out a physiologist last year, and we are getting another one this year.

Plans have been made in the department with a view to establishing in British Columbia an office on the same scale as those maintained in other important forest regions.

On the particular question of fire protection, mentioned in the next paragraph, in 1955 a request was made for us to send parties into the field to try to work out what we call danger rating tables which would be suitable for British Columbia, and similar to those which have been used with great success in other parts of Canada. Practically all provinces except British Columbia use this particular system now.

The object of the system is to enable the forest protection people, industry and others, to estimate what the relative danger of fire will be in the next 24 hours.

Meteorological data are taken and we have a meteorologist seconded by the Department of Transport to our forest fire research section, who advises on the best use of these data.

A request was made by British Columbia for the establishment of two field parties, one working on Vancouver island and the other in the interior. They are now in their third year of operation, and it is hoped that it will be possible at the end of this third year to have enough data to develop these danger rating tables for British Columbia.

Of course, when the tables are developed they will have to be tested very exhaustively, and we hope that this will be done by the British Columbia forest service and that the forest industry will help in the test.

There will be very difficult problems, especially, perhaps, in the interior, in interpreting tables of this kind. In various areas only short distances apart, differences in fire danger conditions will arise on account of the very rough topography, whereas, in the rest of Canada, relief is not so bold.

This question of elevation and its effects of such factors as dew formation, is a very hard one to tackle. At the present time I can only report that the program is progressing well, and we are hopeful that something very useful will come out of it.

Mr. FISHER: It is just in the beginning stages?

Mr. HARRISON: This particular end of the program is pretty well advanced. The tree physiological work has barely started.

Mr. FISHER: Have you done much site classification work yet in British Columbia?

Mr. HARRISON: We have sent out on two occasions site classification experts to consult with provincial officers, and we are providing a man again for two months this summer.

In a very short time we hope to have a full-time specialist working on that problem in British Columbia. It is recognized as being extremely important.

Mr. FISHER: Could I ask the gentleman presenting the brief if he could give a short summary of the role that the British Columbia forest service fills in the field? Perhaps this is a most delicate and difficult question.

Mr. NIELSEN: Could I ask one question on research before you ask that?

Mr. FISHER: Yes.

Mr. NIELSEN: You made a statement that the British Columbia forestry industry preferred to do its own research.

Mr. HARRISON: The forest service.

Mr. NIELSEN: Is this still the situation?

Mr. HARRISON: They prefer to do their own research on experimental sylviculture. And with respect to the various *ad hoc* problems that arise in connection with administration of the forests, but they want us to take on a lot of the long-term work.

Mr. NIELSEN: Are these the terms of reference with the British Columbia forest service?

Mr. HARRISON: Yes.

Mr. NIELSEN: A cooperative program?

Mr. HARRISON: Yes, that has been discussed very fully.

Mr. NIELSEN: Is that covered elsewhere in your brief, this cooperation between the federal and provincial bodies?

Mr. BEAUPRÉ: This is the only reference we make here to research work.

Mr. NIELSEN: I wonder when you answer Mr. Fisher's question, if you could include that?

Mr. BEAUPRÉ: I would like to ask Mr. Douglas, as vice president in charge of forest matters to deal with that. He is best qualified to answer that question.

The CHAIRMAN: Mr. Douglas, would you come to the front?

Mr. MCQUILLAN: Mr. Chairman, I would like to say a few words before Mr. Douglas speaks to the committee. He is one of the foremost foresters, and has been recognized as such in British Columbia for a long time. He is now in private practice, so he is speaking as an authority on this particular subject of forestry.

The CHAIRMAN: Before Mr. Douglas speaks, I wonder Mr. Harrison, if I may ask you a question?

Mr. HARRISON: Yes.

The CHAIRMAN: Has the federal participation in research and in other avenues been restricted or restrained in British Columbia as compared to other areas in Canada?

Mr. HARRISON: Not now. There was no forest research up to 1955, but a fully cooperative attitude exists now.

I should add that the Forest Biology Division of the Department of Agriculture, which is concerned with the study of forest entomology and pathology, has maintained an establishment in British Columbia for a considerable number of years, and has provided the same kind of service in that province as in others, in connection with forest insects and diseases.

Mr. MCQUILLAN: I would like to ask just one question, Mr. Chairman. You mentioned something about a field station in British Columbia, a fully manned station in the dominion forest service.

Mr. HARRISON: We have a forest products laboratory. In the other regions or provinces of Canada, in some cases groups of provinces and in other cases single provinces, we maintain district offices. We want to establish a full-sized forest office with a group of men fully skilled in research in B.C.

Mr. MCQUILLAN: How long do you expect it will be before you are able to complete that establishment?

Mr. HARRISON: It depends very considerably on the extent to which the government finds it possible to provide the men. I hope that we will be fully established within five years.

Mr. MCQUILLAN: Five years?

Mr. HARRISON: Yes, but it is going to be difficult.

Mr. MCQUILLAN: The forests will all be burned up within five years.

Mr. HARRISON: The forest protection work is going full speed. I might say that it is extremely difficult to get really competent men. You have to take them where and when you can find them.

Mr. NIELSEN: Why is it difficult to get them?

Mr. HARRISON: Because there is not really a great number of fully competent research men. We require different kinds of specialists and if we want, say, an expert in ecology we have to find one, with advanced training in that subject and who is able to go, in this case, to British Columbia or wherever we want him.

Mr. NIELSEN: Do you find enough of these trained personnel are graduating from our universities?

Mr. HARRISON: They have met our needs up to now. We hope that it will be possible to create an atmosphere in which bright students have confidence there will be jobs in research to compete for, and that this will go a long way to insure that enough people will be ready to take advanced training.

Mr. NIELSEN: Has the federal government made that atmosphere?

Mr. HARRISON: I think, probably, the great interest being shown in the subject this morning is indicative of that.

Mr. NIELSEN: What about scholarships and grants and that type of thing?

Mr. HARRISON: There are quite a number of scholarships available for post-graduate training in Canadian and American universities. A number of our young men have taken advantage of them.

Mr. KINDT: How about relative salaries for attracting young students to enter this field?

Mr. HARRISON: This situation has been much better in the last couple of years than it was previously. However, there is always a very big problem. It is very difficult when you have your eye on one really first-class man you are hoping to get, and then somebody with a lot more money comes along with an eye on him too. We have had a very striking example of that just this spring.

There is a limit beyond which the government cannot compete. As I said, the situation has been better during the last two years.

Mr. NIELSEN: That is, the situation has been more sound with regard to the salary paid by government to a technician than one in industry? That situation has been better? What situation are you talking about?

Mr. HARRISON: The salary situation.

Mr. ROBERTSON: I think Mr. Harrison means the discrepancy between government salaries and industry salaries has been less in the last couple of years than previously. He does not mean that the government salaries are better, but the discrepancy is less.

Mr. NIELSEN: Government salaries are not any better?

Mr. ROBERTSON: Oh no.

Mr. HARRISON: Than industry.

Mr. NIELSEN: They are not better than they are in industry?

Mr. HARRISON: No, and that is particularly true as you get further along in accumulated experience. That is to say, men entering into government service come in at very competitive rates, compared to what is usually paid in industry, when they leave university with a bachelor's degree.

But when they have accumulated 15 years' service this discrepancy between what a first-class man is getting in industry and in government is rather painful to the government man. Progressively, when they get 20 years' service it is even worse.

Mr. NIELSEN: What striking example is this to which you have referred? Did you lose a man to industry?

Mr. HARRISON: Yes.

Mr. NIELSEN: Tell us about that.

Mr. PAYNE: Could we not have a statement from the man being called?

The CHAIRMAN: I think this is a very important subject.

Mr. NIELSEN: I think it is too, and I think we should pursue it.

The CHAIRMAN: I think we should clear up this research subject or problem before we proceed. Mr. Harrison is giving us, I think, very pertinent evidence. It is something which I believe we should hear.

Mr. HARRISON: I hope you do not expect me to go into too much detail on this because individuals are involved. We were able to find a man with post-graduate training at the Ph.D. level who fitted exactly the need at one of our district offices. He entered the competition and came out head and shoulders above everybody else. He was offered the job. I have not had confirmation of this, but it is coming. He indicated he was not going to accept the position because he was being offered 80 per cent more by a company. That is a very extreme example.

The CHAIRMAN: Mr. Harrison, if I may interrupt, I was rather disturbed about the answer you gave to the important question asked by Mr. Fisher and upon which you later elaborated. I am wondering if you would explain whether or not there is a continuing lack of joint participation between the two governments, or if that situation has been improved in respect of the provincial government concerning federal participation.

Mr. HARRISON: In British Columbia?

The CHAIRMAN: Yes.

Mr. HARRISON: The relationship now is excellent, but our contribution at the moment is very tiny. We are just beginning. However, as far as attitude is concerned it is very good indeed from our point of view.

Mr. NIELSEN: Mr. Harrison, could you prepare for the committee for inclusion in its minutes a table showing what the percentage by the government is of the budget of each provincial forest laboratory in respect of its maintenance? In other words, in Ontario the federal government may be contributing 40 per cent to the maintenance of the research station in Ontario—40 per cent of the total budget. What is paid in British Columbia and likewise in the other provinces? Could you prepare for us a table showing that?

Mr. HARRISON: I am afraid it would be difficult. Some of the provinces have their own research divisions and some have not. In those provinces which have no forest research staffs, what is done is done by us. Where there is cooperation—and Ontario is a good example—the two services are not blended together in one unit. They work quite independently, but the cooperation is arranged in consultative committees or some such means at the top.

In the provinces we do not have forest research laboratories similar to the forest products research laboratories. The vast majority of forest research work is done in the field.

Mr. NIELSEN: Then in the absence of that could we obtain a table showing the dollar amount of federal contribution to each province for the purpose of pursuing research work?

Mr. HARRISON: We can, by regions. In the Maritimes it would have to be for the group of provinces because we just have the one office. For Newfoundland, Quebec and Ontario we could give it to you individually. Manitoba and Saskatchewan are together, and Alberta and British Columbia are separate.

Mr. NIELSEN: Mr. Chairman, could we have that table?

The CHAIRMAN: Is it the wish of the committee?

Agreed to.

Mr. FLEMING (*Okanagan-Revelstoke*): This morning we have touched on a subject which dominated the discussions in respect of the estimates of the Department of Mines and Technical Surveys, namely the fact that a good many men whom the government would like to have are, shall we say, stolen away from the government by industry. This is making the government's position more difficult. Perhaps it might be a good idea this morning, when we have so many members of the industry here, to point out to them the difficulty which the government service has in competition with private industry in respect of these men when they are looking for first-rate trained services in their area. Industry must remember that the job sometimes is made more difficult by the fact that they are offering much higher wages. We cannot help that, but I think we are trying to understand the problems of the lumber industry and that probably they should understand some of the difficulties the government is having.

The CHAIRMAN: Is it not a fact that it could be helped by improving the competitive position through government action.

Mr. FLEMING (*Okanagan-Revelstoke*): Yes.

The CHAIRMAN: That is what this committee has been recommending.

Mr. PAYNE: If it is your wish to explore the research field completely before we pass on, there is a suggestion in which I am interested; that is, the division of the roles played by the two departments, the Department of Northern Affairs and National Resources and the Department of Agriculture. Is it wise that the two departments have to be involved in this matter of research?

Mr. NIELSEN: Should not there be a department of forestation?

Mr. PAYNE: Quite.

The CHAIRMAN: I will ask Mr. Robertson, in the absence of the minister, to answer this question. This is a question regarding government policy.

Mr. ROBERTSON: First, Mr. Chairman, the division between the two departments is that the Department of Agriculture handles forest entomology which deals with the insect infestation and insect problems in the forest, and forest pathology which is concerned with forest disease. The other aspects of the forestry work—forest research in silviculture, management, ecology, and so forth are handled through the forestry branch of the Department of Northern Affairs. The forest products research is handled in the Department of Northern Affairs. Forest management, in so far as it is a federal function, is handled through the Department of Northern Affairs. Relations with the provinces in connection with various types of agreements are under the Department of Northern Affairs. Forest entomology is in the Forest Biology Division of the Department of Agriculture. The origin of this arrangement is that many of the aspects of forest entomology, particularly as they affect plants in the forest, are similar to entomology and pathology as they affect plants in the field. That is the origin of the division.

There have been discussions, and perhaps even investigations, on occasion, to ascertain whether or not it would be desirable to bring about a union of all the functions into one department. There have been many arguments each way on this question. At the present time, as you can see, the forestry function is divided. If you move forest entomology and forest pathology over to Northern Affairs, in a sense you would have the entomological and pathological research function divided between Agriculture and Northern Affairs; you put your dividing line there.

Another possibility, of course, is to move all forestry over to Agriculture. Then you would have a division of your resource function, which is in Northern Affairs, and you would be taking jurisdiction out of it which would inhibit the operation of the resource function and the planning function there. Therefore, there is no easy, simple, obvious answer. This is why at the end of two investigations into the problem there is still no clear answer as to which is desirable at the moment.

Mr. PAYNE: Would it not be a good thing to hear spokemen from the industry of at least one area of Canada on this matter inasmuch as the industry represents a tremendous picture in Canada's economic operation? It seems to me industry should be given an opportunity to express a view on this, because like so many other things, in assigning such matters to agriculture there is always an opportunity in my mind, within the field of agricultural departments that many things do not become complete.

Mr. KINDT: Since we have here representatives of industry, and since this same problem came up last year when we were without the representatives

from industry, this would seem to be a good opportunity for us to ask for their views on this particular subject of the coordination and integration of forestry matters. I would like whoever is the spokesman to give us the views of the industry on the subject.

The CHAIRMAN: Do you wish to have any further discussion on research? This question is broad and very important. Would you mind if, first of all, anyone who has further questions on research has an opportunity to continue.

Mr. FISHER: Is not the United States parallel almost similar, except that the forest services are not within the Department of Agriculture?

Mr. ROBERTSON: There also, Mr. Fisher, over the last year or two a good deal of examination has been undertaken into the organization.

Mr. FISHER: I think the idea is to make the forestry service independent, is it not?

Mr. ROBERTSON: Or alternatively, I believe, of giving it to Interior.

Mr. HARRISON: That question has been discussed a great many times—whether forestry in the United States should stay where it is in Agriculture or go to Interior. The question which has been raised concerning the division between forest entomological and pathological services and the forest service proper is that such a division existed in the United States, but both of them were in the Department of Agriculture. Speaking from memory, I think it was four years ago—it may have been five—that forest entomology and pathology were merged into the forest service. Of course, the forest service in the United States is an enormous organization. They have to look after all the national forests and everything they do is on a very large scale.

Mr. FISHER: The logic of their move was because of the scale. Is there not also a logic here that if you expand your operations there would be the same impetus and it would be logical to have it all within the framework of the forestry operation?

Mr. ROBERTSON: That is a true statement. That is why I mentioned it had not been determined at the present time. As you say, if the forestry service grows and the situation alters, in effect you have a situation similar to that in the United States because of the different scale.

The CHAIRMAN: Mr. Beaupré, on page 10 of your brief you refer to research. You point out that some independent work is being done and that others require study. I would like to ask you whether or not there is a disturbing lack of scientists or technicians in the forestry field in British Columbia.

Mr. BEAUPRÉ: Mr. Chairman, a lot of questions have been asked in respect of research and I think Mr. Douglas could give much more specific answers. We are, however, obviously very much aware of the problem of skilled personnel. I think it is terribly important. As I mentioned, I believe it is true, particularly in respect of senior personnel, that salaries in industry are probably going ahead of government salaries. There are always two ways to sort out the differential; one could be to have industry withhold that money and the other, of course, would be for the government to come up. Of course, would be for the government to come up. Of course, withholding it sounds very nice if you want to save money, or if you think you will save money. Let us suggest, however, that Canada is in world business, not just in the export of its commodities. We are unfortunately also in the business of the export of our personnel. Good personnel are hard to come by. I think the rates of pay in our industry do something to help out in that field. We are active and anxious supporters of our universities in many ways, through scholarships. We provide opportunities in the summer for students to continue and become better graduates, and we welcome the forest service taking up as many of these people as they can.

We would suggest, too, that when you consider what this country gets from its forest resources in the way of revenue, and when you consider—as Dr. Harrison said—how much good one man can do for an industry of this importance, this is not the time to try and save a couple of thousand dollars on an important government official whose work can do so much for the economy of this country. Indeed, the alternative could be rather disastrous for our economy, I suggest, if somebody does not keep these people in Canada and if there are not any incentives to attract people to these schools in opposition to other schools: because people are not born deciding to be foresters; they make a conscious decision to come into this field.

I consider there has to be an incentive to keep these people here and interest them in graduate work; and they must be assured that they are not going to be discriminated against because of their specialized efforts, because they are working for one of Canada's most important—if not the most important—industries.

The CHAIRMAN: I am glad you touched on the scholarship aspect of this matter. Because of the importance to your industry, con you tell this committee what scholarships the forestry industry in British Columbia is making available to students?

Hon. J. V. CLYNE (*Chairman of the Board, MacMillan and Bloedel Limited*): If I can speak to that, Mr. Chairman; I happen to be a member of the senate of the University of British Columbia. I could not give you any detail in dollars and cents, the number of scholarships, or the amount. I would be very glad to furnish the committee with that information as soon as I get back to Vancouver. I assure you that the amounts are substantial.

The CHAIRMAN: What do you mean by "substantial"?

Mr. CLYNE: For instance, just recently the sum of $50,000 was devoted to a particular form of forest research which will take a couple of men maybe six months to investigate.

The CHAIRMAN: Is that a contribution by the forest industry in British Columbia?

Mr. CLYNE: Not by the forest industry as a whole, but by an individual very closely connected with one of the companies.

The CHAIRMAN: Would the committee think it advisable to have on the record—it could be placed on the record later—information concerning scholarships by the British Columbia lumber forestry industries?

Agreed to.

Mr. FISHER: It should not be hard for Dr. Harrison to get this information for us; there are not that many forestry schools in Canada that you could not get the picture very quickly. I think it could be obtained just from university calendars, and I imagine you have the information in your library, have you not, Dr. Harrison?

Mr. HARRISON: Yes.

Mr. FISHER: I think it could be tabled and would give a fairly accurate picture.

The CHAIRMAN: Perhaps we could have it before this meeting concludes.

Mr. PAYNE: What is the British Columbia lumber industry's view regarding centralizing methods of scientific approach, at the federal level, undertaken by the Department of Agriculture and the Department of Northern Affairs? Is there an advantage in centralizing it, in your view? Could we have any views you have on this matter?

Mr. ROSS DOUGLAS (*Vice-President, Forestry, Alaska Pine and Cellulose Limited*): I am unfamiliar with the federal set-up in this regard.

The CHAIRMAN: Would you be more explicit, Mr. Payne? You were wondering if there was any difficulty, or any lack of cooperation?

Mr. PAYNE: The general picture. I have no specific views. I would like to hear industry's views generally on this matter.

The CHAIRMAN: As it affects their industry?

Mr. FISHER: Could not the question be put this way, Mr. Murphy? Have you any views on the fact that the forest biology part of research in Canada is under the Department of Agriculture rather than with, or linked with the forestry branch in this particular department?

Mr. DOUGLAS: I would say that it has not mattered very much to us, because we have not had forestry research of any other kind. We have dealt only with the biological end of it.

I think we do believe, though, in our own province, that research should be pulled together under one direction. Whether it should be so in the dominion, I could not say.

Mr. PAYNE: You can see marked advantages in centralizing this effort?

Mr. DOUGLAS: In forest research?

Mr. PAYNE: Yes.

Mr. DOUGLAS: Yes.

Mr. PAYNE: You can see no particular disadvantages relevant to the scientific liaisons that would then be necessitated between agriculture and forestry?

Mr. DOUGLAS: I am speaking provincially, but I do not see difficulties there. I am sorry; I do not know the dominion problem.

Mr. PAYNE: I do not think we are searching for a statement on anything broader than that which encompasses your specific interest. You can see marked advantages in centralization?

Mr. DOUGLAS: Yes. And we suggest in our brief that forest research in British Columbia should be tied together. That is one of the suggestions we have made, and we propose that possibly the federal government could take the lead in tying it together.

Mr. PAYNE: That conforms with the views expressed by Mr. Mahood on page 9?

Mr. DOUGLAS: Yes, we endorse that.

Mr. FISHER: You remember my original question, Mr. Douglas, with regard to the role of the British Columbia forest service in these particular fields, which was touched on by Mr. Mahood in his brief?

We have a "no man's land" here between the two services that I think most of us would like to see closed in. No one wants you to make a critique of the forest service, in terms of what it has been doing; but what are the relationships between the workings of the two services, and what are the blind spots that have appeared?

The CHAIRMAN: When you say "between the two services", you are referring to the two governments?

Mr. FISHER: Yes, the provincial and the federal governments forest services. In essence, you are coming in here and telling us that the federal government should be doing more in this particular field; they have a responsibility to the British Columbia forest service. How do we get to the root of the problem, in your view?

Mr. DOUGLAS: We have not quite said the federal government should be doing more. We have suggested that the federal government should take the lead in analyzing the research needs in British Columbia, helping to set up a program in British Columbia and then participating more than they have in the past in the fields that the committee decides are best.

Mr. FISHER: Is the logic behind your proposal the same as has come from the Ontario forest industries association, which is to the effect that because the federal government takes so much from forest industry, in terms of taxation, it has a responsibility, either to give money directly back to the forest service or carry out research on its own?

Mr. DOUGLAS: Yes, that is the logic of it, I believe.

Mr. PAYNE: And, further, do you not suggest that this federal spending should be in relationship to the importance of the industry in British Columbia, which today—your brief indicates—is not in relationship to spending elsewhere in Canada in forestry matters?

Mr. DOUGLAS: Yes, in broad terms we suggest that. But I think the matter of research is in one which the amount to be spent, the subjects to be studied, the method of going about it, is best worked out between the dominion service, the provincial forest service, the University of British Columbia and the industry of British Columbia, all of whom do some research in their own way. We are proposing that they should be tied together and a more cohesive program developed.

Mr. MCQUILLAN: Tied together under the leadership of the federal government? Mr. Mahood says, "The federal forest service, with its long experience and competent staff, should provide leadership in analyzing the research needs of British Columbia".

Mr. DOUGLAS: Leadership in analyzing the needs. As to how the actual administration of it would follow, I have not given much thought.

Mr. PAYNE: But you concur in Mr. Mahood's remarks?

Mr. DOUGLAS: Yes, we do.

Mr. HERRIDGE: Mr. Chairman, may I ask a question of Mr. Douglas? You are not suggesting for a moment that there is a "no man's land", a lack of cooperation between the provincial and federal services, because I know in my own district the provincial forest service cooperates fully with the federal forest service with regard to forest industries, and with the science service of the Department of Agriculture.

The CHAIRMAN: I think that has been answered by Dr. Harrison. Of course, we could have it repeated. He said there is now—and he emphasized "now"—quite satisfactory cooperation and liaison. But you can also answer the question.

Mr. DOUGLAS: Yes, we have no criticism of that whatsoever.

The CHAIRMAN: How long has that continued: how long has that situation been in existence?

Mr. DOUGLAS: The cooperation between provincial and federal services?

The CHAIRMAN: Yes.

Mr. DOUGLAS: Dr. Harrison can tell you better than I.

The CHAIRMAN: You will accept his answer, then?

Mr. DOUGLAS: Yes.

Mr. STEARNS: Mr. Chairman, I would ask Mr. Douglas one question, which may or may not tie into this whole discussion. How does industry in British Columbia feel about the adoption of a continuing depletion charge in order to reimburse the operators for moneys spent on fire protection, scholarships, research and loss by fire?

As I understand it, the federal government now allows depletion up to the amount—am I getting ahead of where I should be, Mr. Chairman? I will bring this up later, if I am out of order.

The CHAIRMAN: There will be an opportunity later, Mr. Stearns.

Mr. STEARNS: Then I will wait. I am very much interested in Mr. Douglas' views on this, when we get to it.

The CHAIRMAN: Fine.

Mr. PAYNE: If we have exhausted this matter, Mr. Chairman, I have a question I wish to ask.

The CHAIRMAN: We have not quite exhaused it, because I have a question to ask. Mr. Douglas, who, in your representation here, can express an opinion regarding the federal government policy on the amount spent on research allowable for exemption?

Mr. DOUGLAS: Mr. Chambers.

The CHAIRMAN: The question, Mr. Chambers, was concerning the federal government allowance for money spent by industry on research and allowing, by the present policy—the continuing policy—exemption from income tax. Of course, we all know that probably no amount spent has been refused for exemption; but will you express your opinion relative to the amount of the allowable exemption for income tax?

Mr. Charles CHAMBERS (*Comptroller, MacMillan and Bloedel Limited*): As you said, Mr. Chairman, there have been no instances of disallowance of any expenditure on forest research, other than those that have been of a capital nature, and they would be allowed in the form of capital cost allowances. That is to say, if it was necessary, in the course of research, to build an access road, say, of some kind, the government takes the view that that access road is of a capital nature and capital cost allowance should be allowed in the usual manner. In other words, it does not single out capital expenditure on forest research of a general nature for any singular treatment.

As to the amount, having an allowance of the amount as an expense, anything further that the government did would be in the nature of a special grant, and I wonder if we should touch on that at this moment or wait for "taxation and incentives" to do that. There is a section on "taxation and incentives".

The CHAIRMAN: That is quite all right. Mr. Beaupré, have you any information here for the committee on the amount spent on research by the forestry industry in British Columbia?

Mr. BEAUPRÉ: I am sorry, sir; we do not have that kind of statement here in our brief, and I do not have those figures.

The CHAIRMAN: Could the figures be made available?

Mr. BEAUPRÉ: This would be the amount of money that each company spends?

The CHAIRMAN: The total amount spent by the forest industry in British Columbia on research, including scholarships and that sort of thing.

Mr. BEAUPRÉ: I think we can get that, sir.

The CHAIRMAN: The information will be made available later, gentlemen. I think that is important.

Would you now like to hear Mr. Douglas? Have you anything more to say Mr. Douglas?

Mr. DOUGLAS: I would like to say this, that we are speaking here as the forest industry, and I do not want our remarks interpreted as criticism of the British Columbia forest service because, in the field of work which they do, they do an excellent job. However, their research in the main has been in the applied field—yield studies, thinning studies, and things of that nature.

The reason I think we are making this suggestion here is that in the last decade British Columbia has made quite a substantial step in changing over to sustained yield form of management; and, as a result, there are so many

things that we do not know and that we need to know that we think the research field has to be stimulated and speeded up.

That situation was also met by the late Hon. Mr. Sloan in his commission, and we are endorsing that.

Mr. STEARNS: Mr. Chairman, may I ask Mr. Douglas a question?

The CHAIRMAN: Yes, Mr. Stearns.

Mr. STEARNS: What percentage of your industry is on sustained yield in British Columbia at the present time?

Mr. DOUGLAS: I cannot give you the exact figure, but I would say practically all the major integrated companies, which comprise about 50 per cent of the industry, and some of the smaller ones in addition. In addition to that, the government is managing or is starting to manage its own lands on the sustained yield principle.

The CHAIRMAN: Mr. Douglas, before you finish, turning to page 10:

> While recognizing the important work done by the Canadian government on research in the following areas...

And you mention three—

> ...forest products, insect infestation; plant disease...

Am I correct in saying that the federal government came into the picture in cooperating in these particular fields at the request of the provincial government?

Mr. DOUGLAS: I could not say, sir.

The CHAIRMAN: Can anybody here answer that?

Mr. ROBERTSON: Mr. Harrison.

The CHAIRMAN: Dr. Harrison, did you hear my question?

Mr. HARRISON: I am afraid not.

The CHAIRMAN: I was referring to page 10.

> While recognizing the important work done by the Canadian government on research in the following areas: forest products; insect infestation; plant disease.

Those three areas are separated from others. Is that because you were asked to step into those fields by the provincial government?

Mr. HARRISON: Yes.

The CHAIRMAN: Was it only within the last couple of years?

Mr. HARRISON: These are of very long standing.

The CHAIRMAN: Were these other areas you referred to later, within the last couple of years, requested by the provincial government?

Mr. HARRISON: These items (a) to (e)?

The CHAIRMAN: Yes, was your cooperation requested only within this last couple of years?

Mr. HARRISON: Yes, substantially that is correct.

Mr. PAYNE: Mr. Chairman, these items (a) to (e) were suggested by Mr. Mahood in his testimony. I would like to ask what has been done in regard to these recommendations. Has anything been done? I am referring to these items (a) to (e), tree seed production and collection, development of strains, and so on.

The CHAIRMAN: I think Mr. Harrison will answer that, Mr. Payne.

Mr. HARRISON: Taking the items in order, it is a little difficult to tie the program we have started out with exactly to these items because they are somewhat different. However, last year we sent out a tree physiologist to start things, and he has a technical assistant. There will be another physiologist this year.

Mr. PAYNE: Do you mean the Department of Agriculture?

Mr. HARRISON: No, our department, the Forestry Branch. They are concentrating on a study of the flowering processes, in other words, that end of seed production in British Columbia, and they are comparing it with similar experiments being made at Petawawa.

On one or two occasions, on site classification, we have sent consultants in, but that is all that has been done so far. We are planning to have a full-time man, or men, resident out in British Columbia.

Mr. PAYNE: You have not undertaken studies on the other points?

Mr. HARRISON: Except fire protection. I have outlined the two years' progress that has been made, and this will be the third year.

The cooperation of the British Columbia Forest Service in this regard has been a great deal more than we even hoped for; and we hoped for a lot. They are very good indeed, and they have given us every support and all the help possible.

The CHAIRMAN: You would have been into these fields before if you had been asked, I assume?

Mr. HARRISON: Yes, in exactly the same way as we are in the other regions throughout Canada.

The CHAIRMAN: Mr. Fisher, you had a question to ask?

Mr. FISHER: Yes, Mr. Chairman. Mr. Douglas made a statement that most of British Columbia is on sustained yield. Is this largely as a result of regulation or would you say it is as a result of enlightenment at the managerial level?

Mr. DOUGLAS: Both of them.

Mr. FISHER: If your statement is true—I am not saying it is wrong, but if your general statement is so—we have what must be a model in Canada, that is, a province in which the majority of forestry resources are on a sustained yield basis. What was the most effective means that led to this situation?

Mr. DOUGLAS: It stemmed from the first Sloan commission in 1944, as the result of which legislation was enacted that permitted industry to license crown lands for sustained yield management, under what was then known as the management licence concept and is now called the tree farm licence concept.

Most of the land in British Columbia—95 per cent, in fact—is held by the crown, and until that legislation was enacted, industry had no title to anything beyond the first crop which it might happen to hold. So there was no incentive for forestry management. However, that has been made possible by that legislation. I think the industry was ripe for it; they have backed it up. One way or another, it has made quite a transformation.

Mr. FISHER: There is one point that has developed in Ontario, and I wonder if you have a parallel in British Columbia. That is, as you move towards sustained yield the factor of fairly large units controlled by large companies and corporations became very apparent, so the role of the small entrepreneur in forest development had to be put to one side because he has neither the size of holding nor the resources to go along with sustained yield. Have you had that situation in British Columbia, where because of sustained yield in forest management, the small operator has tended to be squeezed out and you get a build-up of larger units in forest holdings under fairly large forest management organizations?

Mr. DOUGLAS: Although it is quite a lively question in British Columbia, so far the small man has not been squeezed out. It is true that sustained yield has been undertaken, in the main, by large corporations. In order to do that the large corporation needs a large area. But, for instance, the government has

retained on the coast roughly 50 per cent of the lands for logging by small operators. In the interior the proportion is a good deal more than that. So there is still quite a field for the small operator, and the government is dedicated to maintain that.

Mr. FISHER: The government handles the management side of it?

Mr. DOUGLAS: Yes, they call them public working circles.

Mr. FISHER: This would be an argument for the federal government to move out of the field of any research into silviculture management or sustained yield. The provincial government is playing such a role in this field that the federal government should not be in it.

Mr. DOUGLAS: No, I do not see that. There are so many aspects of research. Sustained yield management is a crystallization of, say, 30 different aspects of forestry, all of which come under research.

Mr. FISHER: So you think there is a role in this particular field for research by the federal government, and a role in British Columbia specifically?

Mr. DOUGLAS: Yes, I am not speaking of the regulatory nature, but of the scientific factors required for it.

Mr. MCQUILLAN: Mr. Douglas, is not one of the major blocks to achieving a sound sustained yield plan a lack of a lot of this research information we are asking for? In other words, without a lot of this information, to a certain extent you are guessing at a sound sustained yield capacity?

Mr. DOUGLAS: Yes, very definitely. That is one of our problems. It caused a lot of discussion in the last Sloan commission—the fact that we are guessing at a lot of the information we should know.

Mr. FISHER: This is where we have a parallel in Ontario. The argument has been put forward that it is all very well to talk about sustained yield, but we do not know enough to know what is transpiring on individual sites; and we do not know enough about the kind of species we wish to encourage. Have you a parallel problem in British Columbia?

Mr. DOUGLAS: Yes, to a degree. We have felt fairly confident on the species we should be growing; but we begin to feel less confident when we look around the world and see what is growing elsewhere, at much faster rates. We mention that in here, why these things need to be checked into. So far, we have made the first step to sustained yield. We have started to organize our areas systematically, but it is all done on rather crude information.

What we need is a positive effort to improve our productivity. It may be by different species or different treatments, but whatever it is, we have to find out.

Mr. FISHER: Cutting methods, do you feel that is a field where the dominion forest service can play a part?

Mr. DOUGLAS: Yes, they could. Somebody has to do it, whether dominion or provincial, I do not care. Our suggestion, you will remember, is that the research field in British Columbia be analysed constructively by a committee, in which we think the federal government could take the lead.

Once that is done, I think they can allocate the division of labour.

Mr. FISHER: Could I just ask Mr. Robertson whether some steps have been taken in this particular regard?

Mr. ROBERTSON: I wonder if I could refer this to Mr. Harrison?

Mr. HARRISON: No, not formally. There have been informal discussions with the British Columbia Forest Service about what would be a reasonable division of the field between their research division and ours. There were informal discussions on that last year, but no steps have been taken as far as I am aware, to form a committee.

Mr. ROBERTSON: I do not think it would be too difficult to build it on as a second section.

Mr. DOUGLAS: I think something along the pattern of Ontario would develop. In Ontario we have established a committee on silviculture research; and with respect to our two laboratories, Vancouver and here, we have advisory committees which perform very useful services, upon which industry is very strongly represented. That pattern can be developed, I think, without much difficulty.

Mr. KINDT: As it is now eleven o'clock and time for adjournment, may we carry over this question of research for a few moments at the next meeting? I have one or two questions which I would like to ask.

The CHAIRMAN: We have not finished this subject.

I am going to ask Mr. Beaupré, before we leave, if we can get a breakdown of the main products in the forest industry and the end products that have been utilized. Whether that is true research, I do not know, but is that possible? What proportion of the forest harvest is main products, and what proportion is end products?

You might refer to what part research has played in that; and through further research what other uses could be made of some end products.

Gentlemen, some of you might have questions and I know you are finding this much more interesting than maybe some of us expected; and we have only just started. Some of you may have time to go through some parts of the Sloan report concerning the British Columbia forest industry. There will be some copies of the report in the library, and the Department of Northern Affairs and National Resources has the odd one to lend, and I am sure they will make them available. So, perhaps, before we finish you might take the opportunity of getting some information upon it, and you might want to ask some questions based upon it, pertinent to this inquiry.

I might say to the members of the committee that the house goes into session at 2:30, and we have orders of the day. The time varies from half an hour to maybe an hour. We have agreed to adjourn until three o'clock. It might be 3:00, 3:10 or 3:20, but as soon as the orders of the day are over we will come back to the same room and carry on.

AFTERNOON SITTING

WEDNESDAY, May 13, 1959
4.00 p.m.

The CHAIRMAN: We have a quorum, gentlemen. At the morning meeting a question was asked about the scholarships provided by the forest industry in British Columbia. We have a table here, which I am told is not quite complete. Perhaps it could be explained by someone. It does not indicate the generosity of the industry, apparently.

Mr. HARRISON: Mr. Chairman, this table—as was suggested—was taken from the calendar of the University of British Columbia for the year 1958-59. It simply lists those individual scholarships which were available to students. I do not know if you wish the table to be read, Mr. Chairman.

The CHAIRMAN: I think so, yes.

Mr. HARRISON: The Alaska Pine and Cellulose Limited scholarships in forestry—one scholarship; the amount is $500 annually. In this list reference is made to certificates, with no dollar value, issued by the British Columbia Lumberman: there are three of those. The Canadian Forest Industry's Entomological Scholarship, (a) British Columbia Loggers' Association—one scholar-

ship, at $300; (b) British Columbia Lumber Manufacturers' Association, one, at $300. Then there is the Finning Tractor and Equipment Limited; two scholarships at $250 each. The H. R. MacMillan Scholarships in Forestry and Forest Engineering, two at $200 and two at $100. Then the Truck Loggers' Association Scholarships, two at $125 each. That is the information, Mr. Chairman, we were able to obtain from the calendar.

The CHAIRMAN: Would some one from the delegation like to comment on this statement?

Mr. CLYNE: Mr. Chairman, I understand that those are annual scholarships, but they do not include such things as endowments or particular gifts for particular purposes. If we may, Mr. Chairman, with your pleasure and the committee's pleasure, I think we might supplement that by additional information later.

The CHAIRMAN: That will be fine. This morning we were discussing the brief, and we had with us the deputy minister. We were concerned at that time with research, pages 10 and 11 of the brief.

Like yourselves, perhaps I had an opportunity to review this brief rather hurriedly. While we decided this morning to read each subject and then discuss it, we have found since starting that our question would be overlapping something that might come up later. I believe we could expedite the proceedings if we had the brief read, and then there would be no repetition of discussion of any particular subject. Is that agreed, gentlemen?

Mr. HERRIDGE: That is a good suggestion.

The CHAIRMAN: We can leave the research questions until later on. Would you like to start on page 12, Mr. Beaupré, "Pulp and Paper"?

Mr. BEAUPRÉ: Yes, Mr. Chairman. To continue the brief, at page 12, under the section headed, "Pulp and paper":

Pulp and Paper

Pulp and paper is Canada's leading industry. Value of factory shipments in 1957 was $1.4 billion.

Pulp and paper is also Canada's leading export, accounting for more than one-fifth of all exports from this country. In 1957 pulp and paper exports were valued at $1,044,000,000 of Canada's total exports of $4.8 billion.

Newsprint was the largest item amongst pulp and paper exports accounting for $716,000,000 representing more than 5,900,000 tons. The dependence of the newsprint industry on export can be readily realized when it is considered that only $458,000 tons out of a total production of 6,397,000 was consumed in Canada. Canada produces approximately half the free world's supply.

The pulp and paper industry employs a high capital investment per worker in addition to the very large amounts of capital in the form of the natural resources of timber, fresh water and hydro power. Consequently the industry has an extremely high productivity per worker relative to most other Canadian industries. The annual net value added in pulp and paper mills is over $11,000 per worker. Without the industry, the real per capita income of Canadians would be much lower than it is and without the industry's continued expansion the increase in the country's per capita income will fall short of its potential. Since the investments made in pulp and paper mills and in protecting and increasing the growth of the forest are very large and of unusually long life, their outcome is uncertain. Many investments made in 1926 paid no return whatever for twenty years and the profitability of an investment made now will not be known until the 1970's or later. It is a "risk" industry. High investment and high risk render the industry particularly sensitive to economic climate.

Newsprint

Statistics dealing with newsprint are more comprehensive than for other forest products.

It can, therefore, be used as a good example of trends which are against the national interest. The following table will indicate:

(*a*) that Canada's share of the world market is declining;

(*b*) that new capital investment for newsprint its flowing to other areas which, in turn, are eating into our traditional markets.

NEWSPRINT CAPACITY

	1950	1959 Estimate	% Increase
U.S.A.	992,000	2,390,000	141
Finland	547,000	980,000	
Sweden	385,000	635,000	
Norway	229,000	280,000	
Japan	205,000	835,000	80
Australasia	35,000	183,000	
Other Areas	1,842,700	2,932,000	
Total Free World excluding Canada	4,235,700	8,235,000	95
Canada	5,226,675	7,521,000	44
Total Free World	9,462,375	15,756,000	66
Communist Bloc.	786,000	1,200,000	53
World Total	10,248,375	16,956,000	65
Canada's Proportion of Free World Total	55%	48%	

(See also Exhibit "H" and "I")

Gentlemen, I do not know if you wish me to read all the figures in that table. I think the point which we make comes out very clearly when it shows the per cent increase from 1950 to 1959 in the forest producing areas. It shows that the United States production has increased by 141 per cent; the group of European and Australasian countries has increased by 80 per cent; the total free world, excluding Canada, has increased by 95 per cent; Canada has increased by 44 per cent; the communist block, 53 per cent; world total, 65 per cent. Canada's proportion of free world total in 1950 was 55 per cent, whereas in 1959 it is estimated it will only be about 48 per cent. The average rate of growth in capacity in the rest of the free world in this period has been 95 per cent, more than double Canada's 43 per cent.

The United States is Canada's largest market for newsprint. Canada's share of the U.S. market declined from 80 per cent in 1950 to 73 per cent in 1958 and is currently running at 71 per cent.

We have in Exhibit "J" a chart that shows this, and it shows it as a percentage of previous years' activity.

U.S.A., our chief market, is also our chief competitor and is gaining ground at our expense. That is probably shown more clearly in Exhibit "K", which is immediately under Exhibit "J". In Exhibit "K" there are figures showing from 1950 to 1958 what has happened to United States consumption, using 1950 as a base—as 100. It shows how much of that has come from Canadian mills, which was 80 per cent in 1950 and which was down to 73 per cent in 1958.

It shows, also, how the United States mills are looking after their own consumption to the extent of 25 per cent in 1958, as compared with 17 per cent in 1950.

Turning to pulp, approximately four-fifths of Canada's exports of chemical pulp go to the United States. Canadian exports of chemical pulp have decreased from 11.3 per cent of total United States' supply in 1947 to 8.2 per cent in 1957. In 1953 Canada supplied 72 per cent of the total North American shipments to overseas markets and the United States 28 per cent. In 1957 Canada's share was down to 41 per cent and the United States' share had increased to 59 per cent.

Chemical pulp production shows similar disturbing trends.

The following table is a table similar to that on the previous page for newsprint. It shows what has happened to production, comparing 1957 figures with 1950 figures. It shows the per cent increase, the United States at 47 per cent, Canada with only 35 per cent, western Europe 54 per cent, Latin American countries 142 per cent. It is true that that is of a smaller base, but it is a significant figure. Free Asia, Africa, Pacific, 301 per cent; the total free world has increased by 54 per cent; the free world, excluding Canada, has increased by 57 per cent. As I say, Canada has increased by only 35 per cent.

TRENDS IN CHEMICAL WOOD PULP PRODUCTION

(In thousands of tons)

			Production		
			1950	1957	% Increase
U. S.			10,872	15,949	47
Canada			3,314	4,468	35
Western Europe			5,826	8,960	54
Includes:	Austria	306	526		
	Finland	1,316	2,273		
	France	232	507		
	West Germany	573	777		
	Norway	533	714		
	Sweden	2,717	3,608		
Latin America			118	286	142
Includes:	Argentina	7	22		
	Brazil	60	128		
	Mexico	51	136		
Free Asia, Africa, Pacific			530	2,123	301
Includes:	Australia	70	136		
	Japan	440	1,724		
	New Zealand	0	129		
	Union of South Africa	20	134		
Total Free World			20,660	31,786	54
Free world (Excluding Canada)			17,346	27,318	57
Russia & Satellites *est.*			2,216	3,100	40
Total World			22,876	34,886	51

From 1950 to 1957, United States, which produces almost half the world's supply, increased production by 47 per cent. Western Europe increased production by 54 per cent, Latin America by 142 per cent, Free Asia, Africa and the Pacific region by 301 per cent. Canada showed by far the lowest

growth rate with only 35 per cent. Its growth rate was 19% percentage points lower than the free world average. The trends in the relative position of Canada and U.S. are shown in greater detail in exhibits L and M.

A COMPARISON OF IMPORT — EXPORT TRENDS

(In thousands of tons)

	Imports			Exports		
	1950	1957	% Change	1950	1957	% Change
U. S.	2,095	1,862	—11	96	629	+555
Canada	35	65	+86	1,584	2,025	+ 28

These show detailed figures of products in thousands of tons and the per cent increase for Canada, the United States and the total free world.

Exhibit "M", the following exhibit, shows similar data in graph form, rather vividly showing the increase of growth in the United States as compared to the growth in Canada. From 1950 to 1957 U.S. imports of pulp dropped 11 per cent while U.S. exports increased 555 per cent. In comparison, Canada's imports actually rose by 86 per cent while its exports increased only 28 per cent.

Canada is a leader in pulp and paper technology. Canada has in abundance the physical requirements for pulp and paper production: water, hydro-electric power and large unused forest resources which can be harvested without any diminution of the natural resource.

Yet the growth rate in this, Canada's most important industry, is much slower than the average for the free world. Canada has become less and less attractive for major investment in this field. Investment is flowing elsewhere. There is obviously something seriously wrong with the economic climate for the pulp and paper industry in Canada. We have been exporting jobs instead of wood products. These trends should be a matter of concern to everyone interested in the national welfare.

A few years ago, the Bowater Paper Corporation Ltd., a British company, planned to expand its newsprint and pulp production on this continent. It is well known in the industry that Bowater surveyed opportunities in Canada, including our own province of British Columbia. They found no shortage of timber, or hydro power or water. But the company decided not to establish facilities in this country and instead built a newsprint mill with a daily capacity of 1,000 tons at Calhoun, Tennessee. At the time, Sir Eric Bowater stressed that not only was the company permitted to write off $21 millions through accelerated depreciation out of otherwise taxable profits under the U.S. government's certificate of necessity, but stated that local governments had offered generous tax concessions for establishment of the mill.

The company also has currently under construction at Catawaba, South Carolina, a bleached kraft mill of 400 tons daily capacity at an estimated cost of $38 millions and a hardboard mill, the cost of which is not presently available to us.

Undoubtedly the tax incentives mentioned above were not the only factors that influenced the selection of these particular sites, but they were nevertheless important inducement by government which have no parallel in Canada. Coupled with this we also have higher capital costs from import duties, sales tax, freight, etc., (estimated by consulting engineers as at least 25 per cent) which serve to widen the gap and turn potential expansion away from Canada. In view of our dependence on the forest industry for exports, it is our belief that the government of Canada should seriously investigate the feasibility of bidding for new business through incentives.

Lumber Products

Approximately 6,400 sawmills operated in Canada, in 1957. These mills are widely dispersed across the country in units ranging in size from large west coast mills cutting half a million board feet per shift to small mills producing less than 1 per cent of that amount.

To illustrate the size disparity between units of the Canadian lumber industry, it should be noted that about four-fifths of the active mills are operated by three to four men under individual ownerships or partnerships. This numerically preponderant segment of the industry employs only one-third of the total sawmill labour force, and is responsible for about one-fifth of the gross value of production of the industry.

From coast to coast, Canada's sawmills employed directly 51,100 persons in 1957. Sawn lumber output was valued at approximately $468 million. Fifty-one percent of the 1957 lumber cut was exported from Canada. These exports, valued at $282,690,000, represented about 6 per cent of the nation's export earnings. In the same year the value of lumber imports totalled $24.7 million dollars. The resultant favourable trading balance in this commodity is all the more impressive when it is appreciated that $185,700,000 of the net income was earned in the United States, Canada's greatest creditor. It might be noted that in 1955, the best year on record, the credit balance in lumber trading was over $360 million. (See Exhibit "N").

In Exhibit N, we show export-imports and the resultant figure of net imports for the years 1950 through 1957. I should mention that the source of material and data being quoted in these exhibits in most instances is either from the dominion bureau of statistics or some other source which we consider to be equally reliable.

Although Canada produces only 7 or 8 per cent of the world's lumber cut, she is the world's greatest exporter of lumber, contributing in 1957 about 30 per cent of the volume trade. The Department of Trade and Commerce listed 56 destinations in 1957 for our export lumber. These diversified markets until recently have provided our exporters with favorable trading conditions. We are now however experiencing conditions which are narrowing our markets to North America, particularly to the United States. This is not a healthy trend.

The next table shows the exporting country and the exports in 1955, 1956 and 1957, and then from 1955 to 1957.

WORLD LUMBER EXPORTS

EXPORTS—MILL f.b.m.

Exporting Country	1955	%	1956	%	1957	%	1955-57 % Change
Canada	4,804	35.4	4,112	33.8	3,794	29.5	−5.9
Sweden	2,134	15.7	2,018	16.7	2,192	17.1	+1.4
Finland	1,558	11.5	1,270	10.4	1,408	11.00	−0.5
Austria	1,350	10.0	1,466	12.1	1,394	10.9	+0.9
U.S.S.R.	996	7.3	944	7.8	1,300	10.1	+2.8
U.S.A.	626	4.6	556	4.6	620	4.8	+0.2
Others	2,112	15.15	1,770	14.6	2,128	16.6	+1.1
Total	13,580	100%	12,136	100%	12,836	100%	

SOURCE: Economic Commission for Europe.

The above table shows the decline in Canada's share of world markets during the period 1955-57 inclusive. Much of this loss has occurred in the U.K. which, after the U.S.A., has been most important export market. The

present situation in the U.K. where sales dropped from $69 millions to $42 millions between 1954 and 1957, typies the precarious competitive position which the industry now faces. In 1956, the sudden loss of 40 per cent of the market was attributed to the bullish nature of prevailing ocean freight rates, liquidation of the U.K. strategic reserves of lumber and the credit squeeze. In that year also, the U.S.S.R. made its first major bid for a greater share of the U.K. lumber purchases. Since 1955, however, ocean freight rates have dropped appreciably, the strategic reserve has been consumed and credit is available at satisfactory rates. We have however, been unable to re-enter the U.K. market in strength as our basic bulk items are too expensive to meet Scandinavian and Russian competition. We have been able to move only specialty items not obtainable from the Baltic.

The following table shows the relative position of the major softwood exporters to the U.K. in the years 1954-57:

U.K. SOFTWOOD LUMBER IMPORTS

Country of Origin	YEAR								
	1954		1955		1956		1957		1954–57 % Change
	M fbm	%	M fbm	%	M fbm	%	M fbm	%	
Canada	833,602	28.6	862,512	25.7	430,504	17.2	420,336	14.7	−13.9
Sweden	709,472	24.4	895,918	26.8	792,638	31.7	913,730	32.0	+ 7.6
Finland	536,016	18.4	640,492	19.1	458,736	18.4	551,372	19.3	+ 0.9
U.S.S.R.	335,780	11.5	480,522	14.3	415,762	16.7	574,768	20.2	+ 8.7
Other	498,800	17.1	471,983	14.1	398,568	16.0	392,092	13.8	− 3.3
Total	2,913,670		3,351,426		2,496,208		2,852,298		

SOURCE: U.K. Board of Trade.
NOTE: Ocean freight rates B.C. to U.K. are approximately double the rates Baltic to U.K.

It will be noted that Canada was Britain's leading supplier in 1954; enjoying 28.6 per cent of the softwood market in that country. By 1957, our share of the U.K.'s imports had dropped to 14.7 per cent, and our position as a supplier to fourth place behind Sweden, Finland and Russia. In the same period, the U.S.S.R. had increased her sales from one-tenth to one-fifth of the U.K.'s total softwood imports by ultra-competitive pricing and such trading tactics as the "fall" clause, which guarantees to early buyers the benefit of any price reductions she may make in subsequent sales during the year. Assisted by their lower production costs and comparatively short ocean haul, Swedish and Finnish shippers are trading to show a profit. This is not necessarily the case with Russian shippers.

Elsewhere overseas our sales are inhibited by tariffs, quotas and other import restrictions. These additional barriers, for example, are preventing increased exports to South Africa and Australia, both of which are potentially larger markets.

One additional feature of post-war markets is the appearance of much more lumber of tropical origin and lumber from plantation forests which is competing with us for a share of the available quotas.

It has been shown that we are becoming increasingly dependent on North America for sales volume. Fortunately also we enjoy remarkably free access to the United States for the lesser refined, but volumetrically preponderant lumber items. This is a situation which should be carefully guarded and not jeopardised by ill-advised efforts to protect Canadian minority interests. The 1957 tariff board ruling on a shipment of American pine shiplap entering

Canada, at 20 per cent ad. val, instead of the normal 5 per cent, was a serious blunder which might have provoked disastrous retaliation. The ruling was fortunately reversed in the 1958 Budget.

Lumber as a commodity has, for many years, been experiencing increasing competition from substitute products. The following tables show the inroads being made by alternative building products.

PER CAPITA LUMBER CONSUMPTION — f.b.m.

	Canada	U.S.A.
1947	257	194
1957	210	177

LUMBER USAGE IN HOUSE CONSTRUCTION

	Volume per House
1920	18,900 f.b.m.
1940	13,900 f.b.m.
1953	10,500 f.b.m.

Source: — Stanford Research Institute.

It shows the per capita lumber consumption in 1957. In the ten-year period in Canada it dropped from 257 to 210, and in the United States from 194 to 177.

The second part of that table is the lumber usage in house construction in 1920, 1940, and 1953 showing the amount of lumber that goes into a house, and the volume drops from 18,900 to 13,900, to 10,500.

The lumber industry by reason of its decentralised composition, is singularly vulnerable to competition, from substitute industries equipped with ample resources, able to act with a single-minded purpose in developing and promoting their products. The problem of uniting 6,400 individual entities to undertake programs of quality control, product development and promotion, has to date, been practically insurmountable. An encouraging start was made this February when 15 wood products associations across Canada pledged their support to a new national organization, the Canadian wood development council.

Forest Products Research:

In emphasizing the importance the lumber industry attaches to the forest products research currently being undertaken by the forest products laboratories of Canada. It is hard to avoid citing the analogy that exists between the lumber and agricultural industries. No one farmer has the resources to spend millions on developing a new rust-resistant wheat for example. Similarly no one lumber manufacturer, especially when operating at today's low margins, has the resources to undertake the applied research which is immediately needed if the decline in lumber usage is to be halted.

If it is conceded that the lumber industry (converting as it does a renewable crown-owned national asset, and contributing, as it does, handsomely to national income, to industrial stability and to government revenue) is worth perpetuating in a verile form, it should also be conceded that the amounts spent by the Federal Government on forest products research both fundamental and applied, are inadequate.

British Columbia's Lumber Industry:

The above information on the Lumber industry in Canada applies to the B.C. industry, but to a much greater degree.

B. C. produced in 1957, 4,412 MM f.b.m., or 61.7 per cent of the 7,150 MM f.b.m. of lumber produced in Canada. The province employed 52 per cent of the Canadian sawmill work force, and contributed 60 per cent of the national lumber value in that year. Sixty-six per cent of Canada's total lumber exports emanated from B. C. while, if the U. S. market is excluded, the province's share of the offshore market was an impressive 91.7 per cent in 1957.

The coast range of mountains divides B. C. into two distinctly different lumbering regions. In the interior conditions approximate those prevailing elsewhere in Canada. Many small mills constitute the industry which is dependent on truck or rail markets for its sales.

The coast industry of about 200 mills (3.6 per cent of Canada's total) produces 33 per cent of the nation's cut. These mills were founded on the water-borne trade, and are the group most affected by world-wide trading conditions. They exported 68 per cent of their production in 1957.

An important B. C. specialty product is red cedar shingles. Sales have shown a steady decline, from 2.5 million squares in 1950 to 1.6 million squares in 1958, despite a sustained, expensive, promotional effort. Competing materials have not hesitated to raise the bogey of fire hazard, so as to obscure the genuine merit of the wood product. Shingle manufacturers perform a valuable service for the B. C. coast forest industry in making good roofing and siding (actually, short lengths of clear, prime wood), out of a quality of Cedar that is unsuited for standard lumber.

Disappearance of the shingle industry would add an extra burden to the cost of logging and result in waste of raw material. Ways must be found to halt the decline in the shingle industry.

Members on the committee may be conversant with the effect rising rail freight rates have had on coast lumber sales to the prairies and eastern Canada. Since 1948, when the post-war round of rail freight increases commenced in earnest, our sales to the prairies and eastern Canada have declined by 49 per cent. Our contention that shippers of a relatively few commodities, of which one is lumber, are subsidising the rail movement of many other commodities, the rates of which are bound by statutory agreement, truck competition or agreed charges, has been heard in this Capital on many occasions. Suffice it to say that the evidence is clear that coast shippers are being forced out of the Canadian market by freight costs.

Since April 1948 there have been seven general freight rate increases awarded by the Canadian Board of Transport Commissioners to Canadian carriers. These increases became effective as follows:

April 8th, 1948	21%
June 16th, 1950	20%
Feb. 11th, 1952	17%
Jan. 1st, 1953	9%
Mar. 16th, 1953	7%
Jan. 1st, 1957	11%
Dec. 1st, 1958	17%

The most recent award of 17 per cent culminated a total accumulative general increase of 156 per cent, which was applicable on a flat percentage basis to all commodity movements such as lumber, plywood, shingles, pulp and paper, except where modified by border combinations or other competitive considerations. In addition to increased freight costs to destination on basic commodity movements, such increases also applied to goods and services entering into the cost of our production.

The incidence of the flat percentage principle of increase, greatly distorted the Canadian freight rate structure during this period, upsetting the traditional rate relationship between competitive regions and competitive basic commodities in the Canadian domestic market.

In addition to this effect on the economy of the primary forest industries of Canada, the Board of Transport Commissioners also pointed out in its recent judgment in the 17 per cent award, the fact that the statutory grain rates were largely responsible for the imbalance in the freight rate structure itself. This is indicated in the following quotation from the board's judgment dated December 27, 1957:

The quotation from that judgment is as follows:

> These factors indicate that it is the freight rate structure itself which is largely responsible for the situation in which the railways now find themselves, rather than any defects in the "requirements" formula. This difficulty is intensified by the fact that the grain traffic within western Canada is carried at statutory grain rates which cannot be increased and which yield only one-half cent per ton mile, compared with the general average including statutory grain of about 1.4 cents per ton mile, or approximately 2 cents excluding statutory grain. The increases required through increased cost of operation must therefore be placed on other traffic. The statutory grain rates, of course, are the result of a contract made in 1897 between the Canadian Pacific and the government of Canada, for which that railway received certain considerations, and as pointed out by the Royal Commission on Transportation in its report in the year 1951, these rates are entirely subject to the jurisdiction of parliament. The board must take notice of this fact and govern itself accordingly. With this traffic removed from consideration, and amounting to 11.5 per cent of the present revenue, and with traffic at competitive rates and agreed charges having now reached the total of 31 per cent, on which it is difficult, and in some cases impossible, to increase rates, there is a total of 42.5 per cent of the intra-Canadian freight traffic on which relatively less or no increases are proposed, leaving only 57.5 per cent of Canadian traffic for consideration by way of increased freight rates. Included in this proportion of 57.5 per cent is a very large amount of low grade traffic upon which the present rates may not be fully remunerative despite all the increases that have been allowed by this board on the requirements basis.

We would like to quote Chief Justice Sloan's report of November 19, 1954, (Orders in Council P.C. 1395 and 1505), in part, as follows:

> A major factor contributing to the present serious decline in rail revenue is the distortion and imbalance of the freight rate structure due to the direct and indirect but consequential effects of the Crowsnest Pass rates covering grain and grain products.

A proportionate loss of rail revenue due to the Crowsnest Pass rates is being borne, in varying degrees, by

(a) the railways;
(b) Shippers and consumers of high-rated commodities, and
(c) by Railway employees represented before me, by a contribution measured in terms of the prevailing disparity in working conditions.

> The Crowsnest Pass rates are the reflection of a national policy and the loss of rail revenues consequent upon this policy is being in effect subsidized by those groups. (It should also be noted that the

Canadian Pacific and Canadian National in an effort to cut operating costs, in great part by deferring necessary maintenance, did between July of 1953 and July of 1954 cease to employ about 20,000 men. It is my belief that these 20,000 former employees and their dependents may be also regarded as contributing to this subsidy in terms of wages-losses.)

The Crowsnest Pass rates have contributed in great measure to the economic stability of the nation by moving the wheat crop of Canada to world markets at competitive prices and will, no doubt, in the future, continue to do so.

It is my respectful opinion, however, that the effects of these rates both direct and indirect, wherein their application results in loss of rail revenues, should be shouldered in some fair degree by the national treasury, and not as now continue to be borne by a segment of the national economy.

Upon the evidence before me it is my opinion this present situation is the inevitable consequence of a national policy that compels the railways to carry a heavy volume of bulk freight at a rate not now contributing to overhead. I use "overhead" to mean the general constant cost of railway operation other than the out-of-pocket cost directly assignable to the cost of moving any particular commodity or group of commodities.

It will be seen that the freight rate structure is in a state of distortion and imbalance due in great measure to the effects thereon of the Crowsnest Pass rates. The structure is in the form of an inverted pyramid—too small a base is carrying too great a burden.

In contrast with other sections of the forest industry, B.C. plywood mills have to sell nearly all their production in the home market. The United Kingdom has been buying about 5 per cent of B.C.'s output; other overseas sales are minute. Export to the U.S.A. is effectively barred by a 20 per cent customs tariff.

Today's demand for B.C. fir plywood has been built up by years of advertising and trade promotion and by research for new uses, all on the strength of waterproof gluing. Successive increases in domestic rail freight rates have reduced, and may have eliminated, the possibility of a further expansion of sales in Canada by the coast plywood industry.

The size and capacity of the industry has been expressed this way: one day's output, if laid in panels $\frac{5}{16}$" thick side by side would cover more than 100 acres, and when shipped by rail would fill a train of box cars half a mile long.

Direct employment is given to some 6,500 people. Logging labour would raise this figure to about 8,000. There is a high labour content in the finished plywood product, owing to the degree of processing, remanufacture and refinement. It is of considerable importance to B.C. and to Canada that the B.C. plywood industry should continue to convert high-grade timber into a product of greatest value, and give employment on at least the scale of today.

We have attempted in the foregoing to outline the nature of the lumber industry, its importance to Canada, and to British Columbia and its problems at home and overseas.

Taxation and Incentives

For many decades the fiscal policies of the government of Canada have included the use of tax incentives to encourage industrial growth. Some important examples of this policy are listed hereunder.

1. Sales tax: Exemption of manufacturing machinery and other forms of capital goods.

2. Duty: Remission of duty on certain types of machinery.

3. Income taxes: Special allowances to promote development of the mining and petroleum industry.

The adoption of these various allowances is not part of any "give-away" program. These various measures are simply good business policies applied to public revenues. The underlying philosophy is that incentives granted to primary export industries will produce manifold benefits in higher revenue to governments from both primary and secondary sources.

The pre-eminent Canadian example of a tax incentive is the treatment accorded the mining industry. Oil and gas wells, and metal mines may deduct from taxable income an allowance of one-third of the profits attributable to their mining operations, and gold mines enjoy an even larger allowance. In addition these mines and wells may deduct all their development, drilling and exploration expenditures as current expenses and a mine is exempt from taxation during the first three years of its operation. The result is a net tax rate much lower than for industry generally.

The special tax incentives that apply particularly to other natural resource industries do not extend to the forest industry. Statutory provision for special allowance of mines, oil wells and timber limits has been made under Section 11 (1) b of the Income Tax Act but the requisite regulation with respect to timber limits has never been issued. It is difficult to understand why, if it is in the best interest of Canada to adopt tax incentives for natural resource industries the foremost industry should be omitted. There are four important reasons why the forest industry should be the first to merit tax concessions.

1. It is the largest and one of the most important of the primary industries of Canada.

2. Its resources will permit further expansion beyond the foreseeable market possibilities of the future on a sustained yield basis. In other words this is an industry that can expand without diminishing the natural resource.

3. Its principal market and closest competition is the U.S.A. where tax concessions are in effect, the most important of which are special depletion and accelerated depreciation allowances.

4. The rate of growth of the industry in Canada is falling far short of the average rate of growth of the free world.

We strongly urge that consideration be given to the introduction of incentives in an effort to remedy this situation. The forest industry, particularly the pulp and paper industry, has been through a world wide major wave of expansion in which Canada's showing was poor compared to the free world average. Another major expansion, anticipating population increase and higher per capita consumption, is expected with the first units starting operation in 1962. We believe there is an urgency about this problem that may not be fully realized in view of the present curtailed operations of the pulp and

paper mills. Planning and constructing pulp and paper mills takes three to four years so that decisions as to location of future expansion are being made now.

Special Taxes on Forestry Industry.

In two of the provinces, namely Ontario and British Columbia a special logging tax is imposed. The two taxes are similar, and stated briefly impose a 10 per cent income tax on that proportion of the profits that are deemed to be derived from the exploitation of the natural resource.

Originally the tax applied to logging operations but later the scope of the tax was expanded to include profits from the processing of the logs. This proportion of profits taxed varies under different circumstances but under average conditions would work out at about one-half of the total profits so that the effective rate on total profits is in the neighbourhood of 5 per cent.

Recognition of this tax within the framework of the present dominion provincial fiscal arrangement appears to stem from Canadian agreement on two points. Firstly, the provinces, in agreeing to vacate income tax fields for some form of rental, wished to reserve the right to impose natural resource royalties in the form of income tax as being preferable to a tax on gross income or a royalty on some form of unit basis. Secondly, there was the underlying knowledge that they had a prior right to income from natural resources stemming from the British North America Act. Here again a tax on net income was considered desirable by the provinces so that they would share in the fortunes of the industry. As a result the tax rental agreements recognized the right of the agreeing provinces to impose an additional tax on logging operations.

Turning firstly to the contention that this tax is a form of royalty. In British Columbia crown timber is sold only in two ways. Rights to cut timber are publicly auctioned with the price measured in terms of units removed. Thus there is no gamble or guesswork involved. The highest unit price for the timber removed is secured. The other method concerns crown timber made available on a licenced basis. Here the price is calculated by reference to the current market value of logs less an estimate of logging costs and an allowance for a reasonable return of capital employed. It is obvious therefore that in both instances the crown secures the full value in the stumpage or purchase price and the *logging tax can therefore only be an additional imposition on the forest industry.* This brings us to the second argument namely, that the province, by constitutional right is entitled to impose a special tax on logging operation. We do not propose to either endorse or dispute the constitutional right of the Provinces to levy the tax *but to direct attention to the effect.* The result is that the forest industry in Ontario and British Columbia bears the highest income tax of any industry in Canada. In British Columbia, in addition to paying the normal corporation rate of 47 per cent it also pays a logging tax of 10 per cent which is applied to a proportion of its total profits and after allowing for the corresponding reduction in the federal tax, the total income tax rate is approximately 2.5 per cent to 5 per cent higher than any other industry.

In its major study of "Forest Tenures and Tenures in Canada", the Canadian Tax Foundation stated:

> The conclusion to which we have been forced is that the logging taxes constituted discriminatory taxation—they raise the weight of taxation borne by logging above the weight borne by industry and commerce in general; and there is no special circumstance to justify the departure from a uniform weight.

We find it difficult to reconcile the tax concession given other primary industries on the one hand with the singular treatment accorded the forest industries of Ontario and British Columbia of the highest tax rate of any industry. If there is to be recognition of any prior right of a province then surely this should take the form of payment by Canada of an appropriate portion of the regular income tax collection.

Summary

In this submission we have attempted to acquaint the committee with some of the background of this great industry and bring out some of the problems that directly or indirectly affect it. These are recapitulated below.

In the forests themselves some of the former advantage of our softwoods due to the relative ease of pulping is being lost to the technological advances being made with deciduous hardwoods in other parts of the world. The faster growth and easier terrain of other areas is also tending to reduce the potential value of our forests. We believe that research activities should be stepped up in all phases of forestry in an effort to combat these trends.

In the field of pulp and paper our main concern is the decline of Canada's relative position in this important activity. It is substantial enough to give cause for alarm. We have lost over one million tons annual production not only to our chief competitor but also our chief market. We earnestly suggest that it would be in the interest of the national economy if all aspects of this decline were examined by the government and the feasibility of aggressive tax incentive policies was fully and carefully examined, as a method of overcoming some of the physical disadvantages that presently beset us.

In the field of lumber products, that is lumber, plywood and shingles, the continual rise in freight rates is imposing a particular hardship on the industry. Clearly this is not in the national interest.

We also urge the greatest caution in the matter of import tariffs because the forest industry, with its high proportions of exports is particularly sensitive to retaliatory action.

Turning to taxation we have drawn attention to the lack of taxation incentives which are present in other natural resource industries and as stated earlier we urge that this question receive careful consideration in the national interest. At the same time the effect of the logging tax results in the companies in those provinces that impose this tax paying a considerably higher rate of tax than any other industry in Canada. It is to be hoped that this anomaly could be remedied without delay.

In conclusion we would say that this forest industry has been taken for granted in the past whereas in reality all signs indicate a decline in the relative free-world position to a degree that should give rise to grave concern. We, therefore, urge that this committee recommend to the government that these problems be carefully studied by various departments of the government to determine the feasibility of overcoming certain physical disadvantages through research, taxation incentives or any other practical means. Needless to say the industry stands ready to co-operate to the fullest extent in any such study.

We thank you for your kind and patient attention.

Respectfully submitted.

British Columbia Lumber Manufacturers Association.
British Columbia Loggers Association.
Canadian Pulp and Paper Association. (B.C. Division)
Cariboo—P.G.E. Lumber Manufacturer Association.
Consolidated Red Cedar Shingle Association.
Interior Lumber Manufacturers Association.
Northern Interior Lumber Manufacturers Association.
Plywood Manufacturer Association of British Columbia.
Truck Loggers Association.

EXHIBIT "A"

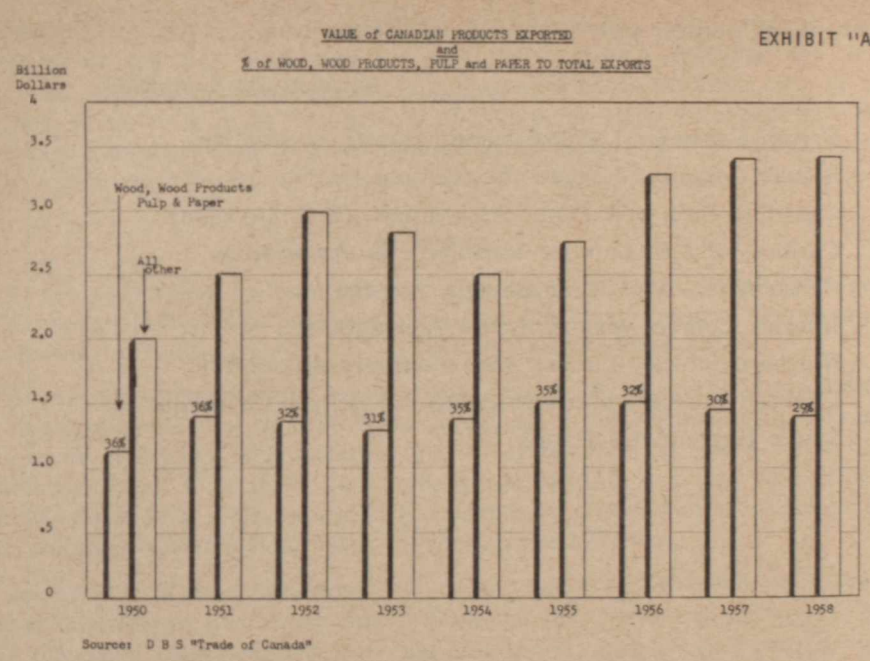


Exhibit "B"

VALUE of EXPORTS of CANADIAN PRODUCTS

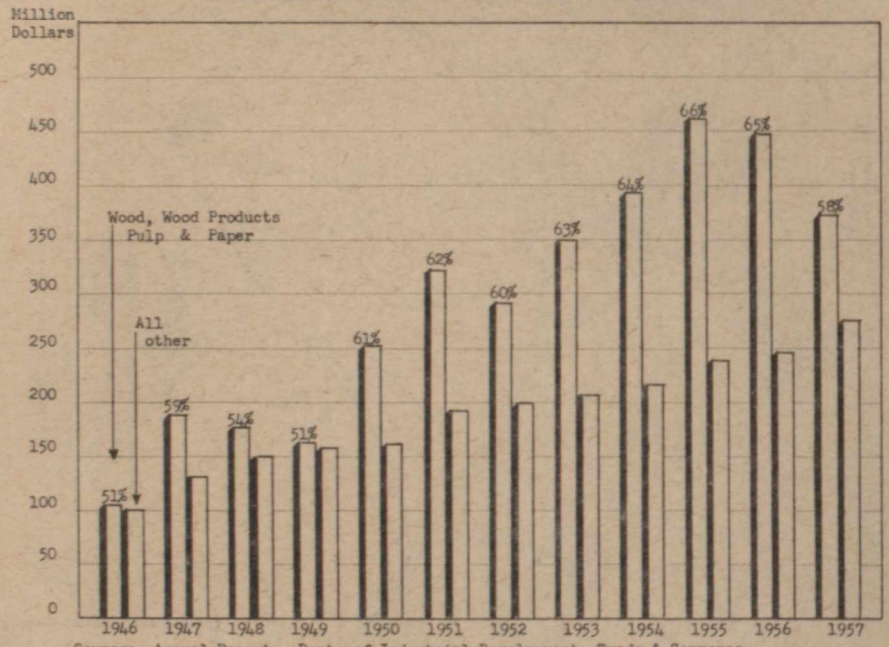
1950 - 1958

	Wood, Wood Products Pulp and Paper (Millions $)	All Other Products (Millions $)	Total All Exports (Millions $)	% of Wood, Wood Products, Pulp and Paper to Total Exports
1950	1,113	2,005	3,118	36
1951	1,399	2,515	3,914	36
1952	1,367	2,934	4,301	32
1953	1,295	2,822	4,117	31
1954	1,378	2,503	3,881	35
1955	1,521	2,761	4,282	35
1956	1,514	3,275	4,790	32
1957	1,456	3,385	4,841	30
1958	1,414	3,416	4,830	29

Source: D B S "Trade of Canada"

EXHIBIT "C"

VALUE of B. C. PRODUCTS EXPORTED (Excluding gold)
and
% of WOOD, WOOD PRODUCTS, PULP and PAPER TO TOTAL EXPORTS



Source: Annual Report - Dept. of Industrial Development, Trade & Commerce, Victoria, B. C.

EXHIBIT "D"

VALUE OF EXPORTS OF B.C. PRODUCTS

(excluding gold)

1946 - 1957

	Wood, Wood Products Plulp and Paper 000 $	All Other Products 000 $	Total All Exports 000 $	% of Wood, Wood Products, Pulp & Paper to Total Exports
1946	105,645	100,070	205,715	51
1947	188,127	131,354	319,481	59
1948	176,770	149,354	326,124	54
1949	163,276	158,865	322,141	51
1950	250,165	162,311	412,476	61
1951	321,662	193,577	515,239	62
1952	291,464	197,090	488,554	60
1953	348,060	207,231	555,291	63
1954	393,410	215,666	609,076	64
1955	460,813	238,155	698,968	66
1956	446,830	245,313	692,143	65
1957	373,031	274,936	647,967	58

Wood Products exports from British Columbia are greater than all other B.C. exports combined.

Source: Annual Report Dept., Industrial Development, Trade and Commerce, Victoria, B. C.

EXHIBIT "E"

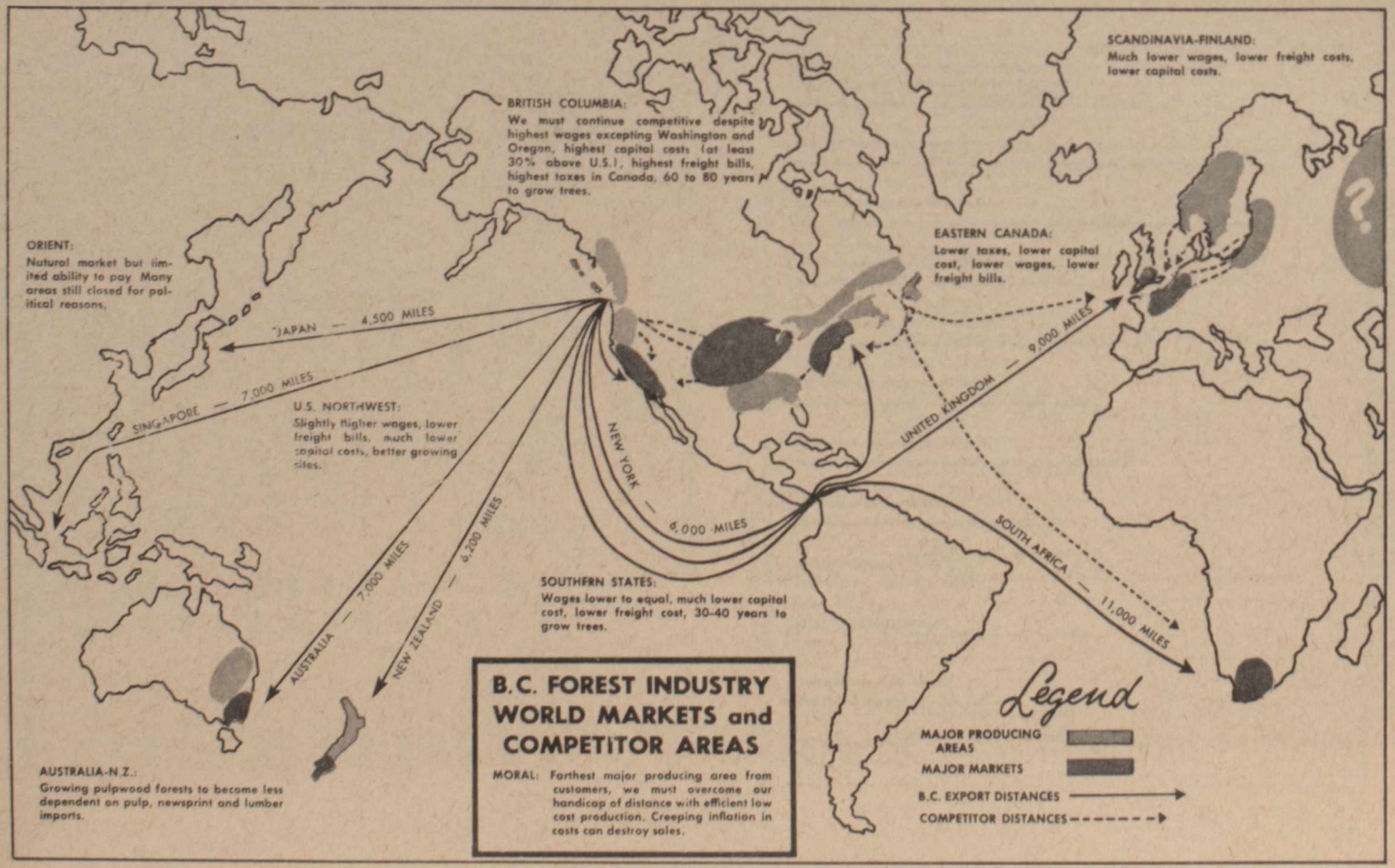
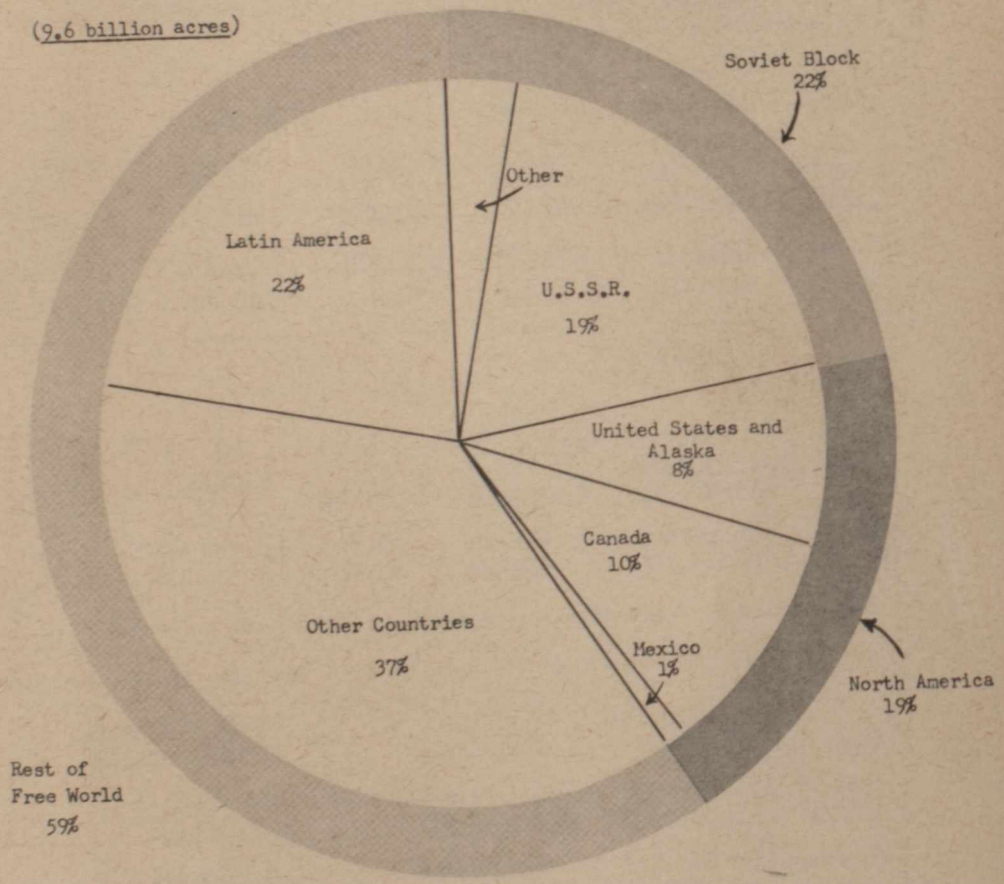

BRITISH COLUMBIA:
We must continue competitive despite highest wages excepting Washington and Oregon, highest capital costs (at least 30% above U.S.), highest freight bills, highest taxes in Canada, 60 to 80 years to grow trees.
SCANDINAVIA-FINLAND:
Much lower wages, lower freight costs, lower capital costs.
ORIENT:
Natural market but limited ability to pay. Many areas still closed for political reasons.
EASTERN CANADA:
Lower taxes, lower capital cost, lower wages, lower freight bills.
JAPAN — 4,500 MILES
SINGAPORE — 7,000 MILES
U.S. NORTHWEST:
Slightly higher wages, lower freight bills, much lower capital costs, better growing sites.
NEW YORK — 6,000 MILES
UNITED KINGDOM — 9,000 MILES
AUSTRALIA — 7,000 MILES
NEW ZEALAND — 6,200 MILES
SOUTH AFRICA — 11,000 MILES
SOUTHERN STATES:
Wages lower to equal, much lower capital cost, lower freight cost, 30-40 years to grow trees.
AUSTRALIA-N.Z.:
Growing pulpwood forests to become less dependent on pulp, newsprint and lumber imports.
B.C. FOREST INDUSTRY WORLD MARKETS and COMPETITOR AREAS
MORAL: Farthest major producing area from customers, we must overcome our handicap of distance with efficient low cost production. Creeping inflation in costs can destroy sales.
Legend
MAJOR PRODUCING AREAS
MAJOR MARKETS
B.C. EXPORT DISTANCES
COMPETITOR DISTANCES

EXHIBIT "F"

WORLD FOREST AREA

(9.6 billion acres)



Source: U. S. Forest Service
"Timber Resources for America's Future"

EXHIBIT "G"

EXTENSION OF TABLES IN SLOAN REPORT - PAGES 255-56

Table 62

Reported approximate expenditure in Forest Protection by other agencies:

Year	Patrol and Fire Prev.	Tools and Equipment	Fires	Improvements	Total
1956	$366,527	$466,983	$503,464	$282,681	$1,599,655
1957	217,714	308,225	141,039	181,583	848,561
1958	381,219	359,535	954,857	151,360	1,846,971
10 yr. av.	$275,426	$348,924	$347,291	$112,313	$1,083,954
3 yr. av. 1956/7/8.	$321,820	$378,248	$533,120	$205,208	$1,431,729

Table 63

(1) Year	(2) Total Forestry* Expenditure	(3) Contribution to Forest Protection	(4) % of (3)-(2)	(5) Revenue	(6) % of (3)-(5)
1956-57	$13,063,505	$2,947,585	22.5%	$33,748,486	8.7%
1957-58	12,161,208	2,858,204	23.5%	31,596,335	9.5%

(*Forestry expenditure is not adjusted for fund balances)

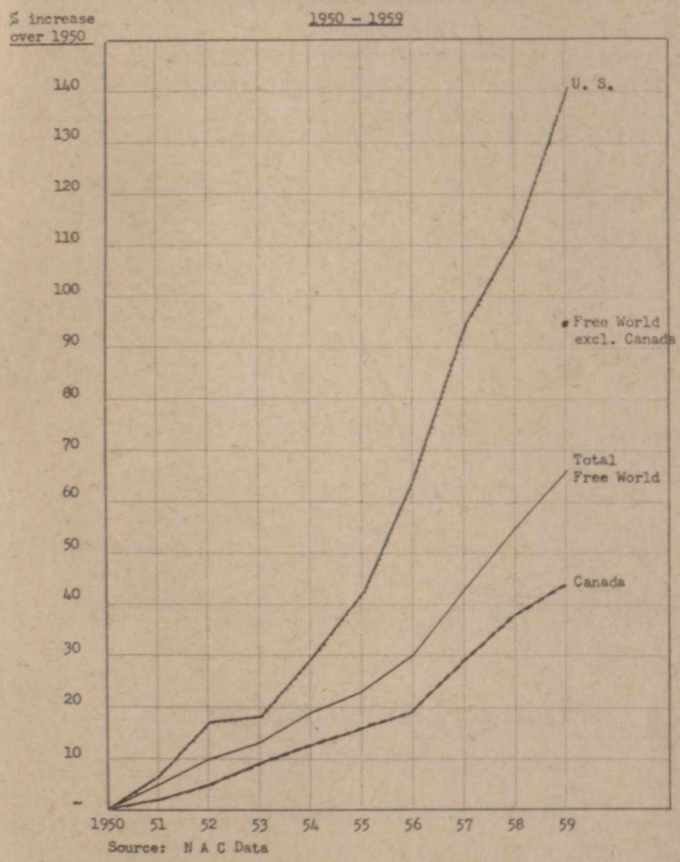
Extract from Extension of Table 63 for comparison of selected years:

Year	Total Forest Revenue	Total Expenditure	Contribution to Fire Protection
1953-54	$19,054,607	$7,724,876	$2,089,521
1957-58	31,596,335	12,161,208	2,858,204
Increase	$12,541,728	$4,436,332	$ 768,683
	(65%)	(57%)	(37%)

EXHIBIT "H"

RELATIVE GROWTH RATES of NEWSPRINT CAPACITY

in CANADA, U. S. and TOTAL FREE WORLD



Source: N A C Data

EXHIBIT "I"

RELATIVE GROWTH RATES OF NEWSPRINT CAPACITY

In CANADA, U. S. and TOTAL FREE WORLD

1950 - 1959

	Total Free World		U. S.		Canada	
	Capacity 000 Tons	% of 1950	Capacity 000 Tons	% of 1950	Capacity 000 Tons	% of 1950
1950	9,462	100	992	100	5,227	100
1951	9,925	105	1,050	106	5,340	102
1952	10,391	110	1,165	117	5,510	105
1953	10,709	113	1,170	118	5,723	109
1954	11,283	119	1,280	129	5,920	113
1955	11,657	123	1,409	142	6,064	116
1956	12,307	130	1,625	164	6,243	119
1957	13,485	143	1,921	194	6,756	129
1958P	14,651	155	2,100	212	7,239	138
1959P	15,745	166	2,380	241	7,521	144

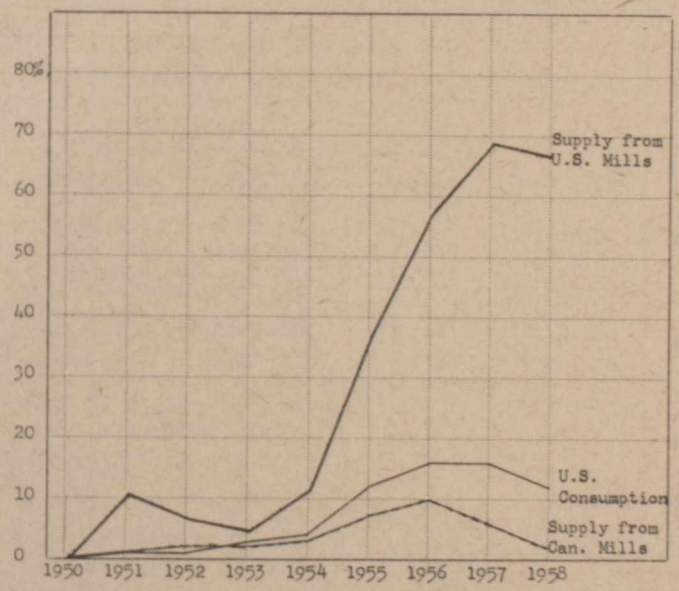
p: Preliminary

Source: Newsprint Assn. of Canada

TRENDS IN U.S. CONSUMPTION OF NEWSPRINT
and
U.S. SUPPLY FROM U.S. AND CANADIAN MILLS

EXHIBIT "J"

1950-1958



Source: N A C Data

Exhibit "K"

TRENDS in U. S. CONSUMPTION of NEWSPRINT
and in U. S. NEWSPRINT SUPPLY
from CANADIAN AND U. S. MILLS

	U. S. Consumption		From Canadian Mills		From U. S. Mills	
	000 Tons	% of 1950	000 Tons	% of U.S. Consumption	000 Tons	% of U.S. Consumption
1950	5,937	100	4,748	80	1,002	17
1951	5,975	101	4,784	80	1,108	19
1952	5,988	101	4,835	81	1,076	18
1953	6,143	103	4,861	79	1,057	17
1954	6,163	104	4,875	79	1,121	18
1955	6,638	112	5,070	76	1,374	21
1956	6,899	116	5,229	76	1,583	23
1957	6,865	116	5,055	74	1,698	25
1958	6,644	112	4,827	73	1,676	25

Source: Newsprint Assn. of Canada

Exhibit "L"

TRENDS IN CHEMICAL PULP PRODUCTION AND EXPORTS

	Canada			
	Production		Exports	
	000 Tons	% Increase since 1950	000 Tons	% Increase since 1950
1950	3,314		1,584	
1951	3,814	15	1,905	20
1952	3,518	6	1,675	6
1953	3,663	11	1,713	8
1954	4,057	22	1,938	22
1955	4,359	32	2,092	32
1956	4,645	40	2,083	32
1957	4,468	35	2,025	28
	U. S.			
1950	10,872		93	
1951	12,160	12	200	115
1952	12,065	11	211	127
1953	12,872	18	160	72
1954	13,431	24	440	373
1955	15,269	40	630	577
1956	16,234	49	527	467
1957	15,949	47	626	573
	Total Free World			
1950	20,660		5,112	
1951	23,359	13	5,541	8
1952	22,431	9	4,572	- 11
1953	23,850	15	5,344	5
1954	26,272	27	6,135	20
1955	29,290	42	6,751	32
1956	30,991	50	6,894	35
1957	31,786	54		

Source: CPPA Reference Tables (1950-1956)
USPPA Wood Pulp Statistics (1957)

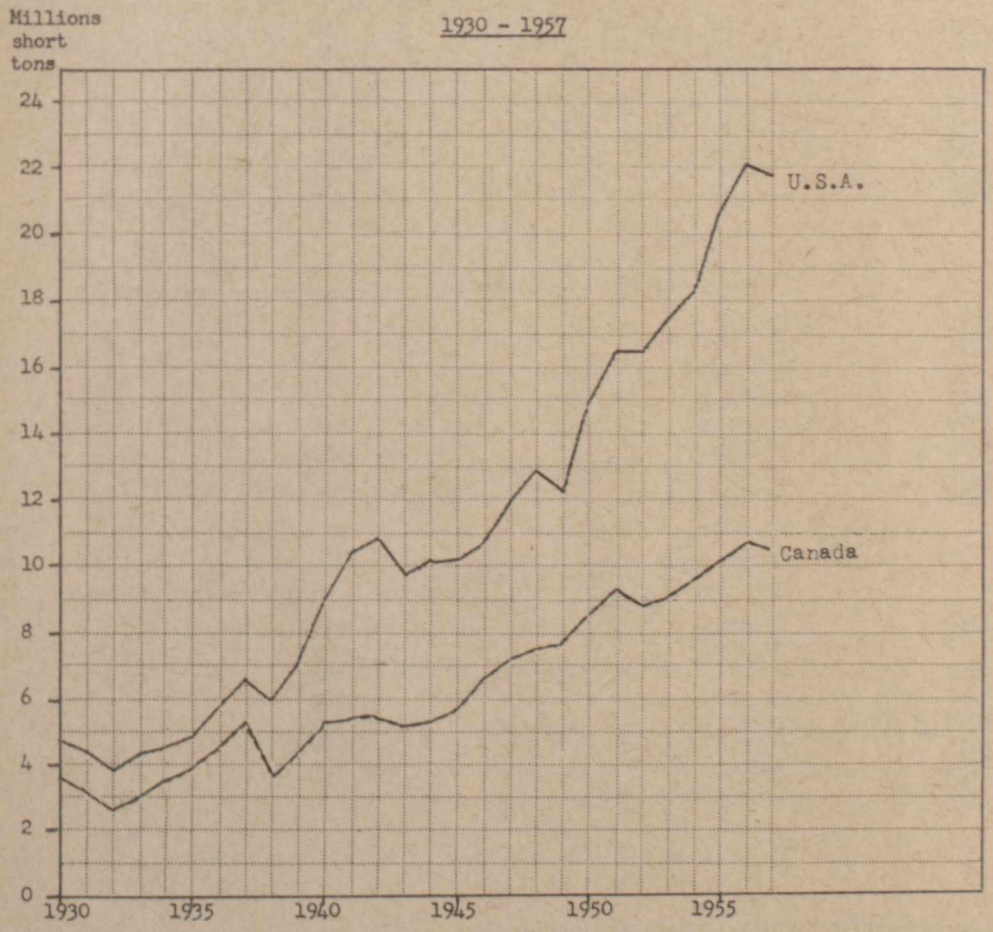
EXHIBIT "M"

WOOD PULP PRODUCTION

in

U.S. and CANADA

1930 - 1957



Source: U.S. Production - U.S.P.P.A. Wood Pulp Statistics
Canadian production - CPPA Reference Tables

EXHIBIT "N"

CANADA'S LUMBER TRADE

	Export		Imports		Net Exports	
Year	Volume MM f.b.m.	Value $Millions	Volume MM f.b.m.	Value $Millions	Volume MM f.b.m.	Value $Millions
1950	3,579	291	86	11	3,493	280
1951	3,439	313	132	17	3,307	296
1952	3,340	297	152	17	3,188	280
1953	3,377	283	159	18	3,218	265
1954	4,049	326	172	19	3,877	307
1955	4,614	386	226	26	4,388	360
1956	3,591	328	285	32	3,306	296
1957	3,647	283	237	25	3,410	258

Source: - D.B.S. & Dept. of Trade & Commerce (for 1956-57 figures).

I am in a position also to say that this brief has been endorsed by the Canadian Lumbermen's Association. This concludes the reading of the brief and obviously we are now at your disposal.

The CHAIRMAN: On behalf of the committee I must congratulate the various associations in compiling such an important brief, and I may say that I think, with the concurrence of the committee, we should send a copy of the brief to the Minister of Finance.

We were on the subject of research, and I was wondering, following a question asked earlier, if you could table the amount of money spent by the province on forestry research in the last ten years.

Mr. BEAUPRÉ: We discussed this question during the lunch hour and we are not sure that we properly understand what you are looking for. We want to do whatever is possible.

Research is such a broad item that if you refer to research expenditures by private industry, I think you will recognize that just about every phase of our industry progresses from day to day because of research done by the companies which are in the actual business of producing logs, lumber, pulp, plywood, or shingles. There is also a great deal of important research work being done by the equipment manufacturers who are responsible for it; and then there is a type of research that the industry supports and in which it has the assistance and support of the federal government through the pulp and paper research institute. So when you get into the myriad of people who contribute to the progress of our industry through private and corporate research, what kind of figure would you have us bring you?

The CHAIRMAN: I did not mean that. I meant what amount the government of British Columbia spent on forestry research.

Mr. BEAUPRÉ: I am quite certain it must be published information which we could get for you.

Mr. DOUGLAS: I have one figure for the year 1956-57 when the expenditure by the provincial government directly on forest research amounted to $155,032.

The CHAIRMAN: Have you any other figures in addition to that?

Mr. DOUGLAS: No, I just happened to have the last annual report; but we can furnish them to you later if you wish.

The CHAIRMAN: I think the committee would be interested in having them.

The meeting is open, and I think we are safe to continue until 5:15, if that is satisfactory to the members. I know we have a lot of work to do before six o'clock, and this is a Wednesday.

Mr. PAYNE: Mention was made in the report—I realize that the delegation probably will not have the figures with them—but it would be of assistance if we could have a breakdown of the access road capital spending for a recent calendar year from industry, and of what has been spent by the province. And could it be supplemented also by a figure from the federal department concerned?

Mr. MCQUILLAN: I do not want to answer Mr. Payne's question, but I doubt if there is a figure available from industry. We could probably guess at it, but it would be a tremendous job to get those figures because there are thousands of miles of roads being built by hundreds of companies.

Mr. PAYNE: I appreciate the problem. My question was one which I felt might be answered at a later date.

The CHAIRMAN: That is for the industry to say. The minister is here, and I think he could give an answer respecting the federal anticipation.

Mr. BEAUPRÉ: I think we would concur in Mr. McQuillan's comment that, considering the number of companies operating all over the province and building roads every day, to try and pick off any figure would be almost impossible, I would think.

Mr. MCQUILLAN: You could guess at it this way, by saying that if we produce five billion feet of timber annually, we—in the industry of British Columbia—would have to build about, let us say, $3 or $4 of roads for every 1,000 feet of timber. That figure, times the number of thousand feet in five billion feet of timber, comes pretty close to it.

Mr. STEARNS: I think that is as close as you will get to it, because I do not think the companies would want to disclose the figure.

Mr. MCQUILLAN: That would be a way of getting at it by mathematics.

Mr. PAYNE: I do not want to hold the committee up. If it is convenient for industry to supply approximate figures—also, if we could get the figure that has been expended by the province—we could no doubt call for figures from the deputy minister of the spending, from the federal point of view, for all provinces. Is that available?

Hon. ALVIN HAMILTON (*Minister of Northern Affairs and National Resources*): Yes, we have that information available.

Mr. BEAUPRÉ: I would agree that it would be very difficult to get a figure, and Mr. McQuillan's rule of thumb is a fairly good one. But I think it is fair to mention that many companies—because of the management licence requirements—build access roads even though they are not cutting any timber. It is a requirement for management to build fire roads, and it is a reasonably heavy requirement. That is another thing that is being done by companies to protect the natural resource. Those roads, of course, would come outside the roads that they would develop.

Mr. PAYNE: That is precisely what I am trying to get at.

Mr. HAMILTON (*Qu'Appelle*): At this stage, do I understand that Mr. McQuillan has stated that the road costs would be between $3 and $4 per 1,000 board feet, on the average, for the various companies in British Columbia?

Mr. MCQUILLAN: That would certainly apply on the coast. Perhaps it would be not quite so high in the interior; but you must realize that the bulk of the cut comes from the coast. It would probably cost around $3 to $4.

Mr. HAMILTON (*Qu'Appelle*): If we took that figure of $3 to $4, and a figure of 5 billion feet cut, that would give an annual cost of around $15 million in British Columbia. We know the federal figures, and by adding the two you would get pretty well the provincial figure, unless the province is doing work of its own. Maybe that is as close as we could come to it at this stage.

I wonder if Dr. Harrison could put a figure on what we spent on forest access roads as a federal contribution as part of the winter works program in the last two years? Dr. Harrison says he has the provincial figures too. If those are put in now, the evidence will be coherent.

Mr. HARRISON: Are these solely for British Columbia?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARRISON: There are what can be regarded as two programs of federal assistance to the provinces in forest access road construction. The first one extended from the period January 2, 1958, to June 30, 1958. For British Columbia the total provincial expenditure under this scheme was $647,183, of which the federal share was $323,592.

The second scheme of this kind extends from November 1, 1958 to June 30, 1959. The total expenditure and the federal contribution up to the end

of the period are estimated, though we have interim figures for the beginning of the period. The estimated total expenditure by British Columbia will be $810,028, and the estimated federal share total will be $405,014.

Mr. HAMILTON (*Qu'Appelle*): Have you the figures for the other part of the five-year agreement, the fire prevention roads?

Mr. HARRISON: No; but they are very, very small.

Mr. MCQUILLAN: While the minister is here, I would like to ask him this question. The federal contribution towards access roads is considered as a temporary measure for the alleviation of unemployment. Is there a possibility that it could be extended in the future on a permanent basis?

Mr. HAMILTON (*Qu'Appelle*): The answer to that, policywise, is that we have had this program in operation for two winters, and there has been representation made to the federal government that by the time June 30 comes the program is really just getting into high gear. They would like us to make this on an annual or year-round basis.

We have been discussing this at policy level on a few occasions, wondering what formula we could arrive at that would be relatively equitable in putting this on an annual basis. But that is as far as we have gone, and it has not got up to government policy level; we have been discussing this purely within the department.

Mr. FISHER: To my mind, Mr. Chairman, this brief comes down to three essential points. The main one is the question of taxation; the second one is the question of what the federal government should be doing, say, in the field of sylviculture and research to tie in with the provinces, and the third one is the recommendation of freight rates.

I would like to start with the first—and I think the most important one—and ask questions dealing with taxation.

Is the situation in British Columbia similar to Ontario, where in Ontario the provincial government states, and has stated, this? I have a quotation here from the Provincial Economist on the matter, and in effect, it is this—the extra logging tax was necessary just in order that the province could take care of its own program of protection, conservation and all the rest, as long as the federal government was taking an inordinate share of the profits from the forest industry. Have you a similar situation in British Columbia?

Mr. CHAMBERS: I would imagine that is a question of provincial policy. It is very hard to pronounce on it. In the first place, the statement of Ontario that they need that amount of revenue to offset their forest protection program is one on which I am not qualified to comment. But in British Columbia, I would say this, that the revenue from the forests—and I think Mr. Douglas can probably bear me out on this—would be infinitely greater than the amount spent on forest protection. They gather in something between $10 million and $20 million by way of revenue from the forests in the course of a year. It just depends on the price of timber and the quantity sold during the year.

Mr. FISHER: Perhaps I could put the question in focus with this quotation from an article by George Gathercole, deputy minister of economics, province of Ontario which appeared in the *Canadian Tax Journal* in November of 1957, I bring this up because in your brief you linked British Columbia and Ontario. He says:

> Despite the increased rates imposed in 1957—

That is the tax about which you are speaking.

> —Ontario still derives a smaller proportion than the federal government of the tax revenue paid by the forest industries, and indeed by other natural resource industries. Although constitutionally the title to such resources is vested in the province and it has the responsibility for

conservation and management, Ontario, even with its logging tax and 2 per cent higher general corporation income tax, will receive about 40 per cent of the total taxes paid by the forest industries, while the federal government will receive the lion's share of 60 per cent.

Does roughly the same situation apply in British Columbia?

Mr. CHAMBERS: Roughly; yes. Now they are dividing the total revenue of the federal income tax. I think, however, in most of these calculations they overlook the rental payments which comes back in the guise of a general grant. If you break that down, the contribution by the forest industry in the province goes into the federal treasury and back again in the form of a grant. Sometimes that is overlooked.

Mr. FISHER: That very misunderstanding would be another reason for asking for a study of the forest taxation problem as an urgent matter on the part of the federal government.

Mr. CHAMBERS: Yes. Furthermore, I do not think that a proper criterion is the amount spent on forest taxation and the amount of revenue collected. Really the two should not bear a relationship of equality. It does not matter whether you spend ten per cent on forest protection.

Mr. FISHER: The minister already made that point in the House of Commons.

Mr. CHAMBERS: I am not aware of that, but I appreciate it.

Mr. FISHER: Your main position in so far as taxation is concerned is that you feel there should be some tax incentives in order to increase the capital investment and the expansion of the resources.

Mr. CHAMBERS: It is my understanding that the tax incentives given to the mine and oil industries are for that purpose. That is to say, they are to increase the incentive, increase the industry generally and in that way contribute to the national economy. As we say in the brief, this is not a give-away policy. It is just good business, in a sense, to dip your bucket down at the mouth of the river rather than at the head of the stream.

Mr. FISHER: You deliberately steer away from making any comments on this extra tax which Ontario and British Columbia have. However, this economic flow, you have said, could be an area of business negotiation on the part of the federal government in order to wipe out what you consider is an inequity.

Mr. CHAMBERS: Most definitely.

Mr. FISHER: That is another thing for any taxation study to take into account.

Mr. CHAMBERS: Yes.

Mr. MCQUILLAN: I have here a couple of reports of large United States companies, Weyerhaeuser and Georgia-Pacific, which I believe are in California and Oregon. They show a federal income tax rate of 37½ per cent. How does that compare with what you people have to pay under the present-day taxation measures.

Mr. CHAMBERS: I might mention that this brief was prepared before the distressing budget announcement of the extra 3 per cent. The figure of 47 per cent is now 50 per cent. In terms of present-day rates now in British Columbia we have an effective tax rate of somewhere between 52 and 53 per cent, depending upon the operation of the logging tax formula. To round it out, say 52½ per cent. That will be a general average. The Wayerhaeuser Company rate was 32½ per cent last year. Their normal rate would be 52 per cent; in other words, it would be pretty well in equality with us. How-

ever, due to the depreciation allowance, the effective rate is down to 37½ per cent. I think in the case of Georgia-Pacific, it is even lower,—around 30 per cent.

Mr. McQUILLAN: To my knowlege, there is one major pulp mill contemplated at the moment in British Columbia. Do you know of any others which are being considered in view of the taxation matters?

Mr. CHAMBERS: I am sorry I did not follow your question?

Mr. McQUILLAN: Do you know of any other new plant in the pulp and paper industry in British Columbia?

Mr. CHAMBERS: No, the only expansion going on at present is Columbia Cellulose.

Mr. McQUILLAN: Of course, that is by virtue of an agreement in respect of a forest managament licence. Is that not so?

Mr. CHAMBERS: Yes.

Mr. HAMILTON (*Qu'Appelle*): In answer to Mr. McQuillan's question, I believe there is an Italian firm which has been doing a study in British Columbia looking into the possibilities of a pulp plant there. The Italian firm has been studying the possibilities in several parts of Canada, one I know being British Columbia.

Mr. McQUILLAN: What I am trying to point out is that tax rates in the forest industry have become so high out there that they come, take a look, and then back away from it.

The CHAIRMAN: Would the tax incentives to increase the capacity of the industry, of which you are speaking, improve its competitive position enough if it could sell its added output; or are there other factors, such as labour costs, distances from markets, and so on?

Mr. CHAMBERS: We deliberately have not advocated that these tax incentives be granted, but rather at the moment they be studied as only one measure of combatting the other physical disadvantages.

The CHAIRMAN: Would you comment on the labour costs, the distance from markets and other factors relative to the cost of producing and the ability to sell in foreign markets as well as in Canadian markets?

Mr. BEAUPRÉ: I think every thing you have mentioned is absolutely true, and worrisome to us. We have mentioned in the brief that our capital costs, for instance, are high.

The CHAIRMAN: What do you include in the capital costs?

Mr. BEAUPRÉ: The capital cost of building a mill or any kind of manufacturing plant. Labour costs certainly are high. Hydro costs are high. All these things are absolutely true. Also from long-term studies we know the market for pulp and paper products will expand. This is a normal feature of the increasing population and the increasing standard of living.

Therefore I think it must be accepted as a matter of interest to the national economy that, despite some of these problems we have, every possible study should be made to find ways and means of ensuring that Canada is not left behind in future participation of forest industries of the world. Obviously we do not want to sit here and let our forests go into decay, as are so many of them at the present time. We want our forests to be a valuable source of wealth.

I think there are a number of companies in Canada, certainly in British Columbia, which have indicated their willingness to make every effort to develop this wealth. In British Columbia we do have considerable disadvantages and we suggest this is a further reason why a careful and immediate study should be given to ways and means of ensuring that Canada, and British Columbia, is given the opportunity of participating in future expansion.

It is not a thing that will happen next month or even next year, but as is mentioned in our brief, trends of this nature are usually laid down four or five years before the mill is actually in production; and the trends we see in the industry are sufficient to indicate to us there are possibilities in Canada if we have an economic climate to permit our expansion.

The CHAIRMAN: If I may follow this through with one or two questions with relation to the cost of production, I notice from your brief output per man per year is $11,000, the highest in Canada is $17,000 in one area, and the average is $7,000. I know several members of the committee have asked if you could put in the minutes a table showing the wages, your labour costs in British Columbia, and also relative freight and other costs in competitive markets.

Mr. BEAUPRÉ: Certainly wage rates, Mr. Chairman, are available. The majority of our industry strike their bargains as an industry, and our labour agreements are public. They could give you the base rates and various category rates. There is no difficulty about that.

The other question, freight rates—

Mr. CLYNE: We could give you the freight rates. At the present time, of course, freight rates are low—that is, the ocean freights—and that is one reason why we are able to sell overseas. Any substantial increase in ocean rates may completely bar us from European markets.

As far as freight rates are concerned, even with the low freight rates we are no longer selling, for instance, in South Africa. That market has been lost to us completely.

The CHAIRMAN: Is it agreed, gentlemen, we will have a table of the rates of the level of the forest industry in British Columbia?

Agreed.

Mr. FISHER: Are you going to request the Department of Labour to provide them?

The CHAIRMAN: I do not think we will have to ask the Department of Labour. I think this committee can get this information. It is as well to have it on the record.

Mr. HERRIDGE: Mr. Chairman, I would like to ask a question because of the committee's interest in the various costs of production; and I do so because I have been a microscopic tree farmer for over 50 years, and therefore know the costs of maintaining small tree farms. On page 8 and at the top of page 9 of the brief, reference is made to the fact that forest potential, as between the United States and other countries, has been increased because of technological advances in the industry which permit the use of a wider range of species.

I want to draw particular attention to the sentence:

> Growth rates of these trees are frequently many times Canadian growth rates.

When one is operating a tree farm he should remove the virgin timber; and then, when you are getting the second growth, the whole set of circumstances changes. It is a question of long tenure, a long-term investment, and a olonged development.

I have maintained in the house over a number of years that these factors should be given consideration in relation to taxation; but in order to bring out the disadvantage suffered by tree farmers in British Columbia, could Mr. Beaupre inform the committee of the variation in the rates of growth regarding the same species, as between the species in British Columbia and species in other countries that are mentioned?

Mr. BEAUPRÉ: I think I may ask Mr. Douglas, Mr. Chairman, to answer that question. I think he might have some data on that subject.

Mr. DOUGLAS: Perhaps the most dramatic illustration, Mr. Chairman, is a wood sample which I brought with me.

This is a section of Douglas fir, young growth, in British Columbia, about as good as you could get. That section represents about 18 years of growth. This is a section of pinus radiata, from New Zealand, where they have planted it. It is a transplant from California. That is five years of growth.

Mr. HERRIDGE: Mr. Chairman, could Mr. Douglas mention the diameters, for the sake of the record?

Mr. DOUGLAS: I have not measured them, and I do not have a ruler with me, Mr. Herridge.

Mr. HAMILTON (*Qu'Appelle*): I will go and get a ruler.

Mr. DOUGLAS: About 18 years, and that is about our best. This one from New Zealand is five years.

I will give you one or two figures to illustrate—

Mr. FISHER: Have you any figures on relative cellulose content?

Mr. DOUGLAS: No, I have not. It is hard to give a broad average because growth varies a great deal from place to place. On the B. C. coast, which is our fastest growth area, our yield tables indicate for our very good sites what we call a mean annual increment. That is the average rate of growth up to a mean age in the neighbourhood of 50 to a top of 200 cubic feet per acre per year.

Mr. MCQUILLAN: Mr. Douglas, would you mind giving us the factor to convert that to board feet? I know you foresters always use cubic feet.

Mr. DOUGLAS: I suggest you multiply that by five.

Mr. MCQUILLAN: I use six.

Mr. DOUGLAS: Six is for larger timber; but five is all right. I think it would be fair to use on the coast, not all over but as a coastal average, about 120 cubic feet per acre per year; or, let us say, in the neighbourhood of 500 to 600 board feet per acre.

I will give you some figures from other parts of the world.

The CHAIRMAN: We are all anxious to know what these measure, now I have brought a ruler.

Mr. DOUGLAS: This fir is eight inches inside the bark.

The CHAIRMAN: That is eight years?

Mr. DOUGLAS: No, 18 years. I am not sure at what height that was cut: it might have been three feet; it might have been one foot. This is pinus radiata from New Zealand. Its size is an average of nine inches at five years.

So, for a few comparative growth rates for coastal British Columbia, let us say 100 cubic feet per acre per year.

In New Zealand this pinus radiata, as an average, is 300 cubic feet per acre per year, and runs as high as 375. Australia has the same rate. Pines in South Africa, 250 cubic feet per acre per year.

The Douglas fir transplanted to Great Britain, 120 cubic feet per acre per year. I have seen figures for Douglas fir transplantations in Denmark, and they are higher than that; but I do not have the figures here.

Another great area of growing competition with us is the southeastern United States. I do not have exact figures for the growth, but I do know that they are cutting pulpwood at ages of 15 to 20 years, and are cutting saw logs at ages of 30 years; whereas we are inclined to think in terms of 70 to 100 years.

The CHAIRMAN: Would you measure that top one again, please? There is some dispute.

Mr. DOUGLAS: That is the pinus radiata, I would say 9 inches; it is 9 inches one way and 9½ inches the other way. I think those are all the ready figures I can give you.

The CHAIRMAN: I wonder, gentlemen, if it would be satisfactory if we pursued this discussion in the morning. I must say that this brief has opened up a very interesting chapter in the proceedings of our committee and I hope all of you will be here tomorrow morning.

Mr. FISHER: Mr. Chairman, I just received a phone call from Toronto and Mr. Ambridge is unable to attend on Monday; he has been out of town. However, he can make it on Tuesday.

The CHAIRMAN: That is quite all right. Gentlemen, due to a previous commitment by members of the committee, would it be satisfactory if we called the meeting at 9.30 tomorrow morning?

Mr. BEAUPRÉ: Or possibly 10 o'clock.

The CHAIRMAN: What other meetings are on?

Mr. FISHER: Broadcasting is on.

The CHAIRMAN: We will have to find out the time of the other meetings. We will have a two-hour meeting some time in the morning. I might say the notices already are out for 9 o'clock; please disregard those, you will receive others.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
MAY 26 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 21

THURSDAY, MAY 14, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

WITNESSES:

The Honourable J. V. Clyne, Chairman of the Board, MacMillan and Bloedel Limited; Mr. T. N. Beaupré, Chairman, British Columbia Division, Canadian Pulp and Paper Association; Mr. L. R. Andrews, Executive Vice-President, British Columbia Lumber Manufacturers Association; Mr. R. G. Robertson, Deputy Minister; Mr. J. D. B. Harrison Director, Forestry Branch; Mr. J. H. Jenkins, Chief, Forest Products Laboratories Division; Mr. J. A. Schryburt, Director, Pubic Relations, Canadian Lumbermen's Association; Mr. W. Breitenbach, President, Alaska Pine and Cellulose Limited; Mr. M. J. Foley, President, Powell River Company Limited; Mr. Charles Dickey, President, British Columbia Forest Products Limited; Mr. Ross Douglas, Vice-President, Forestry, Alaska Pine and Cellulose Limited; and Mr. Charles Chambers, Comptroller, MacMillan and Bloedel Limited.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21224-1—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.
and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric, H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, May 14, 1959.
(23)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

In attendance: Messrs. Aiken, Baskin, Dumas, Fisher, Fleming (*Okanagan-Revelstoke*), Kindt, MacRae, Martel, Martineau, McFarlane, McGregor, McQuillan, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Payne, Simpson, Slogan and Stearns—(19).

In attendance: The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources *representing the British Columbia Forest Industry Associations:* Mr. T. N. Beaupré, Chairman, British Columbia Division, Canadian Pulp and Paper Association; The Honourable J. V. Clyne, Chairman of the Board, MacMillan & Bloedel Limited; Mr. M. J. Foley, President, Powell River Co. Limited; Mr. W. Breitenbach, President, Alaska Pine & Cellulose Limited; Mr. Charles Dickey, President, British Columbia Forest Products Limited; Mr. Charles Chambers, Comptroller, MacMillan & Bloedel Limited; Mr. John Burke, Secretary-Manager, British Columbia Loggers' Association; Mr. L. R. Andrews, Executive Vice-President, British Columbia Lumber Manufacturers Association; and Mr. Ross Douglas, Vice-President, Forestry, Alaska Pine & Cellulose Limited: *of the Department of Northern Affairs and National Resources:* Mr. R. G. Robertson, Deputy Minister; Mr. J. D. B. Harrison, Director, Forestry Branch; Mr. J. H. Jenkins, Chief, Forest Products Laboratories Division; Mr. H. W. Beall, Chief, Forestry Operations Division; and Mr. D. R. Redmond, Chief, Forest Research Division and of the Canadian Lumbermen's Association: Mr. J. A. Schryburt, Director, Public Relations.

Mr. H. W. Herridge, M.P., not being a member of the Committee, again sat at the table.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Continuing on Item 281, Forestry Branch, Branch Administration, questions arising from presentation of the brief of the Forest Industry Associations of British Columbia on May 13 were asked of the representatives of that organization and of officials of the Department of Northern Affairs and National Resources.

The Committee completed its examination of the said brief.

At 12.40 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Monday, May 18, 1959.

Eric H. Jones,
Clerk of the Committee.

21224-1—1½

EVIDENCE

THURSDAY, May 14, 1959.
10.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. We have with us again this morning the representatives of the B.C. Forest Industry Associations, and we will continue from yesterday's proceedings.

Mr. BASKIN: Mr. Chairman, I would like first of all to introduce Mr. J. A. Schryburt to the meeting this morning. He is director of public relations, Canadian Lumbermen's Association. It is hoped that perhaps next week we will have time to call several witnesses from among the lumbermen in eastern Canada, perhaps one or two members of the Canadian Lumbermen's Association. I would like to introduce at this time Mr. J. A. Schryburt.

The CHAIRMAN: You are welcome to sit in at the meetings, Mr. Schryburt, and I am sure you will be interested in our proceedings of yesterday, as well as of today, and what we are having next week.

On Monday we are having representatives from the Canadian Pulp and Paper Association, and other representatives on Tuesday, including Professor David Love, Faculty of Forestry, University of Toronto, Mr. D. W. Ambridge, president, Abitibi Power and Paper Company Limited, and others. Your representatives will no doubt not be heard before Wednesday, but you are welcome to sit in.

Mr. J. A. SCHRYBURT (*Director, Public Relations, Canadian Lumbermen's Association*): Thank you, Mr. Chairman.

Mr. MCQUILLAN: Mr. Chairman, there are a couple of questions I would like to ask.

The CHAIRMAN: Will the members sit as far forward as they can, because this is a terrible room from the standpoint of acoustics? Will the members, and any others who are interested, please come right up to the end of the tables?

Mr. MCQUILLAN: First, I wonder if somebody would explain a little further the implications of this term "fall" clause that the Russians have in their lumber quotations—and, I presume, the same thing in their pulp and paper quotations—to the United Kingdom market?

Hon. J. V. CLYNE (*Chairman of the Board, MacMillan and Bloedel Limited*): I am not quite sure, Mr. McQuillan, about the pulp and newsprint. The "fall" clause is the ordinary slang phrase in commercial use—it is used in commercial documents—and is a provision that when a sale is made at a certain specified price, and the price falls during the term of the contract, the purchaser will get the benefit of any decrease in price.

Mr. MCQUILLAN: That is a pretty hard clause to meet, for industry operating in a free enterprise country.

Mr. CLYNE: It is very difficult, because we know the Russians are really not concerned about costs. They have been overhanging the U.K. market for some time, and when they do come into the market they can simply sell at a lower price than we can, to start with; and then if there is any fall in the market the purchaser, again, gets the benefit. It has put us in a position, frankly, that as far lumber is concerned we just cannot compete, except in special products.

Mr. McQUILLAN: Once they get in there, it is almost impossible to get them out?

Mr. CLYNE: That is so.

Mr. McQUILLAN: Because if you quoted a lower price, they would meet the price, or perhaps go even lower?

Mr. CLYNE: Yes.

Mr. McQUILLAN: I think some mention was made—I do not know whether it was made in this report—that last year for the first time Russia had entered the pulp and paper market in the U.K.; is that correct?

Mr. CLYNE: They have entered the pulp market. I am not sure that last year was the first time, but I know that they are in there. Also, they have entered the pulp market in the United States.

Mr. McQUILLAN: Is there not some place in this brief where it is stated they have exported something like 200,000 and some odd tons? The figures running through my mind were to the effect that Russia produced about 2,300,000 tons of newprint and exported 230,000 tons, and it is anticipated that within a year or two she will produce about double that, 4,600,000 tons. If she continues to export in the same proportion, she would be then exporting 460,000 tons. Am I correct in that?

Mr. T. N. BEAUPRÉ (*Chairman, B. C. Division, Canadian Pulp and Paper Association*): Mr. Chairman, I think those figures are about as accurate as any information we have. I think it is really pulp, as well as newprint. Of course, the significance of the figure is that Russia should be a net importer of pulp. Obviously, she is deliberately shipping pulp out; it is not a surplus they have to get rid of. It is, possibly, just a part of their commercial policy, to intrude into free markets, and commercial examination and exploration of the free markets.

Mr. PAYNE: Mr. Chairman, perhaps I can preface my question with this comment. Yesterday Mr. Fisher made the summation of the brief, that it fell into three basic classifications: taxation, silviculture and research, and the third was freight rates.

I am very pleased that Mr. McQuillan has started questioning on another phase of the brief, because on pages 2, 3, 4, 6, 9, 17 and 18—to mention but a few, going hastily through the brief—it strikes me that one of the main problems facing the industry today is markets.

Having said that, I would like, if possible, to ask Mr. Beaupré or Mr. Clyne if either of them could say a few words relative to the merchandising methods followed both in the lumber and the pulp field, keeping in mind any suggestions they may have as to helpful assistance that is given or, in their opinion, can be given, by federal agencies. I wonder, if Mr. Clyne has, as I believe he has, certain experience in connection with studies in this respect, if he would give us his views relative to the Chinese market. We speak so glibly in round terms of the potential markets in that area. I would like to know whether or not there is anything fundamentally factual as to whether or not there is a market there and, if so, how we could approach it?

Mr. CLYNE: I will endeavour to answer that very briefly. In dealing with Mr. Payne's last point, as he well knows coming from British Columbia, the orient is our traditional market. At one time we did a very large trade with China and Japan. Now that market virtually has been lost to us. My firm obtains monthly reports as to the economic conditions inside Red China. The progress which is being made in Red China in all forms of manufacturing is quite amazing.

Undoubtedly, there is a market in China for our products. Frankly I do not know how we are going to get into that market without recognition. The

information I have indicates that the Chinese are extremely unfriendly to countries which have not recognized them. I do not see any opportunity of trade in Red China to any great extent unless there is some kind of diplomatic recognition. I do not know whether or not I am going too far or whether I am in order in discussing that subject.

Mr. PAYNE: Do you have any indication of the volume of the potential in either finished lumber or pulp; or have you any basic approach in respect of the financial arrangements which would be satisfactory?

Mr. CLYNE: I am satisfied they have the dollars. When the Chinese trade mission was here some six months ago, I discussed with them means of developing some kind of trade. Of course, they are most anxious that when we sell to them we buy in exchange.

As you know, the Chinese are anxious to make barter deals. From the point of view of the lumber and pulp industry, barter deals are not satisfactory. I am, however, quite satisfied that the Chinese would be able to pay in cash, provided we likewise were buying in cash from China.

On the other point which Mr. Payne raised, in respect of the facilities of the department, I think perhaps Mr. Andrews, who is the secretary of the British Columbia Lumber Manufacturers Association, might be able to give some information as to the facilities in the United Kingdom and elsewhere.

Mr. MCQUILLAN: Along the lines that the Department of Trade and Commerce plays?

Mr. CLYNE: Yes.

Mr. L. R. ANDREWS (*Executive Vice-President, B.C. Lumber Manufacturers Association*): In general, all the departments of trade and commerce practically all over the world are conscious of the conditions of the forest industry of British Columbia, in that it is an export industry and we are interested in all these markets. In the United Kingdom the British Columbia forest industries have maintained an organization there for many years. Pre-war, and as soon as trading conditions returned after the war, we put in an organization which works very, very closely with the Department of Trade and Commerce, in Canada House in London.

As a matter of fact, the federal government has had a commercial counsellor, a timber specialist, in England at Canada House for many years.

Our organization and the organization in the field in the United Kingdom for the plywood association works very closely with trade and commerce. I would not like to let this opportunity pass without expressing our very great appreciation for the cooperation and active assistance given to our trade extension efforts by the trade and commerce organizations in the United Kingdom and also in Australia, South Africa—which are two of our important waterborne markets—the West Indies and in various other countries, particularly empire countries.

The CHAIRMAN: What about China?

Mr. ANDREWS: As far as China is concerned, we have no direct contact there. Of course we have the benefit of the trade commissioner at Hong Kong, who has made a number of reports on that.

The CHAIRMAN: Has the Department of Trade and Commerce done anything relative to your suggestions in respect of trade with China in relation to your products?

Mr. ANDREWS: No; there is nothing definite.

The CHAIRMAN: Have you approached them?

Mr. ANDREWS: We do feel China needs our lumber.

The CHAIRMAN: Have you approached the Department of Trade and Commerce with a view to obtaining their cooperation in getting into the Chinese area?

Mr. ANDREWS: Yes.

The CHAIRMAN: Recently?

Mr. ANDREWS: Within a reasonably short time; yes.

Mr. KINDT: In view of the cancellation of the Japanese treaty by China a year ago, has that had any effect on types of relationships which might improve the market position of British Columbia lumber and lumber products?

Mr. ANDREWS: I am not directly able to answer that. However, we do feel China and Japan are dependent on, and have access to, certain sources of supply of lumber which, as a matter of fact, existed pre-war. They bought their lumber and lumber products from the west coast of North America in preference to the Siberian source of supply only because our lumber was cheaper. Without trading relations now, they are using the same source of supply and, no doubt, it is costing them a little more than if they would trade with us. Trade barriers, however, are such that that has not happened yet. I confidently hope and expect that sooner or later they will come into the market for some of our products.

Mr. KINDT: One of the other witnesses mentioned that lumber and lumber products do not lend themselves to barter transactions. In your struggle to capture some of the oriental markets have you found that they, in turn, are insistent upon barter transactions?

Mr. ANDREWS: I am not in a position to answer that.

Mr. PAYNE: Getting back to this matter of the federal agencies and their co-operation, if you will pardon me for saying so, I do feel—and I say this kindly —that the lumber industry from the west coast have a great many men who are not too articulate and who worry about hurting people's feelings. I think, if we are to get down to basic facts, that we have to be a little more outspoken. In respect of the efficiency of sales agents of one department or another, is this confined to Australia, the United Kingdom and New Zealand? What is the potential in other parts of the world? Are you receiving assistance? Are they actively searching out markets for the Canadian industry?

Mr. ANDREWS: I would say the officers of the Department of Trade and Commerce in various countries are actively searching out markets for us. In fact, just the other day we had a visit from the Canadian trade commissioner from Chicago who was most enthusiastic in his belief that there are larger opportunities in the United States. He was giving us very good advice on how to go about obtaining them. That is so in many other markets.

Mr. PAYNE: Do they cover what you consider to be the potential markets, or are some of these potential markets not receiving coverage in this way? I am thinking of Ceylon, India, certain of the countries in the Malay straits area, and South Africa, where we have a decline in our exports.

Mr. ANDREWS: Yes, I would say they are actively engaged in empire markets particularly. In connection with Ceylon and India, they have been of very considerable assistance in respect of certain types of forest products such as treated sleepers for railway ties. To a large extent their efforts have very greatly assisted in the business which we are doing in those markets.

Mr. PAYNE: In the last few years western Germany with their increased construction must have a demand for a lot of materials such as plywood. Are we approaching that market?

Mr. ANDREWS: Yes. We do sell specialties in forest products to West Germany. They are, however, very close to the Baltic market. They also themselves manufacture a lot of plywood.

Mr. PAYNE: What kind of assistance are you receiving? Is it basic information, statistical information, or something to guide you directly to a market?

Mr. ANDREWS: We have statistics and trading information which may result in leads to certain specific business at times. I do not know whether or not I have anything further to say on that particular subject.

Mr. PAYNE: Am I to assume it is your opinion that the most aggressive assistance possible is being given you in the diverse markets of the world?

Mr. ANDREWS: Mr. Chairman, I think that the trade and commerce officers in these various markets, of course, have to cover all Canadian products. I do believe they give our products very, very excellent attention, and we do benefit very greatly by their efforts.

The CHAIRMAN: There is one question I would like to ask. In view of the grouping of certain European countries as a common trading block, so to speak, what effect will that have on your industry?

Mr. ANDREWS: Mr. Chairman, that is very difficult to answer.

The CHAIRMAN: What do you anticipate? I know it is a difficult question.

Mr. ANDREWS: Personally I do not anticipate it will have too much effect. As far as our markets are concerned for lumber and plywood, I think we will not be hurt very materially by this new grouping of countries in respect of trade.

The CHAIRMAN: Is it not a fact the resistance in respect of the purchase of forest products from Canada is price? In other words, are you pricing yourself out of the competitive market?

Mr. ANDREWS: I suppose it might be stated in that way. Actually, our laid-down costs for the more common grades of our products are too high to meet the competition from Russia and the Baltic.

The CHAIRMAN: How much too high?

Mr. ANDREWS: Just high enough that we do not get the business. We have, however, to haul our product 1,600 miles against 600 miles from the Baltic and Russia. We are a high-cost producing country. We are more efficient and more aggressive, I believe, in merchandising our products. As far as the United Kingdom and many other principal markets are concerned, we have had the benefit of some tariff preference. Our shipments have dropped from about 800 million feet to about half that. The slack has been taken up by Russia and by the liquidation of the strategic stocks carried by the United Kingdom after the war.

The CHAIRMAN: You say that is due to a higher price for the Canadian product.

Mr. MARTINEAU: Has the witness any comment to make in respect of the imports of plywood from Japan?

Mr. ANDREWS: No, I do not think it is in any way injuring our domestic market.

Mr. MARTINEAU: Is it a fact that this plywood is underselling our own Canadian products in Canada?

Mr. ANDREWS: It is competing with our own products. It is a different product from the product we manufacture.

Mr. MARTINEAU: Is it not used as a substitute?

Mr. ANDREWS: It is used for certain decorative purposes. It competes with some of the specialty plywoods we manufacture for specialty purposes. However, I do not think our industry feels it is harming us in any way.

Mr. STEARNS: Is it not true that most of the Japanese plywood sells in competition with our low grades and does not affect our higher grades?

Mr. ANDREWS: My information is it competes with our higher grades. It does not compete with our sheathing and construction grades.

Mr. STEARNS: Are you speaking of fir or hardwood plywood?

Mr. ANDREWS: Fir plywood. It may compete with birch plywood manufactured in the east, but it does not compete very much with Douglas fir plywood which we manufacture in British Columbia.

Mr. MCQUILLAN: I would like to ask about the Japanese market. I gather we are not playing too big a part in the Japanese market. From where are they procuring their forest product requirements?

Mr. ANDREWS: Mr. Chairman, I think the Japanese are liquidating some of their own stands of timber in the Hokkaido island and in different islands of Japan. They are drawing from the Philippines and the South Sea islands lumber of various kinds. I think they get lumber as well from Siberia.

Mr. MCQUILLAN: Do they get any from the United States?

Mr. ANDREWS: Very little. The United States west coast is in about the same situation as we are. Prior to the war Japan and China were good markets both for the west coast of the United States and for British Columbia. They, however, are not active in that market any more.

Mr. PAYNE: Are lumber and pulp products today considered to be in the strategic class?

Mr. ANDREWS: I would not know.

Mr. DUMAS: Mr. McQuillan was speaking about this Japanese market. If they are using their own market and are likely to deplete their own stand of timber, perhaps it is due to our prices being too high. Is that not the case?

Mr. ANDREWS: I think it is a combination of circumstances such as the difficulty of getting Canadian hard dollars for one thing, and probably our prices are higher than they can obtain from other sources, their own resources, and what they can buy in the orient. I think, however, we all hope that sooner or later we will return to trading with Japan, although perhaps not on as extensive lines as we did pre-war.

Mr. DUMAS: In your brief, I notice that exports to the United Kingdom have dropped from 28.6 per cent to 14.7 per cent—28.6 per cent in 1954 and 14.7 per cent in 1957. On page 19 of the report it indicates that we are the fourth exporter to the United Kingdom. I see here that it is mentioned Sweden and Finland are assisted by their lower production costs and comparatively short ocean haul, and that Swedish and Finnish shippers are trading to show a profit. Then it says that this is not necessarily the case with Russian shippers. Does that mean that in Russia they are not trading for a profit?

Mr. ANDREWS: I think the way to describe that is that the Russians look at the actual market and decide they want to ship three or four hundred million feet to the United Kingdom this year, determine what they can get for it and offer it at that price. They also offer the buyer the protection that if he can obtain a lower price from any other source, that he would be protected by having his price adjusted downward to the other price.

The CHAIRMAN: That is the "fall" clause.

Mr. ANDREWS: Yes.

Mr. PAYNE: Is it your contention that the Russian merchandising is done as a weapon to undermine private enterprise and commerce?

Mr. ANDREWS: I would not know.

The CHAIRMAN: That is hardly a question for the witness.

Mr. MCQUILLAN: In any event the sales which Russia is making to the United Kingdom would appear to be what are known as loss-leader sales.

Mr. ANDREWS: I think they want to keep in that market for strategic reasons.

Mr. MCQUILLAN: Is there any particular phase of trade extension in which the Department of Trade and Commerce might assist you, and in which you would like to see them participate more actively? Are there any particular projects in the way of world fairs or anything of that nature in which they might participate which would be of help to you?

Mr. ANDREWS: I do not know how to answer that. We are quite hopeful that the Department of Trade and Commerce will continue to put in exhibits at strategic points in the United Kingdom, South Africa and Australia. We cooperate with them in various ways such as by supplying exhibits and that sort of thing. We hope they will continue with that policy. We would be very happy if they would extend it in various markets.

Mr. PAYNE: Have we, by virtue of the long-term financial agreements entered into between the shipper and the buyer nations, lost any of the markets shown in the tables here?

Mr. ANDREWS: I think that is so. As far as I know, Canada has no means of financing on the long-term basis which would possibly enable more overseas buyers to take our product. I believe the government at the moment is giving consideration to that.

Mr. PAYNE: What nations have been giving special credits to importing nations?

Mr. ANDREWS: I think one is the United States. I do not know of any others.

Mr. PAYNE: What about the Scandinavian countries?

Mr. ANDREWS: I am not sure.

Mr. PAYNE: But the United States has.

Mr. ANDREWS: Yes.

Mr. PAYNE: To what markets have they granted such credits?

Mr. ANDREWS: I think many markets.

The CHAIRMAN: Mr. Payne, would you like to follow that up with evidence from this witness as to how seriously this has affected the sales of your province?

Mr. PAYNE: Very definitely.

The CHAIRMAN: Go ahead.

Mr. PAYNE: Would you include that in the question?

Mr. ANDREWS: I would like to have some time to think that over and receive some advice on it. We would be very happy to make it available to the committee.

The CHAIRMAN: I think that is something which is very important and which we should have on the record.

Mr. PAYNE: Would Mr. Clyne have anything to say in that regard? Through the extensive marketing organization they have, he may have run into some specifics.

Mr. MCQUILLAN: While Mr. Andrews is on his feet, I would like to ask him one more question. What benefit, if any, will this $20 million which is being voted by parliament to help offset the 17 per cent freight rate increase have on domestic shipments from British Columbia to the eastern Canadian market?

Mr. ANDREWS: I do not think it will have very much effect for the reason that shipments from British Columbia to eastern Canadian destinations did not take the 17 per cent increase in freight rates. The reason is that the

freight rates from the coast and the interior of British Columbia to eastern Canada are governed, not by mileage or any other considerations, but rather by competition with rail movements from Seattle and Portland to eastern Canada. The board of transport commissioners have fixed the policy that it would not be possible for Canadian railways to have a freight rate which is higher than that being charged by American carriers for competing shipments from Washington and Oregon to eastern Canada.

From the coast and interior of British Columbia to western Canada, some of them may have taken advantage of the full 17 per cent, but the majority of our shipments are to points which are covered by border complications. There again, the ability of the American shippers to get into, say the Winnipeg market via Great Northern, in North Dakota, and then a short haul from there to Winnipeg. The combination rate would be lower than the rates which Canadian railways would have been able to charge had they been permitted to apply that percentage of increase right along the line from April, 1948, to date, which is treble the rate we used to pay prior to 1948. So that in essence this 17 per cent increase was not applied across the board to our business of lumber. Therefore we are not eligible for the subsidy which I believe, from information sent out to date, would only apply to reducing those rates which gave the full 17 per cent impact, and it would reduce those rates down to 10 per cent rather than the 17.

The CHAIRMAN: What effect will the opening of the St. Lawrence seaway have on the Canadian marketing of your product?

Mr. ANDREWS: That is difficult to judge at the present time. We hope to be able to ship lumber and plywood through the St. Lawrence seaway into the big consumer markets around the great lakes, but we are not going to benefit in bulk freight rates from the seaway tolls. We are going to have to pay the higher toll on domestic, package domestic.

The CHAIRMAN: You say you intend to sell in that market. Do you mean, or do you expect that the market will increase? That is the point with which I am concerned?

Mr. ANDREWS: It may be that the rate via the Panama canal and the seaway to such destinations as Toronto or Windsor may enable us to compete with lumber and plywood, and with the rail freight rates across the continent and it may enable us to enlarge our markets in eastern Canada, while over the last ten years our markets have been shrinking by reason of the successive rail increases.

The CHAIRMAN: Is your major domestic market in the central provinces?

Mr. ANDREWS: Our major domestic market is our local market in British Columbia. The second in importance is Ontario and Quebec.

The CHAIRMAN: Would you like to answer Mr. Payne's question, Mr. Clyne?

Mr. PAYNE: I wonder if Mr. Andrews could give us a comparison of the rates on lumber shipped from Vancouver to Winnipeg as compared with Vancouver to Toronto?

Mr. ANDREWS: Speaking offhand, the rate from Vancouver to Winnipeg in car lots, by rail, is $1.40 per hundred pounds; while the rate from Vancouver to Toronto, if I recall it correctly, is about $1.60 per hundred pounds.

Mr. MCQUILLAN: What is the rate to Saskatoon?

Mr. ANDREWS: The Saskatoon rate would be higher than the rate to Winnipeg. The haul is shorter to Saskatoon, but it is not controlled by the border combination such as is in effect at Winnipeg.

Mr. BASKIN: You mentioned the rate from Vancouver to Toronto as being approximately $1.60. What would be your cost via the Panama canal and the seaway to Toronto? Have you any idea?

Mr. ANDREWS: No, I do not have any idea.

Mr. BASKIN: Would you think it would be considerably less than $1.60?

Mr. ANDREWS: It would all depend on the availability of charter freight through the Panama canal and into the seaway. I could not give you an answer.

Mr. DUMAS: What is the rate from Vancouver to Montreal?

Mr. ANDREWS: It is about five cents per hundred pounds more than the rate to Toronto.

Mr. DUMAS: It would be $1.65.

The CHAIRMAN: What is your main competition in the central provinces, Ontario and Quebec?

Mr. ANDREWS: Our main competition in the central provinces, Ontario and Quebec, is lumber trucked in largely from northern Ontario, northern Quebec, northern Manitoba, northern Saskatchewan and northern Alberta. It comes in by rail and by truck. That is our principal competition.

The CHAIRMAN: You have no competition from the United States?

Mr. ANDREWS: Very little, but there is some. Pine comes in from the United States but it really is not competitive.

Mr. FISHER: May we get the position of this brief in so far as the Crowsnest Pass rates are concerned?

The CHAIRMAN: We are on the subject of freight rates now.

Mr. FISHER: The point I am interested in is this: your brief has taken the line that the Crowsnest Pass rates are an inequity in so far as they give a false picture of railway income, let us say, to the ordinary person following your lumber shipped from the west.

We had a statement yesterday which indicated that the Crowsnest Pass rates are sacrosanct. That would please some of us, but it would displease others. Have you any suggestion, in view of the fact that the Crowsnest Pass rates are not going to be touched—in other words, one of the points of your brief has already been anticipated by the terms of reference given to the royal commission by the Prime Minister.

Have you any suggestions of any other way around this particular problem, given the fact that the Crowsnest Pass rates are sacrosanct?

Mr. ANDREWS: Our suggestion has been right along that this is a matter of national policy, and that the cost of the subsidy should be borne or provided by the whole of the people of Canada rather than to be shouldered by other shippers.

If these Crowsnest Pass rates cost $60 million, as it has been estimated they do, that should be a straight subsidy to the shippers of grain for export, and the grain rates themselves should be allowed to find their normal level. That is roughly one-third of the traffic of the Canadian railways.

Mr. FISHER: I think the point should be made that no one has ever yet proved clearly that the Crowsnest Pass rates are not compensatory. I think in fairness to the western interests that should be said; but this is an important point which the Canadian Lumbermen's Association made very strongly; it will continue to act as a dividing influence on our whole economy, with the blame being laid first on the western farmer in getting his subsidy, and on the railway workers whose demands are also increasing.

I take it that your suggestion is that the whole matter should be put on a subsidy basis, a direct subsidy?

Mr. ANDREWS: We do not attempt to say that the subsidy is not justified in order to enable Canadian wheat to compete in world markets. We are handicapped by an inland freight haul; but it should be something to be taken care of by the country as a whole, rather than to be carried by the shippers of other bulk commodities.

Mr. FISHER: It might be worth reminding the British Columbia delegation, Mr. Chairman, that we find it very difficult in northwestern Ontario to compete in the central Ontario market with British Columbia lumber, because we have borne more freight increases than your lumber, in that you have competitive rates through the United States.

Both our plywood manufacturers and our spruce lumber manufacturers have to compete with British Columbia products in the central Ontario market. This just illustrates the complexity of the whole question of freight rates and that it is very hard to find an answer which is nationally satisfying.

The CHAIRMAN: Mr. Fisher, now that this royal commission has been set up, I imagine that it will be the wish of the interests of the forest industry in British Columbia, and others, to represent their views before this commission. I have no doubt you will take advantage of the opportunity to do so.

I think the committee was considerably interested in the statement made about your extra tax on logging which probably is a matter of vital concern; and inasmuch as there is a meeting scheduled in July to discuss fiscal policy between the federal government and the provinces, I am sure that representations will be made by you to your government in British Columbia, so that your views will be made known when this conference takes place.

Mr. CLYNE: On that point I think I can assure the committee that representations to the British Columbia government on the subject of the logging tax have been strongly and continually made, the point being that we are not only or not merely a British Columbia industry as much as we are a Canadian industry. So we make our representations to both governments.

The CHAIRMAN: I do not think it will be overlooked when you are discussing it with the province.

Mr. KINDT: My question has to do with the disadvantages, shall I say, against the British Columbia industry in getting through rates. My point is this: in directing a shipment of lumber from some point in British Columbia to Toronto, when in transit it is found that a better market would be down in Ohio, my understanding is that the industry is unable to direct or to redirect that shipment to Ohio and get a through rate. Am I right or wrong in that particular statement with reference to the freight charges?

Mr. ANDREWS: The freight rate question is a very complex one, but I would say offhand that the shipper would be able to direct his car to Toronto, with instructions for furtherance; and as a matter of fact a great deal of that is being done.

It is common practice to ship to Winnipeg for furtherance, and that car may eventually wind up in Florida. If it does get to Florida, having first been assigned directly to Toronto, instead of your having to pay more for the long haul to Florida, you would get a refund from the American lines below the rate to Toronto.

Mr. BASKIN: Since we are on the question of freight rates I would be interested to know how the ocean-going rate compares from the west coast to Liverpool, England and to Montreal or Toronto?

Mr. ANDREWS: I think there might be a comparison there, but just offhand I am not competent to answer your question. I think there is a point of comparison.

The CHAIRMAN: Are there any other questions of this witness? If not, perhaps Mr. Clyne will answer Mr. Payne's question.

Mr. ANDREWS: May I express, on behalf of the lumber, plywood, and shingle industry of British Columbia, our very sincere appreciation of the efforts which have been made on our behalf by the forest products laboratories of Canada.

We have a wonderful new building in British Columbia, and there is another one, even more beautiful, right here in Ottawa. Now all the department needs is to staff those facilities which have been set up, and we hope it will be given careful consideration. We do appreciate the amount of research work that has been done and is being done continuously by the various product research laboratories of Canada, and particularly the work of the director, Colonel Jenkins.

The CHAIRMAN: Have you any suggestions to offer, Mr, Andrews?

Mr. ANDREWS: I hope that the appropriations will be increased to the point where the forest products laboratories will be able to get the staff to take full advantage of the facilities which are now at their disposal.

Mr. MCQUILLAN: In connection with the forest products laboratories, several years ago one branch of the federal government announced a proposal to construct a building for some research branch in forestry at Victoria. There was a great deal of controversy about it. Most of the industry felt that the building should be placed on the site of the university of British Columbia near the forest products laboratory, and also where it would be close to the heart of the administration of the forest industry.

Mr. ANDREWS: That reference is to the forest pathology and entomology research laboratories which the technical service of Canada, I think the Department of Agriculture, proposed to locate in Victoria. The industry in British Columbia urged very strongly upon the Department of Agriculture that these facilities should be erected on the university campus, where they would be in close cooperation and contact with all the other research agencies of the federal government, the university and the provincial governments. Unfortunately, however, the Department of Agriculture did not see fit to meet our wishes in that respect. They purchased a site for the laboratory in Victoria, but they have not as yet gone further than to draw plans for the building. Maybe it is not too late yet.

The CHAIRMAN: When was the site purchased?

Mr. ANDREWS: I think it was about two years ago.

Mr. FISHER: Could Mr. Robertson tell us anything about it? Was his department not concerned in that particular matter?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): This was an action by the Department of Agriculture and there was no consultation, I am sure. Do you think so, Dr. Harrison?

Mr. J. D. B. HARRISON (*Director, Forestry branch*): No, sir, I do not remember that there were any consultations with our department about it. I referred yesterday to our plan to establish a full-scale district office in British Columbia. The question came up as to where this office should be. A choice had to be made between the university campus and Victoria, and it was taken as an accomplished fact that the new forest and biology division of the Department of Agriculture would be at Victoria. The provincial government is there, of course, and contact between those two agencies would seem to justify plans for the location of our office so as to be close to them.

Mr. MCQUILLAN: I would like to ask Dr. Harrison a question: was this not just one more example of the lack of cooperation between the various research agencies which are concerned with forest research?

Mr. HARRISON: I do not think so at this stage. If you want to maintain close contact with the various laboratories and divisions of the British Columbia government, you should put them both in one place, in Victoria. They are watching the final decision to put it there so as to maintain contact.

Mr. FISHER: May I ask if the previous witness has placed on record any requests or suggestions in so far as the forest products laboratory in British Columbia is concerned, or with respect to any expansion or change in its program whereby it could improve its service to the industry?

Mr. ANDREWS: There are two advisory committees. On one advisory committee only the industry has representatives, I mean the industry across Canada. That is in Ottawa; and there is another advisory committee on forest products research in Vancouver on which also the forest industry has full representation. Those two advisory committees are giving careful consideration to a program of expansion of research, but what they will come up with I do not know.

Mr. FISHER: Is there any need in British Columbia for more contracting of specific jobs for specific companies, the way the forest products laboratories in Wisconsin develop it?

Mr. ANDREWS: I think so to the extent that the research staff is capable of handling the work. The forest products research laboratories do a great deal of that, and as much as they can. It depends on how great an increase in research staff is made available, as to how much that particular function can be expanded.

Mr. FISHER: What would be your recommendation for expansion, other than just to indicate that there is a need? I think that Mr. Jenkins has a plan, or there are plans for expanding the facilities in this particular field. How urgent is the matter?

Mr. ANDREWS: I would say that all research is urgent. We of course are hoping that full consideration will be given in the estimates to expanding the facilities, I mean the human facilities as well, to match the physical facilities which have been made available.

The CHAIRMAN: Would you like to direct your question to Mr. Jenkins?

Mr. FISHER: Yes. Could Mr. Jenkins give us a little resume of how the forest products laboratory in British Columbia is meeting certain problems out there, and what their plans are for the next five years as to more improvements and more space if needed.

Mr. J. H. JENKINS (*Chief, Forest Products Laboratories Division*): Mr. Chairman, in answer to that question, may I give a slight background as to how the laboratory was formed and what it is doing. The forest products laboratories of Canada have two research laboratories. The main one is at Ottawa, and then there is a second at Vancouver.

The Vancouver laboratory resulted from the need for technical information arising from the use of spruce for airplanes in 1917. It was formed in 1917.

Both laboratories are staffed and equipped for research in all the fields of forest products research with the exception of research into the use of pulp for paper. But we do carry out research into pulp for use in building, and corrugated boards—I make the distinction, because of the work of the paper research institute at Montreal.

The Vancouver laboratory concentrates primarily on problems of British Columbia, and they are very specialized problems compared to the rest of Canada. In its research work, which is similar to that of the Ottawa laboratories, it is active in the fields of timber engineering; the determination of the physical and mechanical properties of western woods; the use of wood as structural material in glulan beams, and as new kinds of construction; wood

for house construction; plywood; and problems arising, both basic and applied, in the production of veneers and adhesives; wood anatomy; the micro-structure of wood, and its relation to the properties of and the services which wood should give. This is an aspect which in British Columbia is requiring and receiving increased attention as to why some of these peculiarities are occurring in wood.

I should also include wood preservation and the effectiveness of new preservatives; wood pathology: in which we are concerned with the pathology of forest products as compared to agriculture, which is concerned with the pathology of the growing tree. We study decays of the finished product, decay which occurs in service and how it can be identified; wood chemistry is a very important field in Vancouver and includes studies of the chemical composition of wood. In addition there is basic research into the composition of lignin and other extractives from wood.

In the wood utilization field, in respect to logging and milling, we carry out studies on the production of lumber and on such factors as effect of tree size on manufacture of lumber and plywood; economic uses for low grade material and residue. There is also the seasoning field, the theory and application of kiln drying, and the preparation of kiln drying schedules. Those are fields which are carried on in the Ottawa as well as the Vancouver laboratories.

At Ottawa there are certain fields such as the testing of wood paints which are conducted on a national basis, and which are not carried on in Vancouver, but of which the Vancouver laboratory does get the benefit. Another example, is the development of ultra-sonic devices for use in the manufacture of plywood which was developed here and is being applied by the industry in British Columbia.

The Vancouver laboratory has a full time staff of 53 of which 22 are professional people. They include civil, electrical and mechanical engineers, as well as physicists, foresters, statisticians, and chemists. A program of the work which Mr. Fisher mentioned is produced annually and shows the program for the Forest Products Laboratories of Canada.

The CHAIRMAN: What is the name of the publication?

Mr. JENKINS: Program of work, 1958-59. Sopies are available and it shows the different projects at the two laboratories. It is a coordinated program, and as Mr. Andrews said it results from advice which we get from these advisory committees, of industry. The one in Ottawa is under the chairmanship of Mr. K. O. Roos of the Booth Lumber company, Tee Lake, Quebec, while the one in Vancouver is under the chairmanship of Mr. Prentice, of Canadian Forest Products Limited.

The Ottawa committee is meeting on May 27, and the one in Vancouver will meet two days later. They will go over the program in detail and make suggestions.

There is another aspect of the work I would like to mention before answering Mr. Fisher's question as to the future. It is that in addition to the work that is done in British Columbia for the British Columbia industry by the Vancouver laboratory, there is a very important aspect of the work which is carried out in Ottawa, and which is connected with the end-use of British Columbia timbers. I refer especially to the work that we do, and the contribution we are making—in cooperation with the British Columbia industry—to those national committees concerned, with the National Building Code, and with the national specifications of the Canadian Standards Association. These are becoming of greater importance; if your wood is not properly specified in these national codes, you are going to lose out.

These committees met in Ottawa and we worked very closely with the representatives of all the forest industries. I would like to take this opportunity to express appreciation of the way in which the west coast people sent their representatives down here to these meetings. We make it a point in the laboratory to work closely with the industry in seeing that wood is fairly represented on all these national standards, not only here but in the United States.

Our cooperation is closest with industry, but we also contact provincial forest services from coast to coast. However, while cooperative they have taken the attitude so far that they are perfectly willing to leave the field of forest products research to the federal government. We have been in British Columbia since 1917 and there has been no conflict there at all.

As to the future, there are problems to which so far we have not given the attention that we should, because of lack of staff. There are certain services that we could give to industry which would result in expansion and there should be a stepping up of certain projects, especially in regard to the use of wood as an engineering material and as a building material in houses and other specialized fields. In addition, we should get out more of our publications. At present we are doing this on a "shoe-string". We are working very closely with industry associations, but would like to be in a position to work more closely with the individual members—and all this requires staff.

Mr. FISHER: Mr. Chairman, that certainly indicates a need.

The figure of 27 professional people working on forest research projects, in an economy such as British Columbia has, and the tremendous dollar total, is certainly going to give the committee something to think about in terms of recommendations. I wondered if Mr. Jenkins, later on when we are more specifically on his section of the estimates, will be able to spell out in more detail where we can go and what we can do. If the representatives from British Columbia can give us any guide at all in terms of numbers, or the type of expansion that is required, I think we would find that useful too.

The CHAIRMAN: I agree.

Mr. SLOGAN: Do you find that private industry across the country is cooperating in these research projects to the extent that you feel they should? Do you feel they carry on work in research to an adequate extent?

Mr. JENKINS: We feel that the lumber industry as such, made up of a very large number of small units, is in a peculiar position in that so many of its units are not in a position to carry out research, and also in some respects our research is a little ahead of the application of it.

It is for this reason that we want to pay more attention to getting out the results of research to individuals members. However we are gradually getting them more interested in research. Where it is a question of joint research by means of cooperative studies, we have always been able to get that cooperation. Most of the research that is carried out by the industry is—rightly so—of a promotional nature and the development of certain equipment. And, of course, if we bring research development to the laboratory stage, there is somebody, some organization, that has got to take these developments through the pilot plant stage and make them into a commercial concern: that is a field where industry can be of great help.

Mr. PAYNE: On a point of order, Mr. Chairman, may we not continue with the representatives from British Columbia? We will have Mr. Jenkins with us at subsequent meetings. I think it is only fair to the delegates who have come all these miles that we should carry on with their submission and, as far as departmental specialists are concerned, we can conduct the examination of them at another time. I would like, frankly—and I feel in order in requesting it— to return to the question asked so long ago of Mr. Clyne.

The CHAIRMAN: There is one aspect that I think is important. I think we should have on the record, while the representatives from the British Columbia forest industry are here, the opinion of men like Mr. Jenkins concerning statements that are made in the brief.

For instance, it was stated yesterday that lumber was being substituted by other products, and I wondered last night if the forest industry, through research, could make use of their end products—such as cellulose—to take the place of some of these substituted materials that are now going in in place of forest products. That is the sort of question that I had in mind, because this was referred to yesterday.

Mr. JENKINS: Our experience has been that we agree absolutely with what is in the brief as to the fact that lumber is losing out to the so-called substitutes. In some cases those substitutes may be a better product; in other respects it is simply losing out due to a certain amount of apathy, and I think there is—

The CHAIRMAN: Apathy on the part of whom?

Mr. JENKINS: Industry.

The CHAIRMAN: The forest industry?

Mr. JENKINS: Yes. They do not realize that no longer does the consumer have to buy lumber; he can buy substitute material, if he so wishes. Therefore, we have to turn out, at a reasonable price, a good quality wood product if we are going to keep our markets.

For that reason we have been advocating in our work with industry, the need for research in order to find out what can be done. We have also been advocating bringing to the attention of the members of the associations—and this applies especially to those associations which have a large number of small mills—the need that for them to do something, that in the increasing Canadian economy the curve of lumber has been far too flat; it has not gone up in step with other competing products.

Also, in addition to the promotional work which the council is taking up, we have to get the results of our research to the lumbermen. They have to be educated so that they can apply that research and keep themselves up to date.

The CHAIRMAN: I know you have answered the question; but, to be specific—going back to my former question—and using basic cellulose as an end product of the forest industry, can more substitutes be made from that?

Mr. JENKINS: Yes, sir, I think so. One of the peculiarities of it is that so many of the products are competing with one another. Fibreboard, plywood and lumber all compete in the same market, in some cases. But I do feel that, while we may see an increase in the amount of cellulose products, it is in the national interest to see that everything is done to keep the lumber industry prosperous and sound.

Mr. SLOGAN: Mr. Chairman, I wonder if I could have an answer to the question I asked. I am quite prepared to assist in asking further questions in relation to British Columbia, but I would like an answer to the question I asked. In the opinion of the witness, is private industry doing an adequate job in research, taking over—as you say—in the pilot projects from the stage of the government laboratory? Are they utilizing all the research that you have been producing?

The CHAIRMAN: I think, Mr. Slogan, the witness has answered that; but you want an amplification of what he has already said?

Mr. SLOGAN: Yes.

Mr. JENKINS: I am afraid I will have to qualify that. It will depend a lot on the size of the unit. The coast industry represented here, made up of very large integrated units, is a different matter altogether to the

small mills that you get in the interior of British Columbia and East across Canada. Some of these smaller mills are progressive, but others are really not taking advantage of the research.

Mr. HERRIDGE: Mr. Chairman, I am very interested in this point, because for years I have urged that more funds should be provided for promotional work. I am very conscious myself of the fact that the smaller industries are lacking in the application of the work of the forest products laboratories. They have not the same capacity to take advantage of it. But I do believe there should be much more promotional work and much more field work, and I think there should be more funds for that purpose, even before we consider expanding the staff.

I would like to ask Mr. Clyne a question in that respect, because I know he has great experience of forestry work in British Columbia. Mr. Clyne, what is the opinion with respect to the necessity for more funds for promotional work, in order to get greater cooperation from the small lumber industries in British Columbia in the application of the findings and the results of the work of the British Columbia forest products laboratories?

Mr. CLYNE: I entirely agree. I think, on that point, it is extremely important to the economy of British Columbia that the small mills, the small loggers, be maintained. That is of vital importance.

Mr. HERRIDGE: I am glad to hear you say that.

Mr. CLYNE: While we certainly are in favour of every bit of research that can be done, I just wanted to answer Mr. Jenkins on that point.

I do not think we can be accused of apathy, as an industry, to such an extent. We have our existing converting plants, in which there has been a very great investment. Those existing converting plants must be utilized to the maximum effect. Does that answer your question, Mr. Herridge?

Mr. HERRIDGE: Yes, Mr. Clyne. I have felt very keenly about this for some years, and I thought the laboratories were handicapped because of lack of funds for promotional work and for field work in connection with the small operators.

Mr. MCQUILLAN: Is it not true, Mr. Clyne, that this year the British Columbia industry is putting up $65,000 for promotional advertising, and the rest of Canada is asked to put up another $35,000?

Mr. CLYNE: I am not quite sure of the amount.

Mr. ANDREWS: I think that is related to the organization of a national promotional body called the Canada Wood Development Council. That has 17 associations as members. It has just been organized. The B.C. Lumber Manufacturers' Association has seconded our promotion director to manage the new organization, and it will parallel the national United States program, in which they are spending $100,000 a month.

This year we will be spending about $60,000; next year the council hopes to raise about $200,000 for promotional work, on wood as wood.

Mr. KINDT: Mr. Chairman, I draw a distinction between the promotional work on wood and the applied phases of research. In other words, there is basic research and there is applied research—and the subject under discussion was the application of research to smaller operators.

Mr. HERRIDGE: Mr. Chairman, we have a representative of the Canadian Lumbermen's Association here, and I am so interested in this matter that I would like to ask him the same question as I asked Mr. Clyne. I would like to ask him how he finds this situation in eastern Canada particularly.

Mr. J. A. SCHRYBURT (*Director, Public Relations, Canadian Lumbermen's Association*): Mr. Chairman, I joined the Canadian Lumbermens' Association

just recently. I had the pleasure of being connected for more than 10 years with the Department of Northern Affairs and National Resources as editor of the forest product laboratories, and during those years I worked very closely indeed with Colonel Jenkins. Being now free of government encumbrances, I can say this, that although a great deal of research is carried out by the laboratories—not enough, I believe—and many good publications are issued, their distribution is not wide enough and the people who receive them are not always able to understand the scientific side of it. What is needed more than anything else is a relations service direct to the operators, something like the agricultural services or the technical services of the National Research Council.

Mr. McQUILLAN: Perhaps one of the British Columbia delegates can enlighten me on this. I believe there is a man who is going to work for the Federal Wood Council and who is being permanently appointed in Ottawa to pursue the field of specifications, building codes and such like. I am referring to a man to whom I was introduced here a short while ago, Mr. Cleve Edgett. Is he not being appointed?

Mr. ANDREWS: He is leaving the British Columbia Lumber Manufacturers' Association on two-years' leave, which may eventually be for good. He will be directing the council.

Mr. FISHER: On the theme Mr. Herridge opened up: when one looks at forest products abstracts, he sees the tremendous range of material that is being covered in this field in Scandinavian countries, the United States and Russia. Has there ever been any consideration given to having men working on forest products and going around at all times, keeping in touch with these things and then bringing them back to industry? In other words, is there a funnelling, not only in Canadian research, but world research, in this field, right in to the people who can make the most use of it?

Mr. JENKINS: We have been giving consideration to that. It is one of the ideas under consideration, that we should have somebody who would assess this large volume of information that is pouring over our desks from various world sources on both sides of the Iron Curtain. We should have somebody pick out—using our specialized facilities—and assess from all this mass of information those things which have possible application in Canada. Much screening would have to be done.

There are not only the English-language aspects to be considered. Six years ago in Ottawa, at the forestry conference, the forest production people set up an exchange of information, on translations. This exchange has grown now, not only in the Commonwealth countries and the forestry schools of Canada and the United States, but elsewhere in the world in connection with forest products. As a result, there is a continual flow over my desk, of translations that have been made of excellent research work done all over the world. The idea, as you say, would be to assess it, condense it, put it in a readable form, after considering its possible application to Canada, and get it out, combined with our own information.

Mr. SLOGAN: Is any of this information exchanged on an official basis, say with the Soviet Union, or is it brought in purely through informal channels?

Mr. JENKINS: There is, under necessary controls, a reasonable exchange of information. Following my visit to Russia, they have been sending through their pamphlets and their books regularly. Our trouble is, in getting them translated. In exchange, we send them certain of our classified, general information.

Mr. PAYNE: Mr. Chairman, may we return to my question?

The CHAIRMAN: Yes. Before we do that, may I be permitted to ask a question, while we are on this subject, of Mr. Beaupré. Mr. Beaupré, is it the fact that it is only in recent years that the industry has become research conscious?

Mr. BEAUPRÉ: Are you talking about the lumber industry?

The CHAIRMAN: Yes.

Mr. MCQUILLAN: All phases, I would say, in the forest industry.

The CHAIRMAN: Yes, the forest industry.

Mr. BEAUPRÉ: I do not have enough specific knowledge to give a very useful answer. I would say, definitely not. Many of my colleagues here have been in the industry much longer than I. I know that in our own particular phase of industry—which is the pulp business, and, particularly, the dissolving pulp business—we spend, and have spent for sometime, a lot of money on research. We are a very small company, and we have a laboratory with 20 or so professional people. We have five Ph.D.'s working 'way up north in Prince Rupert in our own pulp mill. We are a small company, and that is an indication of what could happen with the major companies.

The CHAIRMAN: Would someone speak for the major companies, for the industry generally? It is my understanding that it is only in recent years that the forest industry has actually become research conscious to the extent that they realize the necessity for accelerated research.

Mr. W. BREITENBACH (*President, Alaska Pine and Cellulose Limited*): As far as our company is concerned, we maintain a research laboratory right in Vancouver which employs 30 people. We are working on wood research. We work quite closely with the forest products laboratory in Vancouver: they are, of course, very handily situated for us. This is not the mill control laboratory out at the mills, but it is our own research laboratory.

Mr. PAYNE: Mr. Clyne, Mr. Andrews made the statement that Canada was in fact losing markets, primarily to the United States, through government financing programs of a long-term nature with the buying nation. I was wondering, Mr. Chairman, if Mr. Clyne, who has extensive contact with the world marketing organization, could elaborate and in any way indicate the markets that have been lost.

Mr. CLYNE: As far as my company is concerned, Mr. Chairman, the loss of markets has been due, to a very large extent, to lack of dollars in the purchasing nations. It is true that the United States has made very generous loans on numerous occasions since the war and has enabled nations who have a lack of dollars to purchase American products. But, on the other hand, they would not have had the dollars to purchase from us anyway. So I do not think the action of the American government has been harmful to us. I think the difficulty is due to lack of dollars.

Mr. PAYNE: In other commodities we do assist in the needs of less fortunate nations by long-term financing, and it was with that in mind that I asked the question.

Mr. CLYNE: The two markets which we have, where we feel the loss particularly—as far as lumber is concerned—are South Africa and Australia.

Mr. PAYNE: Where the Americans have made loans?

Mr. CLYNE: No; they lack the dollars to buy from us.

Mr. PAYNE: But they have not been lost to American suppliers?

Mr. CLYNE: No, they have not been lost to American suppliers. For instance, Australia is on a quota system, and to the extent of available dollars they do buy from us.

But you have raised a very fundamental point, Mr. Payne. It is lack of dollars in the purchasing countries that really affects us. The remedy for that is the encouragement of imports, because we have to buy as well as sell.

The CHAIRMAN: Mr. Payne, would you like to follow that by inquiring to what extent it has affected export sales?

Mr. CLYNE: To what extent, in dollars and cents?

The CHAIRMAN: Yes.

Mr. CLYNE: I could not give you that figure out of my head, Mr. Chairman. I could furnish you with that figure, but I would be misleading the committee if I attempted to give it out of my head.

Mr. PAYNE: Mr. Chairman, I wish to ask a question on marketing, and I want to preface this with the remark that Members of Parliament are subject to many approaches.

Looking at exhibits "H", "I" and "J", basically there is a rather interesting comparison as to United States demands and the degree to which Canadian pulp suppliers have supplied that market.

It may be that the delegates and representatives from the industry who are present here do not wish to discuss this matter, but I would like them to do so, Mr. Chairman, if they would. However, I think it should be brought to their attention that some of them from British Columbia are saying that the loss of Canadian supplies to the United States market is almost on a diversionary level; the United States company is operating and the Canadian company is only a subsidiary.

In recent years we have seen where Canadian mills have been closed and certain long-term contracts which were existing, not only to the United States market, but to other markets of the world, have been rediverted to American plants through sales agencies in the United States. I would like to have any representative discuss this matter. However, if they do not wish to do so, I, as a member of this committee, want to bring it forcibly to their attention at this time, because we, as members, can cooperate and do so much. But I think industry, too, must be aware of a few of the factors that are affecting the drop in Canadian supplies to the United States pulp market.

Mr. BEAUPRÉ: I do not know how many of my colleagues would like to speak on this subject, but I think it is a fundamental point that companies invest and then they have to see that their investment is serviced. Obviously, all companies would like to see all facilities operating full-blast.

It is also, of course, the fact that in the pulp and paper business, at least, because of current world markets, most of the industry I think is working at about 80 per cent of capacity. I think the point that Mr. Payne brings out is that Canadian facilities, for a number of reasons—many of which we have mentioned here—are finding it more and more difficult to compete. We know that some of the problems are ours. We know that some of the problems are beyond the control of anyone in Canada, whether industry or government.

We think some of them are within the control of government, and that is why we are here. I think it is purely a matter of economics at all times, to try to ensure that all Canadian facilities are operating in an economical climate where they can compete, because if the markets have to be serviced, and we cannot service them, somebody else will; and if somebody else can service them economically, I do not see how we can do anything about it.

This is our constant struggle to maintain our position despite a lot of disadvantages. At one stage these disadvantages were not too great. They have always existed. The rugged terrain, the long distance to markets and the high capital cost have always existed. However, we previously had a lot of advantages primarily because the other large areas had not advanced in technology as much as we had. Now they have come ahead and there are

new areas which are very competitive to us. Therefore, some of the disadvantages we had previously are now disappearing. This is the gist of our whole position, that we are anxious that all elements which have anything to do with the economic climate, whether management, labour or government, address themselves to this as a serious problem which can become more serious unless we recognize it and try to do something about it.

Mr. PAYNE: My question has less to do with the economic factors. For instance, take the case of a mill, very recently purchased by United States interests, which has contracts which will carry it at full capacity for a matter of several years. Economics do not seem to be the only factor. I wish to bring to focus that it is of deep concern to many of us these day that by virtue of an interest, a forestry holding, we should have United States capital coming in and taking over the operation of Canadian elements and after securing them divert those contracts which they had to a foreign nation.

While I wish no ill to our neighbours to the south, at this time I do feel this is a situation which in the public interest should be brought before this committee.

The CHAIRMAN: Are you directing a question to any specific person?

Mr. PAYNE: What I say is merely in rebuttal. The question which has been answered was in respect of a basic economic situation which the facts do not uphold. The contracts were there and the operation was and would have continued to be economic. The net losses to Canada and Canadian workers to some degree show up in Exhibits H, I and J. I feel quite strongly that this matter should, in all fairness, be brought before the committee.

The CHAIRMAN: Would any of the other witnesses like to comment on that.

Mr. FOLEY: I would like to make a comment. I think the charts "J" and "K" deal with newsprint. I do not know of any case in which that situation has occurred in respect of newsprint manufacturing.

Mr. PAYNE: I concur.

Mr. FOLEY: Then it is strictly in respect of pulp?

Mr. PAYNE: Yes.

The CHAIRMAN: Are you through with your questioning?

Mr. PAYNE: I concur with Mr. Foley that it is strictly the pulp field to which I am referring. I am through, providing no member of the industry wishes to make a statement on this matter.

Mr. FISHER: Is Mr. Payne saying that American capital comes in, ties up Canadian holdings, and then feeds those holdings into, say, a world or North American picture which may lead to this being sat on and not developed?

Mr. PAYNE: The contracts are diverted.

The CHAIRMAN: You mean the purchaser is supplying requirements to United States mills?

Mr. PAYNE: Yes.

Mr. BREITENBACH: Are you referring to my company?

Mr. PAYNE: I would rather not make a direct reference. I would not direct it to any specific company. Certainly, however, I would appreciate a statement.

Mr. BREITENBACH: My company was taken over by a United States company, I believe, effective January 1, 1955. When we took over the company we took over two pretty well broken-down pulp mills which were not capable of producing the types of pulp which could be sold in the competitive market. We spent $14 million on one of the plants at Port Alice in rehabilitating the plant and practically building a new mill. That mill has been rebuilt, the money has been spent, and that plant currently has been operating at close to capacity. The other plant, the wood-fibre plant which was originally built

in 1912 and which manufactured a grade of pulp of a quality which could not be sold in the competitive market, has been closed down. We are keeping the plant in a condition to operate and are studying ways and means of doing something with that plant so that we can get it into operation.

As to the statement made that the mill was taken over with an order filed, and the order filed given to some United States mill, in this particular instance that was not so. There was no order filed when the mill was taken over. We struggled along with the mill and operated it for a while; but in the present situation with the type of market pulp which that mill produces, we have not been able to sell the output.

Mr. FISHER: This is a subsidiary of what American corporation?

Mr. BREITENBACH: Rayonier Incorporated. Incidentally, the parent company closed down a wood-fibre mill of their own.

Mr. MCQUILLAN: Could Mr. Breitenbach tell us whether or not he has any figures as to what it might cost to reconstruct that mill in order to put it in a position to produce the grade of pulp which could be sold?

Mr. BREITENBACH: I do not have those figures. We spent $14 million at Port Alice. At the present moment we could spend $14 million on the wood-fibre mill the same as we have done at Port Alice, but we are having difficulty in selling from Port Alice.

Mr. PAYNE: What was the production there?

Mr. BREITENBACH: It was 225 tons a day.

Mr. PAYNE: What was the market picture in respect of that? Did you have an unsold backlog?

Mr. BREITENBACH: No, sir.

Mr. PAYNE: It was selling?

Mr. BREITENBACH: I do not believe I understand the question.

Mr. PAYNE: This product was selling? There was no unsold inventory?

Mr. BREITENBACH: When?

Mr. PAYNE: At the time of the take-over.

Mr. BREITENBACH: The market for pulp in 1955 was a different "animal" than it is today.

Mr. PAYNE: Where were you shipping wood-fibre at that time?

Mr. BREITENBACH: Some of it into the United States, some to Japan, and of course the Japanese market has been hit very hard and has not yet fully come back.

Mr. PAYNE: Have you the percentages of the shipments to the United States, to Japan and other nations?

Mr. BREITENBACH: I do not have those figures readily available.

Mr. PAYNE: Were there countries other than Japan and the United States?

Mr. BREITENBACH: We were selling some to the United Kingdom.

Mr. PAYNE: Did that account for 100 per cent of your production?

Mr. BREITENBACH: I would say that in 1955 the product essentially was going to Japan, to the United Kingdom and to the United States.

Mr. HERRIDGE: Could the witness tell the committee why this company purchased two broken-down mills?

Mr. BREITENBACH: Because we thought with the combination of the integrated company with the sawmills, shingle mills and the pulp mills, we could have an integrated and profitable operation.

The CHAIRMAN: Including the forest holdings.

Mr. BREITENBACH: Certainly we had to have the raw material.

I might add that in addition to the money which was spent at Port Alice we built a sylvichemical plant at one of our sawmills at Vancouver which manufactures a product called "rayflow", which is an oil well drilling additive, something never before made in Canada from a by-product of a sawmill. We are keeping the wood-fibre plant in shape.

Mr. BEAUPRÉ: How long did you operate the wood-fibre mill from the date of the take-over?

Mr. BREITENBACH: We took over at the end of 1954, say, January 1, 1955, and it ran sometimes at curtailed capacity until June of last year.

Mr. FISHER: Are these the plants which were taken over from Abitibi?

Mr. BREITENBACH: No. The company, Alaska Pine and Cellulose Limited, is the same but Rayonier bought the controlling interest in Alaska Pine and Cellulose Limited.

Mr. HERRIDGE: I have a question in respect of Mr. Clyne's statement dealing with markets.

The CHAIRMAN: First of all, I believe Mr. Foley would like to make a statement on this subject.

Mr. M. J. FOLEY (*President, Powell River Company Limited*): Our company manufactures sulphite pulp, non-bleached. A few years ago we sold as much as 45,000 tons a year. This year we will be very fortunate if we sell 1,800 tons. We have not withdrawn from anything. I think, however, that Mr. Breitenbach's company may have been influenced a bit, as we have been, by the market for sulphite pulp, generally speaking, shifting over more to sulphate pulps.

Mr. CHARLES DICKEY (*President, B.C. Forest Products Limited*): In answer to Mr. Payne's question, I happen to represent a company which has a minority ownership by a United States company. Our company built a plywood kraft pulp mill on Vancouver island. It would not have been possible to build this pulp mill without the financing from the United States company. Furthermore, it would not have been possible to operate the pulp mill in this market if it had not been for the contract with the United States company. It is taking a large tonnage from the mill.

I might also point out they are taking that tonnage and living up to that contract despite the fact they have some curtailment in their own pulp mills in the United States.

Mr. HERRIDGE: Mr. Clyne, when you were talking about markets, you said you did not think Canada could sell to Red China without recognition. Are you in favour of recognition of Red China?

The CHAIRMAN: I think that question should remain unanswered.

Mr. CLYNE: Mr. Chairman, I bow to your ruling and am grateful for it. Nevertheless, I have made public statements on that subject.

Mr. HERRIDGE: What were those public statements?

The CHAIRMAN: A little later I was going to ask a question in respect of forestry and trading with China, in view of a couple of proposed transactions between China and the Canadian companies which were subsidiaries of United States companies. However, we will probably discuss that this afternoon.

Before we adjourn I would like to have tabled at the opening of our next meeting the tables which were asked for yesterday. At the same time could we have the figures in respect of the other provinces for the same period in connection with forestry research in addition to those for which I have already asked? I wonder if the representatives from British Columbia could furnish the committee with a table showing the productivity, since you mentioned it yesterday—and it is very important to us. Also, you mentioned

the rail rates and the increases in freight rates over a period of years. Would you kindly give us the breakdown of the labour cost during those same years you referred to in respect of the railway increases and have those prepared? I imagine you can obtain that very quickly from the labour department.

Mr. McQUILLAN: Is it the thought that the representatives from British Columbia will again be here this afternoon?

The CHAIRMAN: Unless you think we could clear it up in half an hour or so?

Mr. McQUILLAN: It seems to me we have pretty well exhausted our questions. I am sure these gentlemen here are busy men.

The CHAIRMAN: We all appreciate that.

We do not have the figures I have requested. Could you supply them?

Mr. CHAMBERS: Yes.

The CHAIRMAN: Gentlemen, what is your wish?

Mr. HERRIDGE: If there are only half a dozen or so questions, could we now conclude?

Mr. DUMAS: Then we would not have to sit this afternoon.

The CHAIRMAN: I think that is a good idea.

Mr. HERRIDGE: I wish to ask a question of Mr. Beaupré in respect of a reference in the brief on page 17. The reference is to the fact that the mining industry and the oil industry received incentives by way of exemptions. I never could understand why the forest industry was excluded from that consideration. I have thought it is largely because of the fact that possibly the people in the department failed to realize the circumstances under which the forestry industry operates with regard to depletion of forest reserves, construction of roads and costs in that respect. If consideration is given to your representations, do you think it would be a good idea, before a decision is made in that respect, for persons authorized to deal with it to visit the industry itself and get some on-the-ground knowledge of the problems of the forest industry in respect of the things I have mentioned?

Mr. BEAUPRÉ: Mr. Chairman, in answer to that question, if there are not enough people aware of this problem I think probably we have been somewhat remiss in not coming often to Ottawa. I must say, however, that over a period of years we have made many representations in Ottawa on this and other issues. It is, of course, a fact that it is no further from Ottawa to Vancouver than it is from Vancouver to Ottawa. We would welcome visitors who would come and study our problems with us in our area. They could be assured of complete cooperation.

We think this is not only in our interests. We think the underlying theme of our submission has been that our interests are of such a magnitude that they are not only provincial but are significant and serious Canadian interests. We feel we have here a joint problem with the people who are responsible for formulating, developing and administering policy.

I am sure I am speaking for all my colleagues when I say we would welcome more people from Ottawa if they would come to British Columbia and work with us on these problems.

Mr. HERRIDGE: I think it would lead to a greater understanding of the problems with which the forest industry is faced, some of which are not even found in some other industries.

Mr. FISHER: I have a question in relation to the taxation structure. The committee used a reference from the book, "Forestry Tenures and Taxes in Canada" written for the Canadian tax foundation by A. M. Moore. In

Timber of Canada magazine there is is an analysis of the conclusions of this study made by Ian Mahood who was down here last year as a witness. He makes a number of comments on sustained yield in British Columbia. It certainly is related to tax incentives and the whole taxation policy as it affects the forest industry. I wonder if Mr. Douglas would care to comment on it.

Mr. Mahood says:

> In B.C. we have oversimplified a complex economic problem. We are artifically doling out inventory. We have preservation of the mature trees, we do not have the basic elements of sustained yield from the forest.
>
> To achieve true sustained yield we have to ensure that the inventory can be used.

Do you care to make any comment on that, Mr. Douglas?

Mr. Ross DOUGLAS: (*Vice-President, Forestry, Alaska Pine and Cellulose Limited*): The last few words are quite correct.

Mr. FISHER: Is the present system of sustained yield as you have it set up by regulation in British Columbia, creating an artificial wall around an inventory which is the main charge in this book, in connection with the British Columbia forest situation?

Mr. DOUGLAS: I do not think so. I am not quite sure what Mr. Mahood is referring to. He made the suggestion that if you limit the cut, established by sustained yield, the policy is too low, and then you are preserving an inventory unnecessarily; and if that is being done, then he is right.

That question is rather undecided as yet in British Columbia, and that is one of the reasons we need more information than we have, as to what our true sustained yield capacity may be.

Mr. FISHER: Mr. Mahood says:

> Unless we are prepared to get down to serious silviculture with our choice species on land close to the mills, we have a declining forest economy. We will be sitting with high wood cost and no customers.

In essence, is that not your problem in British Columbia?

Mr. DOUGLAS: It remains to be seen. I know Mr. Mahood advances that, and it is quite possible he is correct, and that the only place we can compete is on our most accessible and more productive lands.

Mr. FISHER: You mean the most accessible and most productive lands close to the mill and where there is a superior species?

Mr. DOUGLAS: Yes, that is what he said.

Mr. FISHER: If that is the nub of the problem, or at least the way in which one individual forester in British Columbia puts it, what recommendations can we make to tackle something like that?

Mr. MCQUILLAN: I think you will find them in the book right here.

Mr. FISHER: In a general consideration of tax incentive, it seems to me that tax incentives fall into two groups. First we may have a tax incentive to give an expanding capital program. But an expanding capital program will not do you any good if your wood costs are too high, if your wood is in inaccessible places, and you cannot readily get at it. So what tax incentive can you give in this particular field in order to get lower wood costs and encourage you to develop your second growth stands close to the market? I am asking for more specific suggestions than you have in your brief.

Mr. DOUGLAS: If it is a question of taxes, I would prefer that Mr. Chambers dealt with it.

Mr. CHARLES CHAMBERS (*Comptroller, MacMillan and Bloedel Limited*): The tax incentive which is referred to in this brief is not what is specifically asked

for, but it is assistance in offsetting the disadvantageous situation in which we find ourselves in regard to wood costs. I wonder, in connection with that article, if Mr. Mahood made reference to the fact that the provincial economy was set up on what he considered to be a wasteful basis?

Mr. FISHER: Yes.

Mr. CHAMBERS: Until the actual slide timber was removed, that arrangement did not carry a proper incentive. I was wondering whether that was one of the things he did say.

Mr. FISHER: Yes, in the main.

Mr. CHAMBERS: That is purely a provincial matter, and when you come to taxation as a whole, our thinking there is that since this is such a vital industry it should be examined with a view to counteracting the various physical disadvantages that our industry has experienced.

Mr. FISHER: In other words, there is no way in which the federal government can act in so far as taxation is concerned to increase or to improve the possibilities of silviculture management directly?

Mr. CHAMBERS: I would not give a flat no to that. An action that we have in mind is that there could be some formula worked out for incentive production. There was one worked out during the war years where some incentive was given for additional production which in a sense could be construed as a taxation incentive.

Mr. FISHER: Would you agree with this general statement, that there is both confusion and a sort of lack of analysis in many of the problems that you face in so far as the relationship between the federal government and your industries are concerned, and that the logical move out of this situation is a very serious and intent study by the federal government in all its phases, in order to come up with good recommendations in so far as taxation is concerned?

Mr. CHAMBERS: I would say that you have expressed it very well.

The CHAIRMAN: How long has that situation existed?

Mr. CHAMBERS: Well, they have been steadily getting worse in the last two or three years. I think that expresses it very well. I would not like to use so strong a word as "confusion", but it does seem to us that the problem is one to be sponsored by the federal government, and that is research into all aspects of the study.

Mr. MCQUILLAN: Is not one of the problems in three farming, the fact that you must capitalize so much of the costs that you cannot write them off at what might be an opportune time?

Mr. CHAMBERS: I think I know to what you are referring. It is quite possible that it is not so serious as it is generally thought; but in application, in some types of leasings there are some expenditures of a preliminary nature such as advertizing and a certain amount of forestry work which must be done, and which the federal government disallows. I think this is covered in what is known as the K.D.P. case, which is an Ontario case. The same condition applies to us. In terms of the broad picture it is not very important. The amount involved in such a preliminary survey necessary to obtain a licence would be, let us say, in the neighbourhood of $50,000. We are speaking of a great many more dollars than $50,000. Roughly, what the federal government do is to permit that to be written off over the cost of the timber.

Mr. FISHER: A few years ago a Stanford economic group, sponsored by Weyerhauser, came up with a study of forestry products use, projected to 1980, and which gave a very optimistic picture. It suggested that almost all the forests in North America would be needed to meet the increasing use for wood. This was done in a period of high optimism, 1954-55.

We have now reached the stage where optimism does not prevail. There is much pessimism in your brief about how our industry is going to compete with the over-all world situation. In the long term view, are these factors which Weyerhauser brought out in the report—the optimistic ones—are they going to catch up? For example, the mill which we keep going—will it in the foreseeable future, even with our high costs and high work, get back into the picture of relatively full exploitation, or is this situation so serious that we must move very quickly in order to plug all possible loopholes and weaknesses in our structure? I appreciate this is just a general question.

Mr. CHAMBERS: The tables we have used over a period in the most serious aspects for newsprint are ten years, and that, I think, should get us over any cyclical effect there might be in the economy, in a general way. We feel the long term trend position has shown a persistent decline.

Referring to the Stanford figures, they may be right. There may be a slowing up of our economic uses. They may be right in the long term; but that does not mean to say that we are going to benefit thereby, particularly when you view our relative positions. In other words, they may continue to expand in a more favourable economic climate at our expense, because it is two-fold. Their expansion unfortunately is also our principal market. They may build a mill which, rather than compete with us, takes away from us.

Mr. FISHER: Would you agree that we have crises in the forest industry of which most Canadians are not aware?

Mr. CHAMBERS: I would say this is a situation which I think should give us cause for great concern, but "crises" I think is too strong a word.

Mr. FLEMING (*Okanagan Revelstoke*): I got the impression that the world demand is not applicable to this American estimate of the future prosperity or the future prospects in the industry when they are concerned with their own industry, and that we are actually now becoming very much in a competitive position with them. In other words, we are going to have to fight for survival in Canada against any possible large expansion there. Therefore we can assume that the demand for wood products of all kinds is an increasing and rising one which does not decline in its demands, and that we are preventing its decline by retaining our proportion of the demand for our own industry.

Mr. CHAMBERS: That is correct.

Mr. FLEMING (*Okanagan-Revelstoke*): Therefore, the demand exists?

Mr. CHAMBERS: There are two things in connection with demand: one, population increase; and two, what is referred to as rising living standards which require, for example, more newsprint. I prefer to say per capita consumption rather than standard of living, because when you see a Sunday supplement, with all its extra pages, I do not know whether that can be considered as an increase in the standard of living; but it certainly does indicate a greater per capita consumption; and those two things are going on steadily.

The CHAIRMAN: Are there any other questions?

Mr. FLEMING (*Okanagan-Revelstoke*): I want to emphasize that this recent demand and the problem which exists in Canada, is a decline in our percentage or share, and that it would not mean that the industry is shrinking. But in relation to the total increasing demand, the Canadian share is declining in relation to the rest.

Mr. CHAMBERS: That is the proposition.

Mr. FLEMING (*Okanagan-Revelstoke*): We are not occupying our former position in the field.

Mr. CHAMBERS: Our tables illustrate that.

Mr. FLEMING (*Okanagan-Revelstoke*): It is the losing of our predominant position, or the position we once held.

Mr. HERRIDGE: I have only one question. Yesterday afternoon when the committee adjourned Mr. Douglas was giving the committee some information on rates of growth, and he dealt with the exports from certain overseas countries. I think he should have an opportunity to complete his statement so that the committee may have a true concept of the picture of what the rate of growth is in respect to exports, let us say, for ten years.

Mr. DOUGLAS: Yes, I was speaking yesterday about exports from British Columbia, and I used the figure of 100 cubic feet per acre per year to compare it with a rate of as much as 300 for some foreign countries. I should have amplified it by saying that the greater part of the forest land of British Columbia is in our interior, with a much larger growth rate. I would imagine the average to be about 30 cubic feet per year; so if you think of British Columbia as a whole, I do not think you can get a growth rate which is greater than, let us say, 40 cubic feet per year, which compares with the figures for some other areas of the world of 300.

Mr. MCQUILLAN: Are you familiar with the growth rates of northern Ontario? How would the over-all growth rate in British Columbia compare with that of Ontario, in the coniferous field?

Mr. DOUGLAS: I do not know precisely, but I think from general observation that Ontario would be quite similar to our own interior.

Mr. FISHER: In our part of the country it runs around 25 to 30.

Mr. DOUGLAS: That would be smaller than the interior of British Columbia.

Mr. FISHER: What information does your group have on Russian competition? Mr. Godwin has warned a Senate committee about this, and so have several other people. What do you know about Russian competition and its effect or possible impact on the markets that you have.

Mr. MCQUILLAN: I think we covered that subject earlier this morning.

The CHAIRMAN: You will find that in the printed proceedings. Just before we close we asked for a breakdown of the money spent on forestry research. I have before me now a memorandum in respect to the different provinces and the federal government, but it does not include what they spent on forest products research. I wonder if we could have this brought up to date, and also, as I said a while ago, to show the amount spent by each province on all phases of forestry research. Would that be all right?

Mr. HARRISON: You want a breakdown of the forest industries of the provinces, but of course with the exception of the Vancouver laboratory, we do not have such figures for any other province except for the one here at Ottawa which serves all provinces.

The CHAIRMAN: It would be quite all right if you included the amount spent by the federal government on forest products research, and if you mentioned the amount spent in British Columbia and the amount spent at Ottawa.

Mr. HARRISON: We could do that.

Mr. FISHER: May I ask one question? You have come down requesting certain things such as an expansion in government services to fill your needs. But there is a tendency among some people in parts of the forest industry always to express criticism of the expansion of the federal civil service and of government experts. My question is obvious. You are aware that if we, or if the government respond to your request, it is going to mean an expansion both in the number of employees as well as in the amount of money that the government is going to have to spend.

Mr. BEAUPRÉ: I think, Mr. Chairman, it is not necessarily that simple. There are always ways and means of allocating efforts. I think what we are trying to do is to suggest to you that in our own particular area possibly there has not been sufficient interest or attention shown to its requirements. On the other hand I think it was very well brought out yesterday that, for a very few dollars, we could probably do a very great deal of good for a very important industry. As to any examination of the tax aspects of the problem, we recognize the consequences of our suggestion.

The CHAIRMAN: You understand that in our report—whatever we may have to say in our report to the House—we are not able to recommend the expenditure of money; we can only ask the government to consider so doing. So when you read the report you will know why certain things were perhaps not included.

Now, gentlemen, before we adjourn this interesting conference, I think you will glad to hear from any other members of the representative group which came from British Columbia. Perhaps Mr. Clyne who is one of the group and represents a very "small" company, might like to give us some ideas which probably have not been covered. We would be glad to hear from him or from anyone else in the way of a summary of the evidence, or as to what he may wish to contribute to the committee.

Mr. CLYNE: Mr. Chairman: first of all may I on behalf of my "struggling" company, and on behalf of the other "struggling" companies who have come down here, express our very great appreciation for the hearings we have had. What we are trying to do is to make it clear that although we come from the far west, we are a part of a great Canadian industry, and a very important Canadian industry.

We want to make it clear that our prosperity is vital to the Canadian economy, and that we also contribute very substantially to the national revenue. For these reasons we feel that greater funds should be devoted by the federal government to forest research work, to fire protection, and generally in the interests of the forest industry. If such a policy is adopted by the federal government it will pay dividends.

We also have to try to impress upon you the danger to the industry from retaliatory markets. I cannot emphasize the point too much: that if we are barred from the markets of the world and in particular from the markets of the United States, then our whole national economy is going to be affected, not only our industry, but the whole national economy.

I strongly urge that in so far as it can be done by the members of the committee, the greatest resistance should be exercized towards restricted trade practices and increasing tariffs which would invite retaliation from the United States.

We have also tried to explain to you our position in regard to taxation. We are competing with other countries in world markets and with companies in those other countries which have considerable advantage over us by way of taxation. I refer in that respect to depletion and the other matter that we discussed with you, namely, the logging tax.

I hope that members of the committee will look favourably upon our statement in regard to the logging tax. It is agreed, I think by everyone, that the tax is discriminatory, and that the difficulty is to find a method to avoid it.

Now, Mr. Chairman and gentlemen, I again say that we are most grateful for the interest which this committee has shown in our problems, and we hope you will see fit to invite us here again next year.

Mr. PAYNE: Mr. Chairman, I am sure I speak for all the members of the committee in expressing our thanks to the many gentlemen who have constituted this delegation from my home province. I am sure we agree with Mr. Clyne that it has been useful, not only to them but very useful and informative to this committee. I certainly hope, Mr. Chairman, another year it will be our pleasure to have the delegation with us again.

Mr. DUMAS: Mr. Chairman, I wish to concur with what has been said by Mr. Payne.

Gentlemen, we have been very happy to have you here. Your brief was well prepared, and it has been well presented, which is something that is very important. As was mentioned by Mr. Clyne, your industry is a vital part of the Canadian economy. So, if your indusrty is prosperous we will also be prosperous. Therefore, we all hope that prosperity will come back to your industry, and that another delegation from British Columbia will appear here next year before this same committee.

The CHAIRMAN: Thank you very much.

Mr. HERRIDGE: Mr. Chairman, I want to say, as a democratic socialist I enjoyed listening to the representations of those who represent considerable capital.

The CHAIRMAN: Gentlemen, before you go, I would like to say, as Chairman of the committee, how much I agree with the members of our committee who have expressed our appreciation and our interest in your contribution. I think it has been one of the most valuable contributions that has been submitted to this committee—which, of course, is the best committee of the House of Commons!

I can assure you that your presentation will be seriously considered; and I hope that you will be able to read the reports with interest.

Our next meeting will be Monday morning next at eleven o'clock.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 22

MONDAY, MAY 18, 1959

RECEIVED
JUN 1 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. W. A. E. Pepler, Manager, Woodlands Section, Canadian Pulp and Paper Association; Mr. J. B. Matthews, Chief Forester, Abitibi Power and Paper Company Limited; Mr. A. F. Buell, Woodlands Manager, E. B. Eddy Company; Mr. R. G. Robertson, Deputy Minister; and Mr. J. D. B. Harrison, Director, Forestry Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21226-6—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,
and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, May 18, 1959.
(24)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Doucett, Dumas, Fisher, Granger, Gundlock, Hardie, Kindt, Martel, McQuillan, Murphy, Nielsen, Payne, Simpson, Slogan, Stearns and Woolliams. (18)

In attendance, of the Canadian Pulp and Paper Association: Messrs. W. A. E. Pepler, Manager, Woodlands Section, Canadian Pulp and Paper Association; J. B. Matthews, Chief Forester, Abitibi Power and Paper Company Limited; and A. F. Buell, Woodlands Manager, E. B. Eddy Company; and *of the Department of Northern Affairs and National Resources*: Messrs. R. G. Robertson, Deputy Minister; J. D. B. Harrison, Director, Forestry Branch; J. H. Jenkins, Chief, Forest Products Laboratories Division; and D. R. Redmond, Chief, Forest Research Division.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Item 281, Branch Administration, Forestry Branch.

Continuing on Item 281, Forestry Branch, Branch Administration, Mr. Harrison put on the record a table of research expenditures on forestry and forest products by the Forestry Branch and on forest research by provincial government departments.

Mr. Pepler was called; he presented a brief of the Woodlands Section, Canadian Pulp and Paper Association. Mr. Pepler and other members of the delegation together with officials of the department answered questions arising therefrom.

At 1.00 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m.

AFTERNOON SITTING

MONDAY, May 18, 1959.
(25)

At 3.35 o'clock p.m. this day, the Standing Committee on Mines, Forests and Waters resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Doucett, Martel, McFarlane, McQuillan, Murphy, Payne, Simpson, Slogan, Stearns and Woolliams. (13)

In attendance: The same as at the morning sitting except Mr. Redmond.

The Committee continued its consideration of the brief which had earlier this day been presented by the Woodlands Section, Canadian Pulp and Paper Association.

21226-6—1½

Mr. Pepler and members of his delegation together with officials of the department answered questions. Mr. Pepler was retired.

On motion of Mr. Stearns, seconded by Mr. Doucett,

Resolved,—That the hearty thanks of the Committee be extended to Messrs. Pepler, Matthews and Buell for the assistance which they had given to the Committee in its deliberations.

At 4.15 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Tuesday, May 19, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

MONDAY, May 18, 1959.
11.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Let us begin.

I think Dr. Harrison has some information to table that was requested at the last meeting. Have you that with you, doctor?

You are going to have written into the records some information regarding research.

Dr. J. D. B. HARRISON (*Director, Forestry Branch*): Yes, Mr. Chairman. We were asked to provide a table which would show the manner in which cash expenditures on forest research by the Forestry Branch were distributed, by provinces. We were also asked the way in which expenditures on forest products research were divided as between the Ottawa laboratory and the Vancouver laboratory; and also anything we could get on forest research expenditures, by provinces.

This is shown in the table I am about to hand to you, Mr. Chairman.

With regard to the expenditures by provinces, the latest we could get were those in respect of two provinces that operated forest research divisions for 1957-58. This information came from the annual reports.

The province of Saskatchewan operates a small and quite new research division, I think with three officers, but unfortunately we were unable to find reference to the expenditures on that particular subject in their annual report.

On thinking over your question, Mr. Chairman, which was a supplement to the previous one, perhaps I should point out that the figures being tabled do not cover the whole of the expenditures on forest research in Canada. To get that it will be necessary to take into account the very substantial expenditures by the forest biology division of the Department of Agriculture which, as has been explained, is the division which deals with forest entomology and forest pathology, the expenditures by the universities, which were estimated as recently as two years ago, and expenditures by the industry itself.

There is only one forest research organization maintained by industry, which is the Woodlands Department of the Pulp and Paper Research Institute of Canada; but certain companies have done a limited amount of work on their own.

I thought it was just as well to add that explanation, sir.

The information contained in the table is as follows:

RESEARCH EXPENDITURES

FORESTRY AND FOREST PRODUCTS

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES FORESTRY BRANCH

Forest Research Division	Expenditure 1957–58	Expenditure 1958–59	Allotment 1959–60
	$	$	$
Newfoundland	69,897	76,053	74,120
Maritimes	234,616	257,525	251,383
Quebec	125,034	128,244	149,304
Ontario	85,430	92,065	113,468
Manitoba-Saskatchewan	92,500	107,158	121,802
Alberta	133,372	139,182	148,120
British Columbia	—	12,420	27,710
Petawawa Forest Experiment Station	340,953	344,068	394,152
Ottawa—			
Division Headquarters	137,790	149,330	139,173
Fire Protection Research Section	73,705	83,115	96,048
Inventories Research Section	84,540	62,190	78,617
	$1,377,837	$1,451,350	$1,593,897
FOREST PRODUCTS LABORATORIES DIVISION			
Division Headquarters	19,780	26,640	27,315
Ottawa Laboratory	463,328	560,282	572,840
Vancouver Laboratory	255,503	250,412	288,132
	$ 738,611	$ 837,334	$ 888,287

FOREST RESEARCH

by

PROVINCIAL DEPARTMENTS

Ontario, 1957–58	246,342	N.A.	N.A.
British Columbia, 1957	155,033	N.A.	N.A.

NOTE: Relatively small expenditures on forest research in provinces of Quebec and Saskatchewan cannot be determined from Annual Reports of departments concerned.

The CHAIRMAN: We have some other information to be tabled regarding labour costs, and I understand from the clerk that will be forthcoming a little later.

It suggested that we endeavour to have the brief to the Senate Committee on Land Use included in our printed proceedings, but I am not just sure what procedure we must go through to have that done.

Mr. FISHER: Mr. Chairman, Mr. Jones discussed the matter with me, and I have decided to waive the suggestion. I just want to put it on the record that in issue No. 5 of the Senate Committee on Land Use is recorded a brief presented by the Ontario Forest Industries Association entitled, "Forest Management and Land Use in Ontario". I think much of the information in it is relevant to the matter before this committee, and to what we are trying to bring out in this particular phase of the committee's operations. I think it would be worthwhile reading for members of the committee.

The CHAIRMAN: I was going to mention that too, Mr. Fisher.

This morning, gentlemen, we have with us Mr. W. A. E. Pepler, manager, Woodlands Section, Canadian Pulp and Paper Association; Mr. J. B. Matthews, chief forester, Abitibi Power and Paper Company Limited, and Mr. A. F. Buell, woodlands managers, E. B. Eddy Company.

They have brought with them a brief, a copy of which I believe every member of the committee has.

Mr. Pepler will read the brief. Is it agreeable, gentlemen, if Mr. Pepler reads the brief; then you would be free to ask questions afterwards, rather than to interrupt the reading of the brief? Is that satisfactory? Agreed.

All right, Mr. Pepler. You have no occasion to rise, just sit there.

Mr. W. A. E. PEPLER (*Manager, Woodlands Section, Canadian Pulp and Paper Association*): Thank you.

First may we express our appreciation of being given this opportunity of appearing before you and giving you information concerning our pulp and paper industry in Canada, its hopes, expectations, and its problems, also the responsibilities which we believe that you, as members of parliament, have in helping to solve these problems.

We represent the Canadian Pulp and Paper Association and, more particularly, the woodlands interests of the member companies of that association. The association includes in its membership the manufacturers of about 98 percent of the pulp and paper made in Canada.

We do not want to take up a great deal of time describing the importance to the Canadian economy of pulp and paper. But sometimes the nearness of Canadians to the industry, the circumstance that every Canadian, either directly or indirectly, is touched by this great enterprise, dulls our appreciation of what far-reaching effects it has on the well being of our nation and ourselves. So we have included in our presentation the following brief statements to establish the singular value of pulp and paper to Canada and the Canadian people:

(1) Pulp and paper is Canada's leading bread winner. The value of its output exceeds $1.4 billion annually, thereby accounting for almost five per cent of the gross national product. No other enterprise contributes as much to Canada's income.

(2) Pulp and paper is a leading foreign exchange-getter. In 1958, the industry's shipments abroad were valued at more than $1 billion, accounting for a fifth of all Canadian exports and a third of the nation's exports to the United States. The industry's exports thus substantially exceeded, for instance, our exports of all agricultural and vegetable products, including wheat and all other grains.

(3) Pulp and paper is the nation's leading employer. Permanent employment in the mills exceeds 66,000 souls. In addition, the industry gives employment to some 245,000 seasonal employees to gather the pulpwood harvest. A substantial proportion of this seasonal employment is offered in the winter months, when other work is not available.

(4) Pulp and paper is Canada's leading industrial wage payer, with total wages and salaries exceeding $500 million annually.

In short, the pulp and paper industry is a natural for Canada. Through it, the fruits of the forest are converted into dollars of national income, obtained chiefly from abroad and chiefly paid out in wages and for raw materials that generate still further benefits for Canadians. These figures are compiled by the Dominion Bureau of Statistics and we would be glad to file with you the appropriate D.B.S. reports to substantiate the statements, if you wish us to do so.

Of particular import then in our presentation to you today, are the following facts:

(1) Our share of the world's markets declined substantially in the recent period of world pulp and paper expansion. Here again, the facts can be seen in Reports of the Dominion Bureau of Statistics, and we would be glad to make them available to you.

(2) There is a measurable trend of pulp and paper investment money to seek placement in other producing areas in spite of the advantages in Canada of raw wood supply, ample water and power, and an international reputation for paper making skill based on long experience and dynamic research and development activities.

We believe it should be a matter of great concern to the government of Canada that these trends be halted, as otherwise there will be serious inevitable losses to our future economy.

We do not need to look far for the major cause of this situation and these trends. Our costs are rising at a faster rate than those of our competitors and, in the frequently heard phrase, we are pricing ourselves out of the market.

We, in the industry, must and do accept our full share of responsibility. It is a simple matter of selfish interest with the pulp and paper companies. And we are justifiably proud of the striking progress we have made in forest management to get the most from our timber limits without damaging their ability to produce raw wood, in improved logging equipment and methods to reduce costs, and in mill techniques to get more and better products from less wood.

But the industry does not control all the factors affecting its costs. Governments and the general public, including labour, are partners in this enterprise. This is particularly true in Canada where 90 per cent of the forest area is crown land and the greatest part of privately owned forests is in small ownerships.

Responsibility for forestry policies and a favourable economic climate is divided constitutionally between the federal and the provincial governments. In matters concerning the forest lands themselves, the primary responsibility lies with the provinces under their control of natural resources. However, the federal government, under its general powers over international trade and tax structures, has a major role to play in the situation in which the pulp and paper industry finds itself and which we are presenting to you today.

Originally, legislation and tax structures dealing with the forest and forest products were drafted with the main purpose of obtaining public revenues. This was in a period when the forests could be exploited without fear of exhausting wood supplies. This situation has changed economically and physically with the development of our economy. We now know that we are dealing with a living renewable resource, one which has tremendous potential for future Canadian prosperity. Despite this, much of the original thinking persists. The emphasis still seems to be on immediate direct revenue from the forests rather than on the development of increasing indirect revenues through maintaining and expanding production. New legislation must be framed and new tax structures must be devised, with incentives and encouragement to both corporations and private individuals to increase the yield from this great resource, the forest growing soils, and to build up the industries which convert the products of the forest into pulp, paper, building materials, plastics, and the hundreds of other commodities that the world wants in this twentieth century.

We have noted that the responsibilities in these fields are divided between the federal and the provincial governments. We will deal here only with the federal side of the picture.

The picture is not all dark. The Canada Forestry Act is excellent enabling legislation and the agreements with provinces made under its authority have been most helpful. Unfortunately, too little use has been made of this well conceived legislation. We are particularly disappointed that such small

sums have been made available for fire protection and forest access roads, respectively $1,250,000 and $1,000,000 in the 1959-60 estimates, these sums to be divided among ten provinces.

We are most happy to see the Senate Land Use Committee continuing its studies. Land classification for most efficient use is one of the four top priority recommendations in statements of forest policy developed by a federal government sub-committee, the Canadian Forestry Association, the Canadian Institute of Forestry and others, including ourselves.

Currently, the federal government draws direct tax revenues from the forest industries of the order of $200,000,000 annually. Their expenditures on the forests are less than $10,000,000 per year. We submit that the provision of tax incentives to aid orderly expansion of production, greater use of the Canada Forestry Act in amounts made available to the provinces for protection and development of the forest and forest industries, economic studies, plus increased expenditures on research to develop technical knowledge, could be unusually rewarding.

We would like to make specific reference to the role of the federal Forestry Branch in forest research in Canada, but before we do so, we would mention three other ways besides what we have termed "creation of a favourable economic climate" in which the federal government can carry out its responsibilities and aid in gaining back Canada's full share of world markets in pulp and paper.

We have mentioned rising costs which are beyond the direct control of the industry. Taxes of course are one of these factors. The rising trend of labour costs is another. The pending increase of 30 per cent in unemployment insurance payments is yet another. In the pulp and paper industry, because of the high scale of earnings of our employees, the increase will be closer to 50 per cent than 30 per cent.

Our labour relations picture has been good and we are quite ready and willing to make our proper contributions to social and community benefits. However, when these costs affect adversely our ability to sell our products, our capacity to maintain a healthy industry and make our proper contributions is weakened and the economy suffers therefrom. We appreciate that these items are not in your defined field of discussion but they are part of the whole picture, so we make this brief reference to them here.

An informed public opinion to support a policy of sound forest management is necessary and is now lacking. There are probably few undertakings that have so many amateur advisors, whose opinions are often largely based on sentiment only. On the other hand, public consciousness of its great interest in and responsibility for protection of the forest from fire is far behind what it ought to be. The federal government, through its own actions and through subsidization of properly constituted public information organizations, can help in the correction of this apparent lack of appreciation on the part of the public of the problems of sound economic management of the forest resource and of the hazards of fire.

There is general agreement on the part of experts across the country on the broad lines of policy which would bring greater yields from our forest lands. In spite of this agreement, and in spite of the best efforts of corporations and individuals to improve the situation, and in spite of the passing of the Canada Forestry Act enabling the federal government to give aid to the provinces, progress has been slow. This seems to be due in a large measure to

the complexity of problems with legal, financial, political and popular aspects over and above the strictly technical ones, and to a lack of co-ordination of the efforts of the partners in the enterprise, the federal government, the provincial governments, the industry, and the public. It is suggested that the federal government has a particular function in providing leadership in arranging for such co-ordination.

Coming now to forest research, we are at a turning point in forestry practice in Canada. This is fully realized by foresters and those working in the forest products industries, but it is essential to our future prosperity that it be recognized by all the partners.

Canada is changing from the practice of harvesting a ready made crop of mature trees to a practice of growing trees for a harvest. In other words, we have moved or are moving from what was known as a "cut and get out" policy to management of blocks of forest land for continuous crops. In those statements there is no criticism of old policies nor is there sentiment in the new ones. It is sheer economic survival interest.

We have already noted that new laws must be drafted and new tax structures devised to implement these new policies. Similarly, changes in thinking are required in the field of forest research.

Although there are still large inventories of wood, more than we yet have the mill capacities to use, these supplies are far from the mills and the costs of continuing to move the cut farther and farther up the rivers and away from the mills contribute to our higher over-all costs.

It is now generally accepted by those concerned that we must intensify our efforts on our most productive forest lands to increase their yield of useful forest products.

Excluding lands that have been cleared and subsequently successfully farmed, we have been cutting in quantities that are appreciable in the general picture, for about 30 years. Although some of these cutover lands have been burnt, there is young forest of either good or bad quality on the bulk of them. These are lands which we must now convert to regulated, healthily growing forests for our future crops.

Generally speaking, these lands are the best growing sites closest to the mills, and they are, in many cases, ready for some sort of cut or treatment. Now this is the important thing. The way they are treated today, will have a tremendous effect on the kind and quantity of wood we will be able to harvest from them for the next 30 to 50 years.

To prevent us from making mistakes in these first treatments, we must have more information on the process of tree growth, that is, the relationships between growth and soils, the climate, the lesser vegetation and other factors which affect growth.

Because of the time required for a forest to mature, it could be many years before we discovered the effects of erroneous treatments. It might then be too late or too costly to correct the mistakes.

The role of the federal Forestry Branch in the general forest research picture is an essential one. The long-term nature of forest production and the problems involved, call for a long-term program. The staff and facilities to carry out such a program must be established on a continuing basis, a characteristic that is not always possible in industry or even in provincial government research organizations.

Much of the knowledge lacking is of a fundamental nature as regards forestry. We do not want to try to define fundamental and applied research, nor do we believe that hard lines should be drawn between the fields of this or that research organization. However, the search for the more basic knowledge is particularly a field for the federal Forestry Branch.

One other circumstance that must be taken into account in consideration of the situation, is the wide variety of species, sites and other growth conditions across the country. Forest research staffs must be located in the areas where there are forests, the species and the sites that they must study. The problems are complex. Solution of them frequently requires knowledge from several allied sciences such as biology, physiology, ecology, and soil sciences. Hence teams of pressionals at each location have special value. These workers, their activities and the compilation and release of their findings should have central administration. This appears to us to fit into the federal Forestry Branch picture.

The studies carried out by the Forestry Branch over many years on methods of inventorying, the rate of growth, the methods of cutting and types of reproduction have been, and still are, of great value to forest managers. However, they have also served to illustrate that, until more is known about the basic factors affecting tree growth, our application and interpretation of forest management experiments are severely handicapped. The demand, even now, for the results of forest research, far exceeds the current meagre supply.

The branch is quite unable, with present personnel and budget, to meet current needs. And these needs are going to be doubled or trebled in a relatively short number of years.

Under these circumstances, we have urged the Minister of Northern Affairs and National Resources to set up a concrete program of expansion of forest research immediately and that the program envisage doubling within the next five years the professional staff engaged in forestry and fire protection research, with such technical assistance as is required.

We are pleased to report that the Minister was sympathetic to our recommendation and we note that there is provision in the estimates for an increase in expenditures for operation and maintenance of the forest research division of $141,000, from $1,329,000 in 1958-59 to $1,470,000 in 1959-60. This is balanced by a decrease of $41,000 in the estimated expenditures for construction etc. for the division, leaving a net increase of $100,000.

This is a step in the right direction, but we consider it a very modest one, having in mind the vital importance of the forests to the Canadian economy and the expenditures on research in other fields.

We would like to make a special reference to forest fire protection research. Our section has organized two national conferences on forest fire research in the past two years. These conferences were attended by industry and government representatives from nine of the ten provinces.

The projects recommended from these conferences are carefully considered and thoroughly screened for their usefulness to the country as a whole. Fifteen priority projects came out of the first conference and it has been possible to get started on only five of these because of a lack of funds.

These conferences have had very worthwhile results. They have underlined the magnitude and importance of the overall problem, and have pinpointed specific urgent projects. However, the conferences themselves have neither authority nor facilities to conduct the needed research.

To summarize briefly, the pulp and paper industry is a very vital contributor to Canada's prosperity now and potentially for the future. Canada's share of world markets in pulp and paper is declining because of too rapidly increasing costs and in spite of great advantages in wood supplies, water, power and skill.

Governments, both federal and provincial, and the general public including labour, are partners with the industry in this great enterprise.

The industry is making every effort to keep its costs within reason, but it does not have direct control over all costs.

We commend the federal authorities for starts made to shoulder their responsibilities as a partner, but we submit that the volume of their effort falls far short of being commensurate with the importance of the industry to Canada.

We recommend tax incentives to aid orderly expansion of production, greater use of the Canada Forestry Act in the fields of forest protection, forest access roads and economic studies of the forest resources, increased activity in forest research, stimulation of public information, legislation designed to encourage both corporations and private individuals to increase the yield from this great resource and leadership in the co-ordination of the efforts of those concerned.

Again we want to thank you for this opportunity to present to you the fields in which solutions are to be found for some of the problems facing our industry and to correct the circumstances that are damaging Canada's position in world trade which is her life blood.

We hope that you consider the time spent worthwhile and that the subject matter presented will be useful to you in your deliberations. We would offer our services with respect to further information on the subject at any time that we can be useful to you. Thank you, Mr. Chairman.

APPENDIX I

PRINCIPAL STATISTICS OF TEN LEADING INDUSTRIES, 1956[1]

Industries	Selling value of factory shipments		Salaries and Wages		Employment		Value added by manufacture	
	$'000	Rank	$'000	Rank	No.	Rank	$'000	Rank
Pulp and paper	1,453,442	1	297,572[3]	1	65,985[3]	1	736,346	1
Non-ferrous metal smelting and refining[2]	1,396,565	2	130,140	6	30,788	10	511,018	2
Petroleum products[2]	1,253,799	3	66,342	22	13,925	30	444,428	3
Motor vehicles	988,143	4	149,948	4	35,099	6	298,259	5
Slaughtering and meat packing	844,889	5	90,472	14	24,667	16	171,398	12
Primary iron and steel	680,860	6	162,881	2	36,043	3	352,523	4
Sawmills[2]	639,414	7	153,809	3	57,078	2	279,711	6
Butter and cheese	431,255	8	58,431	26	20,135	22	101,806	26
Miscellaneous electrical apparatus and supplies	393,562	9	99,639	10	26,501	13	199,625	10
Rubber goods, including footwear	355,584	10	82,155	17	23,136	18	198,602	11

[1]Table A from Catalogue No. 36-204 of the Dominion Bureau of Statistics—The Pulp and Paper Industry.
[2]Gross value of production.
[3]Does not include woods.

APPENDIX II

CANADIAN EXPORTS[1]

1958

VALUE

	To all Markets		To the U.S.A.	
	000,000's $	%	000,000's $	%
Pulp and Paper	1,010.1	21	846.2	30
Other Wood Products	403.9	8	317.0	11
Agricultural and Vegetable Products	885.3	18	179.5	6
All Other Exports	2,531.1	53	1,489.5	53
TOTAL	4,830.4	100	2,832.2	100

[1] Dominion Bureau of Statistics, Catalogue No. 65-004, December 1958.

The CHAIRMAN: Thank you, Mr. Pepler, on behalf of the committee, for an excellent brief. I notice—and you are aware of it—that you have common problems with your friends from British Columbia, who made an excellent presentation before this committee last week.

The three representatives are here, gentlemen, and are subject to questions. The meeting is open for questions.

Mr. FISHER: There is one thing lacking in this brief that was in the British Columbia brief and has some relation to federal activities. You have made no point in relation to freight rates and its effect: is that because it does not naturally fall within the interest of your association?

Mr. PEPLER: You are quite correct: it is an omission from the brief. It is a major item in our costs and it is an item over which the federal government have some measure of control.

Mr. FISHER: I just want to get the point clear: you do recognize it?

Mr. PEPLER: Thank you very much; I am glad you mentioned it.

Mr. DOUCETT: I have listened to this brief with very great interest; it is a very fine one. I wonder what, if anything, is being done to protect what little white pine we have left in the upper valley along the Ottawa river? I am wondering what is being done to re-establish that great growth of pine which in the early days I think laid the foundation, in fact, for a great part of Canada? Some of the finest pine in the country has more or less become extinct. What, if anything, is being done to help preserve what is left, and what is being done to replenish that growth?

Mr. PEPLER: I suggest that your committee get in touch with and have before you the Canadian Lumbermen's Association. There are some things being done. I know the federal Forestry Branch is working on the problem. We in the pulp and paper industry did not take it into our field. Our only use of pine as such has been to use the thinnings from certain plantations. We have taken those thinnings from certain plantations and made pulp from them. It is not the best of pulp. It does not, however, in any way detract from your problem. The problem is there. I suggest you should refer it to the Canadian Lumbermen's Association for direct study of the problem.

The CHAIRMAN: Mr. Doucett, in case you do not know, the Canadian Lumbermen's Association will appear before this committee on Thursday this week. There will be six representatives.

Mr. DOUCETT: This is a very impressive report and it is giving very wide thought and consideration to the pulp industry. I wondered whether or not any thought had been given to this matter and I am addressing my inquiry to you, Mr. Chairman and the committee.

Mr. PAYNE: When we had the west coast lumbermen before us, I asked a question which I would like to follow up here with the Woodlands Section of the Canadian Pulp and Paper Association. Research is mentioned broadly in this brief. What is the feeling of your association relative to the present practice of pathological research being carried forward under the Department of Agriculture? I am searching for your opinion. Do you deny or corroborate that evidence which was given us earlier? Do you think this is the most beneficial method of undertaking these research projects, or would it be more efficient if followed through a forestry division?

Mr. PEPLER: Mr. Chairman, I think that is a matter which would have to be studied more than we have studied it at the present time. I would say that some very excellent work has been done by the forestry biology division under the Department of Agriculture, both in the field of entomology and pathology. The question as to whether or not it is better administered under the Department of Agriculture or the Department of Northern Affairs and

National Resources through their Forestry Branch is something which I think would require more study and more careful inquiry than we have had an opportunity of doing. I would ask Mr. Matthews or Mr. Buell to make any additional comments.

Mr. PAYNE: When they are answering would they also take into consideration the practice of the Department of Agriculture in connection with widespread scientific research projects in their own specified field? Do you feel that sufficient emphasis is being placed on forestry research, or is it somewhat buried by the impetus and pressures of agriculture itself?

Mr. A. F. BUELL (*Woodlands Manager, E. B. Eddy Company*): I might say there is a danger of the emphasis being unbalanced. In other words, as long as we have some phases of research pertaining to forestry under one department and other important phases under another department there is a danger of distortion of emphasis in branches of research.

Mr. PAYNE: Might you even say at times, neglect?

Mr. BUELL: I think that is quite true.

The CHAIRMAN: That is all the more reason why we should have a research committee.

Mr. PEPLER: I would add one other thought. Our industry is vitally concerned in the problem. We would be very glad to send to any committee studying the matter the people whom we thought most fitted.

Mr. PAYNE: Then you do feel that right now there should be a very sound second look taken at the current divided basis of research undertakings?

Mr. PEPLER: I agree with that, sir.

Mr. FISHER: Would Mr. Pepler briefly explain the scope and coordination of research which his organization carries out? When the B.C. people were presenting their brief there were some questions in respect of what the industry was doing. He might like to place on the record the scope of their publications and the type of research their section is doing.

Mr. PEPLER: Our industry is conducting certain research, both as mentioned by Dr. Harrison in the woodlands department of the Pulp and Paper Institute of Canada and by individual companies. Actually in the industry we keep a directory of research by companies. There are about 175 projects currently under way in forest research by individual companies or by the institute. Those are in the field of direct applied research. They are more in the nature of experimental application of such research findings as are produced by, say, the federal or provincial forestry branch and the universities. It is very difficult to pin-point that kind of thing. In our industry that work is generally carried out by a forester employed by a company when he is not doing something else. Frankly, it has a very temporary character.

In other words, a forester with a company wants to know whether if he plants jack pine in a certain area it will grow. So he plants it here and plants it there; he finds it grows here and will not grow there. He does not know why. It is the "why" which we think is the responsibility of the federal government, the universities and others.

Mr. BUELL: I think you have covered it very well. There is not a pulp and paper company in eastern Canada which has not carried on the type of research to which Mr. Pepler has referred. You may find that a certain application of silviculture produces good results in one forest site and you may find the same application produces nil or very poor results in another area. We do not know the "why". We do not know where to proceed in another area; and until we can get the answer to some of these basic questions, through basic research—and we feel the responsibility for basic research

rests with the federal authorities and with universities—we are in the position of wasting the industry's money by continually repeating the experiments which can cost us both money and time. In forestry, time is very important. Many of our natural forests in eastern Canada today have taken 80 to 90 years to mature. We would hope that under good forest management we may shorten that rotation; but even there, we are dealing with long terms.

Mr. FISHER: On April 7 in *Hansard* there was an answer filed to a question I put in connection with the Forestry Branch losing certain areas of the Petawawa forest experimental station because of the increasing demands of the Department of National Defence, and part of the answer says:

> The area available for forest research has been reduced from approximately 93 to 36.5 square miles of land for continuing research with a consequent loss to the Forestry Branch of about 50 per cent of long time silvicultural study areas.

I thought it was regrettable that 50 per cent of the silviculture long term studies in connection with the Petawawa forest experiment should be lost. Have you any comments in regard to this kind of loss? Later I intend to take this up with Mr. Harrison and the deputy minister; but here is an example of long term silviculture studies which seems to have been blown up because of defence requirements. This situation would be very regrettable to you.

Mr. BUELL: Yes.

The CHAIRMAN: Mr. Fisher, would you like to have a statement from Mr. Harrison in connection with that?

Mr. FISHER: Yes, if he is ready to give one.

Mr. HARRISON: The facts in connection with the Petawawa Forest Experiment Station are as follows: The Forestry Branch was asked to take over the administration of a forest area of slightly under 100 square miles in 1917. What was, in effect, the first formal piece of forest research in Canada, started with sample plot No. 1 the following year, and gradually a very considerable amount of silvicultural experimentation was done. Many of these experiments were very valuable, and still are, because they are of a long time nature. You can observe now the results of treatment instituted 30 years ago, and even more. However, we are on National Defence lands and the changes in training programs and the increasing velocity of projectiles, with the consequent great increase in the area of possible deflections, have led to the situation with which we are now faced. Also, the station was operated under an agreement with the Department of National Defence, which goes back to 1923. This agreement further provided that in case of military necessity our claim on that area might be reduced.

Now it has been found necessary by the Department of National Defence to extend their training area for the physical movement of troops. I have already mentioned deflection of shells. At the present time the north half of the area, which consists of some 36 square miles, is reserved for our use by agreement, except in case of national emergency which, of course, would over-ride anything.

Arrangements have been made also to reserve a limited number of groups of sample plots and other small areas of a special nature to try to preserve them undisturbed for the next five years, so we can get the benefit of re-measurement to find out what has happened in connection with these long term experiments.

We have a large laboratory at our station headquarters; it is a very good plant. We would be very glad if any members of the committee would care to come up and see it. I think it would be true to say that it is one of the most advanced forest research laboratories in existence anywhere, and a

great deal of what is usually referred to as fundamental work is being done there. Also, we are using this north half for more intensive demonstrations of various methods of managing a forest.

That is about the way the matter stands now, and if you are interested in any details of the program, Mr. Redmond, the chief of the Forest Research Division, would be glad to give them to you.

Mr. FISHER: If you lose the 50 per cent this is, in effect, a set-back to your silviculture study.

Mr. HARRISON: We are certainly sorry to lose it.

Mr. MCQUILLAN: I wonder if you have anything of a similar nature in connection with British Columbia? Does the Dominion government operate a silviculture forest research program in any area under their jurisdiction?

Mr. HARRISON: No.

Mr. MCQUILLAN: None at all?

Mr. HARRISON: Not yet.

The CHAIRMAN: Or in any other part of Canada, Mr. Harrison?

Mr. HARRISON: Yes, we have a rather large forest experimental station at Acadia, 17 miles out of Fredericton. That area contains about 32 square miles and is proving a very promising area at the present time. We have access now to a rather limited area of the Valcartier forestry station in Quebec. That is also on a military reserve, and the same difficulty is occurring there as has occurred at Petawawa. We have an experimental area of 25 square miles within Riding Mountain National Park in Manitoba; and we have a station in the foothills of the Rockies at Kananaskis, between Calgary and Banff, which is suitable for the study of lodgepole pine and the other East Slope species.

Also we have made arrangements in one or two cases, and expect to do more, whereby rather small areas of two or three square miles, which are representative of the major forest types within a province, are being reserved by the province for our use for indefinite periods; sometimes for specific purposes, such as provenance testing of important species.

Mr. PAYNE: Have you any plans to establish such a silviculture area in the interior or coastal regions of British Columbia?

Mr. HARRISON: Nothing specific. As explained, we only started forest research work, as opposed to forest products research, in British Columbia in the last three years, and the present effort is on three physiology and forest fire protection research. In view of the fact that British Columbia runs a fairly strong forest research organization itself, which is concentrating mostly on problems of silviculture—that is the treatment of the forest as such—it may be that we will concentrate more heavily out there on such matters as work in the allied sciences. To ensure that what I am saying is intelligible, I might say that there are a great many problems in forest research; and in connection with the whole staff of our division across Canada it is necessary to have some sort of a planned program whereby all these things are dealt with at the same time.

I am going to read this list, which is by no means exhaustive; then I will explain just what I meant by that necessity for concurrent work.

The subjects dealt with by the Forest Research Division fall into two groups. One, you can, for lack of a better term, call forest management subjects. These are silviculture, or the actual treating of the forest as a crop, tree breeding, forest mensuration, including photogrammetry, which is an extremely complicated field, forest regulation and forest fire protection.

But with that, work has to be done in the following allied sciences: ecology, tree physiology, soil science, plant taxonomy, including dendrology, forest meteorology, statistics, and genetics.

I said work in these fields has to go on concurrently. The reason is that progress made in any one of them can affect progress in one or in many of the others; so you have to keep going in all fields at the same time. A new idea coming up in ecology can profoundly affect studies of practical silviculture, and vice versa; so the field is very, very great. One of the great problems, of course, is to do two things: one, to give all the help we can towards the practical problems that arise in the various provinces we are serving—all ten of them—and, at the same time, maintain a balanced program which will give at least some attention to each of these many subjects, when you look at the work in Canada as a whole.

Mr. FISHER: One final question, Mr. Harrison. You have no criticisms to make on any of the points that are made in this brief, in so far as suggestions are concerned that the federal government, through your particular branch, should be doing more work and expanding its activities?

Mr. HARRISON: I concur.

Mr. FISHER: You concur?

Mr. HARRISON: Yes.

The CHAIRMAN: I think Mr. Harrison's statement, Mr. McQuillan, amplifies the former short answer that was given in reply to your question.

Mr. FISHER: There is one point I would like to put to Mr. Matthews and Mr. Buell. They are both very knowledgeable on the real forest problem. On January 23 the Northwestern Ontario section of the C.I.F. passed unanimously the following resolution:

> Since, newsprint and market pulp are the main components or our export trade in forest products and
>
> Since, spruce (both black and white) wood gives the necessary high quality to these items and
>
> Since, a large percentage of the forest land of northern Ontario is a natural site for either black or white spruce and
>
> Since, both white and black spruce are more resistant to insect and fungus attack than most other native species
>
> Resolved that there should be a policy, in north-western Ontario, of favouring and aiding regeneration of spruce on all sites that will support a merchantable stand of spruce, unless it can be shown that other species will produce greater economic returns.

Have you any comments to make on that resolution, Mr. Buell?

Mr. BUELL: No comments, except to say I heartily concur.

Mr. FISHER: Mr. Matthews, have you?

Mr. MATTHEWS (*Chief Forester, Abitibi Pulp and Paper Company Limited*): With some reservation, in that white and black spruce in a natural forest are often followed by balsam fir, and that is a very useful pulp-making species. It is a large component of the pulp and paper made in the province of Quebec. Mr. Pepler will bear that out.

In many cases it comes in without any effort after logging because it is a natural successor to spruce. It makes good use of the site and grows much more quickly than spruce, possibly in half the time. I think that has to be taken into consideration in any resolution of this sort.

Mr. FISHER: If there is merit in this resolution, how could the federal government make a greater contribution in this particular field, if it is a fairly vital point?

Would you say now the silviculture research program of the federal branch is strong enough to get to the roots of some of these answers required by this resolution?

Mr. MATTHEWS: I would say it is basically, but it probably has not the staff. I believe most of the work in Canada on tree species—and I am talking in terms of genetics, reproduction, and so on—has been in species other than black spruce, which is a prime paper-making species. I think there is a very wide field for work in black spruce—Mr. Harrison will correct me if I am wrong—and I would certainly like to see it done.

Mr. FISHER: You have in northwestern Ontario what they call a woodland laboratory. There are remarks in your brief suggesting tax incentives and various things which could be done to improve the forestry picture. Do you see any relationship between such tax incentives and the extension of such kind of operation when it is carried out?

Mr. MATTHEWS: I am not a tax expert by any means, Mr. Fisher. As far as to what our company might do in relation to taxes, our president, will appear before your committee tomorrow, and I suggest that question might be much more appropriately addressed to him.

Mr. FISHER: It will be.

There is one other question I would like to ask before I tackle some of the points in the brief. Back in 1936 Elwood Wilson, a well known forester at the time, made this statement:

> A word might be said simply as a statement of fact about the position of the forester in public service and in the employ of large corporations. They are not free to express themselves. They not only cannot write freely about their professional work and their opinion on it, but also they cannot speak freely about public affairs.

Do you think that situation still exists, Mr. Buell?

Mr. BUELL: It might to a degree, but not to the extent it did in Elwood Wilson's day. I think the fact that Mr. Pepler and Mr. Matthews and myself—all of whom are foresters—are sitting with this group today and talking about matters that foresters would not have discussed in Elwood Wilson's day with a group of parliamentarians is sufficient proof that that situation does not exist now.

Mr. FISHER: As a result of the C.P.P.A. there has developed in the woodland section quite a bit of liaison, and interchange of information between the government and industrial foresters, especially in the last decade, let us say?

Do you suggest there are still advances to be made in this relationship?

Mr. BUELL: Between the government and industry?

Mr. FISHER: Yes.

Mr. BUELL: Certainly.

Mr. FISHER: I ask this question because I sometimes get the impression, from talking to foresters, that they feel one of the barriers to getting information and the ideas down is that there is not sufficient co-operation and recognition of mutual objectives on the part of the government foresters and industrial foresters.

Mr. PEPLER: Mr. Chairman and Mr. Fisher, I might try to answer that question in this way, that I consider that as a professional problem. I personally never agreed with Mr. Wilson's point.

It comes to this point, that whether you are working for the government or a company you have the same long-term objectives, and you can direct your effort towards those long-term objectives. In short-term objectives you must follow the policy of your employer. I agree, whether it is the government or an industry. You either square that with your conscience or you quit. I do believe that. It is a professional rather than an economic matter;

but I do agree with you, and I have worked towards this end for a long period of years. I believe that there should be the closest discussion on professional problems between industry and government people. The more they talk over their problems, the more they are going to find areas of agreement and make progress in those areas.

Mr. FISHER: In so far as the foresters of the federal government are concerned, do you feel there is still room for advance in this particular sector?

Mr. PEPLER: I would say that that is merely a continuation of what has gone forward in the past. It has been my privliege to work with foresters in the federal government for a good many years now. I used to be stationed with the Canadian International Paper company here in Ottawa, and our discussions have always been cooperative and progressive. My own thought is that it is only lack of funds. That has been much more of a hindrance to the progress than lack of agreement between the federal foresters and industrial foresters.

Mr. FISHER: In other words the lack of funds is on the side of the government foresters, you suggest?

Mr. PEPLER: That is right.

Mr. FISHER: On page five of your brief you say:

> Currently, the federal government draws direct tax revenues from the forest industries of the order of $200,000,000 annually.

That figure does not include payment of income tax that is made by your pulp and paper workers?

Mr. PEPLER: That is right.

Mr. FISHER: So actually the figure, if you took it in those terms, would be much bigger?

Mr. PEPLER: That is right.

Mr. MCQUILLAN: On page four of your brief it says:

> The emphasis still seems to be on direct revenue from the forests rather than on the development of increasing indirect revenues through maintaining and expanding production.

I wonder if any of you gentlemen can tell me how much new capital expenditure is anticipated in the coming year in Ontario and Quebec in the way of new plants or new expansion in pulp and paper mills.

Mr. PEPLER: I am afraid I cannot answer that. All I could tell you would be only what I have read in the newspapers—but we have been through a period of expansion, and at the moment we have capacity to produce more than we can sell. So it is common sense, if I may say so, that there would be less expansion in the immediate future.

I have heard it stated that 1961-62 is the year when we will catch up with our present capacity. I say that only as an ordinary citizen and not with any special knowledge of the pulp and paper industry.

Mr. MCQUILLAN: Is it not possible that this over-taxation that you refer to, and which was also referred to by the delegation from British Columbia, is partly responsible for the fact that there is no new capital expenditure being planned? In other words, that capital which might have come into Canada was being diverted into other countries and other parts of North America, perhaps to the south, and even into Mexico, which might have come into Canada if we had had a favourable tax plan?

Mr. PEPLER: I would corroborate that statement; but again it is only based on kowledge that is available to everybody. The only particular knowledge I might have that would strengthen the thinking on it is that I know that others have looked at sites in Canada, and they have not expanded in Canada. I am thinking of such international organizations as Bowater's and

the International Paper Company who have mills in various parts of the world and who have recently expanded their production in other areas. Why? I do not know from my own personal knowledge.

The CHAIRMAN: Following the question asked by Mr. McQuillan, would you please look at page three of your brief, where, in the first paragraph it says:

> Our costs are rising at a faster rate than those of our competitors and, in the frequently heard phrase, we are pricing ourselves out of the market.

I wonder if you might elaborate on that and give us—apart from the taxation angle—your ideas for including that particular phrasing in your brief, particularly where you say " . . . we are pricing ourselves out of the market"? Are not high wages partly to blame?

Mr. PEPLER: Yes, there are several factors which affect that situation. One, I think, that we can see, is that in Canada with respect to labour and labour earnings, we are taking our men away from their homes into the woods and we are paying them competitively with other labour demands. They are living at a comparatively high standard of living in Canada, as compared to indigenous labour that is used in other places.

The CHAIRMAN: You are referring to other countries?

Mr. PEPLER: To other countries, yes.

The CHAIRMAN: Are you doing enough in the way of research to lower the cost of production, as an industry?

Mr. PEPLER: As an industry I would support that with this kind of statement: that we are holding our own as regards costs of delivery of wood to the mills, in spite of increased labour earnings, and in spite of increased freight rates and the general rise in the cost of living, the general rise in wholesale prices.

In the last five years the cost of wood delivered to the mills has gone up and down, but in general it may be stated that we are holding our own. We are doing that by use of improved logging techniques and logging equipment. We have increased productivity per man quite decidedly in recent years, due to mechanization in a major part.

The CHAIRMAN: Are you using through research any end-products—what would formerly in years gone by be termed "waste" products? Are you using all those end-products coming from the forest?

Mr. PEPLER: We have, in our mills, developed ways and means of getting more out of a piece of wood—more products both in the paper field itself and in the way of by-products.

The CHAIRMAN: Do you feel personally that the industry is doing enough in the way of research?

Mr. PEPLER: That question is a little like the one: when did you stop beating your wife! I am never satisfied that we are making enough progress.

The CHAIRMAN: I think our committee agrees with you in that.

Mr. MCQUILLAN: You asked Mr. Pepler about their pricing themselves out of the market. A great deal of the pulpwood expansion in the markets in which we compete is taking place in the United States where, I believe, they have higher wage scales than we have. How do you account for the fact?

Mr. PEPLER: No sir; that is not a correct statement. The wage scale for woods labour in the United States is lower than ours. The wages in the mills are not directly comparable; but, generally speaking, you can say that in the mills they are at the same level.

Mr. McQUILLAN: What area are you referring to?

Mr. PEPLER: The south; and even in the northeast their wage rates in the woods are not higher than ours.

Mr. McQUILLAN: Does not the taxation feature come back into the picture here? I brought before committee the other day the fact that two American companies show a net taxation of approximately 37 per cent, whereas I think ours in British Columbia now, in the pulp and paper industry, runs something over 50 per cent. How do your tax rates here in Ontario—combined federal and provincial taxes—compare with tax rates of other industries, let us say with the whiskey industry?

Mr. PEPLER: Well, sir, I am not a tax expert. I would be pleased to pass that question on and, if you wish, bring you an answer, or have a tax expert from the industry discuss the matter before the committee.

The CHAIRMAN: Will there be a tax expert here tomorrow, do you know?

Mr. PEPLER: I do not know. Mr. Ambridge himself would be much better fitted than I to answer that question.

Mr. STEARNS: Mr. Chairman, I would like to ask Mr. Pepler a question which I asked the British Columbia delegation last week. Could he tell us what percentage of the forest industry in Ontario and Quebec is on a sustained yield basis today?

Mr. PEPLER: My answer to that, Mr. Stearns, would have to be very general. I believe that the industry both in Quebec and Ontario is on a sustained yield basis with regard to their holdings and their ability to supply. Maybe the two gentlemen with me might elaborate on that.

Mr. BUELL: All I can say is, within the last five years I have been associated, first with an Ontario company and secondly with a Quebec company, and in both cases we were on a sustained yield basis; that is, our annual crop did not exceed the annual allowable cut as determined by inventory and rate of growth.

That can be borne out by the government foresters who are responsible for the carrying out of the regulations, which in both provinces demand that the cut shall not exceed the annual growth, as determined by an involved and intricate method of computation.

Mr. STEARNS: If that were true, would you say that companies that are on the sustained yield basis ought to be entitled to special tax concessions, as an incentive to all the companies all across Canada, practically, in conservation and going on to sustained yield?

In other words, might the federal government be able to offer tax incentives in continuing depletion, for instance, to companies who were able to file working plans showing that their annual cut did not exceed the annual growth?

Mr. MATTHEWS: I think there might be a hitch or two in that, because there are some companies who, by force of circumstances—and I am thinking particularly of lumber companies—would be unable to obtain enough area to carry on on a sustained yield basis. In Ontario the whole province is set up in what we call management units, some of which would be company management units which have a sustained yield plan. Some of those are government management units.

The government management unit is designed to operate on a sustained yield basis and operates through the sale of blocks of timber within the management unit. A particular block an individual company might get might not itself be on sustained yield, but would form part of a unit which was on sustained yield. So it might be a little bit tricky to offer an incentive in that.

The CHAIRMAN: Mr. Stearns, will you ask that question tomorrow?

Mr. STEARNS: Yes, I will be glad to.

Mr. PAYNE: Mr. Chairman, I do not want to divert the subject to an entirely different topic, but rather to follow out the continuity of the questioning with the preceding lumber delegation.

Throughout the brief we have today are indications—without, in my opinion, definite statements—with regard to markets. Certainly in both briefs we have had indicated that, while our net export figure may not be dropping in relation to the world export market, we are gradually arriving at a point where we are in a less favourable position.

Pardon my lengthy remarks; but I think it is fair and right to say that in the testimony from the British Columbia delegation it was definitely indicated that certain markets had been dropped in United States competition—this is world markets—by virtue of financing arrangements undertaken by the United States government.

My question to the British Columbia delegation—and, likewise, now—is: are you satisfied, as an industry, that you are receiving the maximum assistance in approach, maintaining and creating additional markets throughout the world? I would like, if I could, to have the delegates express their general opinions on this matter.

Mr. PEPLER: I think the answer to that is, we are not satisfied that we are receiving the assistance that we could in developing markets.

Mr. PAYNE: Would you spell out in detail some of your thoughts, because those thoughts can be helpful to a committee such as this.

Mr. PEPLER: I think, there again, sir, that question would be best asked tomorrow.

Mr. PAYNE: Whom would it be asked of?

Mr. PEPLER: Mr. Ambridge.

Mr. FISHER: Mr. Chairman, may I come back to labour costs? We have in eastern Canada—and this is a field that you gentlemen know best—say, Ontario, Quebec, the Maritimes and Newfoundland, areas that are carrying on pulpwood production. Is it generally fair to say that, in so far as mill labour costs are concerned, they tend to be much closer, in a regional sense, in comparison, than woods costs?

Mr. PEPLER: Woods earnings, do you mean?

Mr. FISHER: Well, labour. What the workmen get in the mills tends to be closer than what the woods industry in northern Ontario gets, compared with Newfoundland?

Mr. PEPLER: I do not know that I can answer that one, Mr. Fisher. I would believe that "yes" would be the answer to the question, that the rates in the mills are closer to the same level than the rates in the woods. There are many factors, however, that have to be taken into consideration in such a question.

Mr. FISHER: What I want to lead to is this: we have not had the expansion in eastern Canada as a whole, either in the Maritimes, in Quebec, or in Ontario, because woods costs—because of high labour costs—are higher in Ontario than any of these other regions; is that not generally true?

Mr. PEPLER: I believe that is generally true, yes.

Mr. FISHER: Can you see any reason why—if high labour costs are a factor—Ontario should not suffer more, in expansion terms, than these other parts of eastern Canada, where woods costs are lower?

Mr. PEPLER: There are other factors in the total cost of wood. There is the stand itself, the quality of the timber, the nearness of the timber to the mill: they are all factors in such a picture. The labour costs in one area may be greater; the power costs in that area may be lower.

Mr. FISHER: The Anglo-Newfoundland Development Company Limited gave information that their cost per cord delivered to the mill was between $22 and $23, which is quite a bit lower than the general cut cost per cord for mills in northern Ontario. If this is the case, how is it that the Ontario mills are able to keep going in the face of this advantage which the Newfoundland mills have?

Mr. PEPLER: I can only answer that by saying that the other costs, such as conversion cost in the mill and the power costs, are lower. They must be able to compete some other way.

Mr. KINDT: In other words, the question of cost is a terrifically complicated matter. It is not possible to generalize in a superficial way between one area and another.

Mr. PEPLER: That is correct. I might also go back to a question Mr. Stearns asked. The whole problem of what should be done is a very complex one. In direct answer to Mr. Stearns, the development of good forest practice varies from the highly intensive operation of a wood lot to the production at the northern edge of what we call virgin forest. You cannot apply a forest management principle—one principle—to the whole. With that in mind, one of our recommendations deals with economic studies.

Following your question, sir, I believe that these matters have to be taken under advisement, under consideration. Unquestionably there are places where tax incentives to induce better forest management can be put into good effect. You cannot, however, make one rule and apply it to the whole. There is provision under the Canada Forestry Act for economic studies. Perhaps that is one place where some thought can be given and some development of economic research put into effect.

The CHAIRMAN: Mr. Pepler, might I ask a question at this point, pointing up what was said a moment ago. Do you know whether or not any companies with very large capital expenditure and which proposed opening in Canada did not do so, because of costs and other factors and opened elsewhere?

Mr. PEPLER: As I said before, it is common knowledge that Bowater's looked at certain places in Canada.

The CHAIRMAN: At what places in Canada did they look?

Mr. PEPLER: I do not know specifically what places.

The CHAIRMAN: For instance, what province?

Mr. PEPLER: Ontario is one province.

Mr. FISHER: Is it not true that in the last few years A.N.D. have been looking at the Sioux Lookout area in Ontario?

Mr. PEPLER: It is true; A.N.D. looked at places in Ontario. It is also true that Canadian firms looked at places in Saskatchewan, and Saskatchewan has not yet been able to sell the idea of a mill.

Mr. FISHER: On page 4 you say, "Too little use has been made of this well-conceived legislation"—that is the Canada Forestry Act. Since there is an inter-relationship between the federal and provincial governments, could you go further and state which one of the two bodies seems to lack the initiative? Or if you do not want to do that, could you say whether or not the federal government has failed to take the initiative in this?

Mr. PEPLER: There was a situation which since has been corrected in respect of fire protection. We do not believe that has been followed through enough. I am not prepared to say who is lagging, whether the federal or provincial governments. I do believe, however, that the federal government should take the leadership in these things. I would not criticize either of them. I just think more thought should be given to it because the end result is not good enough. There is some weakness in the situation or we would have had more allowance, more provision for fire protection.

Mr. FISHER: As far as the federal government is concerned, forestry is contained largely within the Forestry Branch of the Department of Northern Affairs and National Resources. Do you think there might be some other department or another side of the department set up at the deputy minister level the main function of which would be to give leadership on the forestry side? Do you think we have reached in Canada the point where we should have deputy minister recognition rather than merely the director of a branch?

Mr. PEPLER: I would say that probably is correct; that the federal interest in forestry in Canada is sufficient to warrant putting more emphasis on it. Whether or not it should be by raising it to the deputy minister level is a question which the government has to answer for itself. In my mind, however, there is no doubt but that the federal role is of sufficient importance for it to take some leadership. In that field, another possibility is the setting up of a National Forest Development Advisory Board, advisory to the minister of Northern Affairs, set up and probably financed by him, a board which could have representation from the federal government, the provincial government and industry. We had an example of such a board in the forest insect control board which looked at what purported to be a national emergency at that time. It came into being, I believe, in April 1945, and ended in 1952, its work having been completed. Such a board undoubtedly could handle some of these questions and bring together these parties to see where the weaknesses in the system are.

The CHAIRMAN: I wonder whether or not there has been any evidence of increased participation by the federal government in recent years.

Mr. PEPLER: Well, there is this: they now have made provision for, and entered into agreements with the provincial governments. If my figures are correct an amount of $750,000 was allocated under the agreements with the provinces. In 1958-59 there was $1¼ million allocated to that. If it so happened, that each province were to enter into such an agreement with the federal government under the Canada Forestry Act; the sum of $125,000 per province is pretty small money. In the province of Quebec alone our industry spends over $2½ million, regardless of provincial expenditure.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): May I just mention one thing? I would be very interested in having Mr. Pepler's view on this. The government has taken a new initiative which the Minister of Northern Affairs has started working on. That is for the institution of a national conference on conservation of renewable resources.

The conference in question is to be held approximately one year from now. The first preliminary meeting with the provinces was held last November. The intention is that the conference would discuss all renewable resources, of which forestry would be one of the most important. I know Mr. Hamilton has regarded this, and does regard it, as the sort of organization and meeting out of which some new initiatives might come for work, not simply in the field of forestry, but also in the field of other renewable resources as well. When Mr. Pepler and his associates are here, I would be interested to hear their views as to the probable value of this kind of a meeting in which not only the provinces and the federal government, but also certain organizations in Canada of a professional or of an industrial character, might be represented, which could bring proposals for further action. I am interested in hearing any views as to what the value of this might be.

Mr. PEPLER: I think I can give you a good answer to that. We believe that such a conference will do good. Naturally, it will depend on the follow-up of the conference afterwards; but as I said a moment ago, the more the partners in this enterprise talk to each other and discuss their problems with

each other, and the solutions of these problems, the better. I gather from Mr. Robertson's statement that it is the government's intention to bring together the federal government, provincial governments, professional associations and industrial associations to discuss these things and, therefore, I believe that is good. Would you like to elaborate on that, Mr. Matthews?

Mr. MATTHEWS: I would like to say that I agree with it. I would like to see the forestry associations included in that conference; I think they could play a very useful part. There is a tremendous need to make the people of Canada realize this is a forested country, which is based to a large degree on the forestry economy. I think it should be pointed out that they share in the economy and also have a share in the responsibility for protecting the forests. I do not think that has been gone over well enough yet. I think the conference could help in that to a large degree.

The CHAIRMAN: That meeting will be held in Ottawa?

Mr. ROBERTSON: Yes.

The CHAIRMAN: Would you like to comment on that, Mr. Buell?

Mr. BUELL: I concur in what has been said.

Mr. KINDT: I have one or two questions. Is it your thought, Mr. Deputy Minister, that this conference would be a continuing affair or a one-shot deal?

Mr. ROBERTSON: I think that would remain to be seen when the meeting takes place. The immediate objective is the conference to be held in the spring of 1960.

Mr. KINDT: And out of which might emerge—

Mr. ROBERTSON: We do not know what will emerge.

Mr. PAYNE: I have a question in connection with this proposal. What is interpreted as the renewable resources?

Mr. ROBERTSON: It does not include mineral resources, either metals or fossil fuels, or anything of that kind.

Mr. PAYNE: I am asking for the inclusions.

Mr. ROBERTSON: No one has made a detailed list, but it would include forestry, land use and water resources. In land use I should have included recreational values of land use, which we visualize as an important resource of a renewable character, if recreational lands are handled properly. Wildlife would be another that would be represented. Mr. Payne, I think those are the main fields.

Mr. PAYNE: My reason for asking was because of my concern which I expressed previously, that is, the danger of losing the emphasis. Here on the one hand we have the forest industry, which is paramount in Canadian economic terms—you can view that from any angle—and we may be confusing that with the series of renewable resources which, from the gross economy point of view, do not bear any relationship. I would like expressions from the delegation as to whether once again we are apt to lose the necessary emphasis in connection with industrial requirements.

Mr. FISHER: I would like to support the question.

Mr. PAYNE: I would like an answer on that.

The CHAIRMAN: Probably you would like to hear a statement from the deputy minister.

Mr. PAYNE: From industry.

Mr. FISHER: Could I say this? The reason why I think this is important is that we have had these big conferences in the past. We had one in 1911; we had one in 1917.

I am very concerned that in all the big building up to a big conference we could lose sight of the short-range problems, the urgency of the problems the forestry industry faces at this time.

I do not see how any of these gentlemen could say this conference was not a move for the good. Let us get back to the forestry end of it; and I think that is why Mr. Payne's question is important.

Mr. ROBERTSON: I do not think the result Mr. Payne is worried about is likely to happen.

What is visualized is that the conference would have to work through a number of, what you might almost call, sub-conferences, because you cannot mix all these things together in a pot and get a useful result.

What is really contemplated is that, in effect, you would have a particular series of meetings on forestry; but there are relationships between these different renewable resources which, in the government's view, give special value to having a meeting that brings them together.

For instance, if I might cite one case. Operations in the eastern Rockies forest conservation area are mainly in the field of forestry, but they are related to water conservation, in the same way that recreational land use relates, to some extent to water conservation and forestry.

The thinking is there would be value in bringing them together, so that having had them on a subdivided basis, they do not get lost in a big mixture.

Mr. STEARNS: I am inclined to agree with Mr. Fisher and Mr. Payne. I think the forests are the most important thing, because you will not have any wildlife, you will not have any water resources, if you do not protect the forests.

I would like to see a conference on forestry; and if we can make some progress in that, that is going to embrace the other renewable resources of which you are speaking.

Mr. PAYNE: I do not bring this up, Mr. Chairman, in the spirit of criticism of the proposal brought forward. As Mr. Fisher said, it is a matter of emphasis, and here we have Canada's most important industry with urgent matters requiring attention. Let us not get too high-flown in our approach to this matter, when urgency faces us.

Mr. MCQUILLAN: In the British Columbia delegation of last year Mr. Mahood, the witness, appeared before this committee and in his presentation laid emphasis on the urgency of renewing our forest crops in the immediate vicinity of existing plants and transportation facilities. That is the most urgent aspect that has been stressed in all three presentations; and I think most of us are now beginning to understand the problem there.

I think that points up what Mr. Payne is expressing here. I feel this proposed conference should be, primarily, a forestry conference and the rest of these fields should be brought in as they relate to the forestry problem.

The CHAIRMAN: Is there not a very close relationship though, Mr. McQuillan?

Mr. PAYNE: Yes there is; but there is only this situation: we have a tendency to bury the interests and needs of Canada's most important industry under a pile of wheat through the Department of Agriculture.

Now we are prepared to delay emphasis on long-term and short-term planning of an important industry under the allied requirements of wildlife and other factors. The study is probably desirable, but we are losing our focus of importance in this matter.

Mr. MCQUILLAN: Public interest will centre around wildlife and water resources.

Mr PAYNE: They are more attractive.

Mr. ROBERTSON: If I may make one further comment, I sympathize entirely—purely because of my departmental interest—with the views expressed about the importance of the forestry aspect of it; but it is the feeling of the government, and I must say it is one with which I also sympathize, that the conservation problem has to be seen as a whole; that land use and water use are related fundamentally to the forestry problem, and that forestry relates to them. It is most important to try to study the thing in a systematic form, and it is better to see it at least as a single exercise. Mr. Fisher referred to the 1911 and 1917 meetings and said that since 1917 there has not been a meeting on conservation of a general character.

Mr. FISHER: The recommendations made then would be valid today. I will wager that I could write the recommendations which will come from this conference. In the meantime we have an industry which says it is facing trouble. It is one of the most important industries in the country. You may lose sight of this industry in regarding the immediate problems of something that is as grandiose as agriculture. That is my feeling.

Mr. ROBERTSON: The question will not be lost sight of. I certainly hope that it would not.

Mr. FISHER: We have recommendations from this group from British Columbia, with specific problems which do not need to wait for any conference.

Mr. ROBERTSON: I was not suggesting that these things have to wait for a conference. I was simply using the question of a conference as a matter which could bring about some initiatives of a helpful kind; but I was not suggesting that all these things have to wait for a conference.

Mr. FISHER: On page ten of your brief you say:

> The branch is quite unable, with present personnel and budget, to meet current needs.

We do not need a conference to find that out. The government should know how. Is that not correct?

Mr. ROBERTSON: I quite agree.

Mr. PAYNE: This was amply concurred in by the previous brief and from the analysis it received by the committee.

Mr. ROBERTSON: I am not suggesting that everything has to wait for a conference, not for a minute. I only wanted to get the views of the delegation as to whether a conference would have value.

Mr. PAYNE: We have a very important industry, and we have a department to handle the matter. We go into agriculture and we have a department handling the matter. But we go into a major industry and we are prepared to disperse its interests among a lot of importers, which has a far greater economic effect upon Canada at this time.

The CHAIRMAN: I think the point was made that they are related. I think that is an important point.

Mr. FISHER: Do you not think it possible—to put it bluntly—that in a department such as yours which has a tremendous responsibility in the north, the forestry side of things may be diminished to a degree, and lost sight of, in relation to the tremendous emphasis that is going on with respect to northern development?

Mr. ROBERTSON: That is a possibility, certainly. There are a lot of things which have to be attended to. I think we could say that that could happen, but I hope it will not happen. I do not know. But a five-year program is being worked out for expansion of the work of the forestry branch in the way of forest research, forest products research, and forest management. I

think that will achieve substantially what this brief and the brief presented the other day suggested should be done. I would not deny for a minute that other things do press.

Mr. AIKEN: May we not hear from Mr. Pepler or from the industry in connection with this particular matter?

Mr. KINDT: I would like to add a footnote to what the member has just said. May I ask Mr. Pepler what his views are on the board that was suggested? Would that board be advisory?

Mr. PEPLER: That board would be advisory to the Minister of Northern Affairs and National Resources. This is just a concept that we have.

Mr. KINDT: Is it part of your concept that this board would be relatively small and still look with perspective at the entire forest industry, and that it would be of an advisory nature, all with a view to the better functioning, not only of research, but with respect to other phases of the industry as well?

Mr. PEPLER: Yes. It is our concept that such a board would be small, not more than fifteen at the outside,—probably nine would be a more workable group; and it would have representatives from the federal government and from the provincial governments. They would have to decide for themselves how that representation would be made up. We assume they would be people who would look upon the problem as of a national character, rather than in the sense, of a parliamentary representation, people from the industry, from both our industry and the lumber industry; it could, I believe, go a long way in coordinating the efforts of the various groups. Does that answer your question?

Mr. KINDT: It does.

Mr. PEPLER: It would be advisory, and to it would be submitted your problems of priority, and any allocations made under the Canada Forestry Act. It would primarily be advisory to the Department of Northern Affairs and National Resources and to consider problems brought to it by other departments which might have a fringe interest in forestry. It could also undertake a study for a province, if requested to do so by a province.

The CHAIRMAN: Gentlemen, before we adjourn, I think you would like to have in the record of proceedings a statement of the amount spent by the federal government for the Forestry Branch for 1953-54 down to 1959-60. I think that would be information of value to the committee.

Mr. ROBERTSON: The figures show a general increase, but in the last two years, 1957-58 and 1958-59, as compared to 1959-60, the figures seem erratic. That is because there was substantial construction in two of the years, which does not appear in the third year.

The CHAIRMAN: Is it agreed, gentlemen?

Agreed.

FORESTRY BRANCH

Fiscal Years	Vote Totals	Full time staff	% of increase over previous year
1953-54	4,978,991	328	—
1954-55	4,441,920	337	2.7
1955-56	3,981,383	346	2.7
1956-57	4,791,733	360	4.0
1957-58	7,885,680	377	4.7
1958-59	8,111,991	393	4.2
1959-60	6,251,342	426	8.4

Mr. FISHER: I have one final question. Are these witnesses aware of the fact that last year the minister was asked to make a study of taxation as it bears on the forest industry?

Mr. PEPLER: No, I was not aware of that.

Mr. FISHER: The study was made, but I understand the minister was dissatisfied with it, and that nothing further has been done. I want to ask you if you feel that such a study should go beyond the departmental scope and take into consideration the entire field of taxation policy, in so far as it applies to the forest industry of Canada.

Mr. PEPLER: I believe it should. I believe such a tax study is due, yes.

The CHAIRMAN: Gentlemen, I think we should have a meeting this afternoon, if it is agreeable. Perhaps we could finish with these witnesses, and then our next meeting would be tomorrow morning at 11 o'clock. Is that agreeable? After the routine proceedings and the orders of the day we will meet in this same room this afternoon, just as soon as that is over.

AFTERNOON SITTING

MONDAY, May 18, 1959
3.30 p.m.

The CHAIRMAN: Gentlemen, I think I see a quorum. We will now proceed with the questioning. Some of the witnesses would like to get away at 4.15, and we will try to accommodate them. I am going to suggest—with your approval—that copies of this brief be sent to the Minister of Finance and to the Minister of Trade and Commerce, as was done with the brief presented to us last week. I think, as a matter of fact, it was agreed that we send it to the Minister of Finance; but, with your permission, we will send it also to the Minister of Trade and Commerce.

Mr. WOOLLIAMS: Do you want a motion to that effect, Mr. Chairman.

The CHAIRMAN: Just "agreed", that is all.

Agreed.

The CHAIRMAN: All right, gentlemen: time is the essence, as well as quite relative.

Mr. MARTEL: Mr. Chairman, I would like to ask one of the witnesses this question. Perhaps they could tell us if they are aware of the production of pulp and paper in Russia, and if they think this might undermine our exports.

I see, at the end of their brief, that appendix II gives the over-all production of pulp and paper to all markets and to the United States. I would like to know if they have any information about pulp and paper production in Russia, and whether this endangers our markets somewhere else in the world.

Mr. PEPLER: No official figures are published for Russia. In general world statistics, at the moment Russia is not considered an active pulp and paper producing area for export. I might add to that my own personal opinion: they have a potential; they just have not directed their efforts in the direction of producing pulp and paper. But officially, I do not know. I think perhaps Mr. Harrison could give you a better answer as to the accuracy of statistics from Russia in the United Nations records.

Mr. HARRISON: Mr. Chairman, I have not the figures in my head. The production of the various forest products does appear in the year books issued by the Food and Agricultural Organization of the United Nations. I do know

that for the last couple of years the Russians have been contributing a good many of their statistics. I could check, if you so desire, see what the published figures are, and bring them to the committee at a later date.

I used to work with F.A.O. myself. In the last year or two some of the figures that have come out of Russia seem to have been pretty well confirmed, if you got them at all. Generally, it was in the form that there had been a percentage increase—an increase, say, of 15 per cent in the last year. We did not know what 100 per cent was. But they have changed their attitude on that. I think it is probably to be expected that the figures they supply to F.A.O. may be regarded the same as those from any other country.

The CHAIRMAN: Would you like to have those figures produced?

Mr. MARTEL: At a later date if it is possible.

The CHAIRMAN: That is, the export figures from Russia to various countries?

Mr. MARTEL: Was there not recently a report in the newspapers that the Russians said they would export pulp and paper to different countries? I do not remember exactly. But I would like to know if this situation would interfere with the export of pulp and paper products from Canada?

Mr. PEPLER: I can only say that it is quite possible that pulp and paper exports from Russia might well be a serious competitive factor in our well being in Canada.

Mr. SLOGAN: Would you say that at this time that threat does not exist as it does in the lumber industry?

Mr. PEPLER: I am not familiar with the lumber figures at all, sir.

Mr. SLOGAN: Apparently the lumber industry in Canada is suffering to a certain extent by being undercut in our markets by the shipment of wood products from the Soviet Union. But you would say that at this time this does not exist in the case of pulp and paper?

Mr. PEPLER: To the best of my knowledge, it does not exist at the present time.

Mr. AIKEN: I wonder if I could enlarge on this question that we touched on. On page 2 of the brief it is said that the Canadian share of the world markets has declined, and I would like to ask about competition in the world markets. From where has this competition come that has caused our share of the world's markets to decline—from what countries?

Mr. PEPLER: The major producing areas are the United States—which is at the same time our biggest market and our biggest competitor, shall we say —Scandinavia, Finland, Sweden and Norway. These are, major export areas.

In increasing competition now there is western Europe, Latin America and the Far East, by the building of mills partially for their own local consumption. New mills are becoming increasing factors in the Far East, in Australasia, in western Europe and in Latin America.

Mr. AIKEN: Is the United States increasing its own production of pulp and paper?

Mr. PEPLER: Yes, at a more rapid rate than we have in say the last, four or five years.

Mr. AIKEN: Would that be brought about by improved conservation methods within the United States, or improved production methods?

Mr. MATTHEWS: It has probably all come about through changes in technology. That is, in the United States they have been able to make use of a greater percentage of hardwoods than they were able to before. Where their production and consumption of softwoods may be pretty well in balance, it is the hardwoods that they are trying to use up. Added to that, a lot of

their original cut-over lands have come back into production in the last decade or so, so that on the whole the inventory of wood in the United States is increasing, rather than declining, and making room for more production.

Mr. AIKEN: That is what I had in mind, more or less. We were under the impression that the United States was depleting its natural resources very quickly; but it seems that they have now undertaken conservation methods to counteract that.

Mr. MATTHEWS: I recommend the study of the United States Forest Service (Timber Resources) Review, which covers that subject very well.

The CHAIRMAN: You are referring to the lumber industry, Mr. Aiken?

Mr. AIKEN: Yes.

The CHAIRMAN: Not to other resources?

Mr. AIKEN: Not to other resources: I was referring to timber resources and wood products. If I might follow that further: is there any competition from other products as well as from other countries? I mean by that are there any synthetic materials which are appearing, or which are likely to appear, as replacements for wood pulp in this market?

Mr. PEPLER: You may be referring to the products of paper from the bagasse sugar cane waste.

Mr. AIKEN: Yes, I am thinking of competitive products.

Mr. PEPLER: So far it has not been able to compete technologically. There have been experiments in Canada with straw but so far it has not been able to compete, largely because of the getting together of such a quantity as is necessary.

The CHAIRMAN: Mr. Aiken, do you also refer to products which are competitive to wood products in, we will say, the building of houses?

Mr. AIKEN: What I have in mind is this. Take, for example, coal. A large amount of our time has been spent in the discussion of coal in this committee. There now is a replacement to some extent by oil and gas. I am wondering if there is any foreseeable likelihood of wood pulp being replaced by other products.

Mr. MATTHEWS: I suppose every manufacturer will look at this possibility. In pulp and paper two moot examples are the use of aluminum in the manufacture of the half dozen disposable types of soft drink cartons, and the use of the foil instead of paper as a covering on beer bottles. I do not think, however, that is a very big field.

Mr. AIKEN: At the present time there is nothing of any consequence appearing—is that correct? There is nothing of a competitive nature appearing?

Mr. PEPLER: I think it is correct to say that a raw material has not been found as yet which would replace the uses of paper, wood or fibre. That does not say anything for the future. It is always possible that something will come up.

Mr. MCQUILLAN: I would like to ask one of the representatives whether or not it is a fact that one of the greatest concerns is that the demand for the use of pulp and paper is increasing in the world in the over-all picture, but our place in supplying that demand is diminishing.

Mr. PEPLER: That is exactly the picture.

Mr. WOOLLIAMS: Could we have figures showing the comparable cost of newsprint in Ontario and the United States? I know we touched on that this morning. There was some discussion about wages here and in the United States. Could we have the comparative cost in that regard?

Mr. PEPLER: I am not prepared to present any comparative costs.

Mr. WOOLLIAMS: The brief says we are pricing ourselves out of the world market. In that connection would we not have to have that data before us?

The CHAIRMAN: I think the question asked by Mr. Woolliams is an important one. I am inclined to believe that this committee will go along with the idea that that is information we should have.

Mr. STEARNS: Is that something which Mr. Ambridge might be prepared to answer?

Mr. PEPLER: I think it is something Mr. Ambridge might be able to reply to. This morning I heard reference to a cost of $22 or $23 a cord and the representative from Ontario spoke of there being higher costs in Ontario. In the southern states they are delivering wood to the mills at $18 a cord.

Mr. STEARNS: I beg your pardon?

Mr. PEPLER: They are delivering wood to the mills in the southern states for $17 to $18 a cord. That is wood only. However, the cost of manufacturing newsprint, for example, would be something you would have to ask Mr. Ambridge.

Mr. SIMPSON: Is the figure of $23 a cord delivered to the mill an average in Ontario or Quebec, or the average in Canada?

Mr. PEPLER: I believe the average in Canada is more in the order of $26 a cord. I believe the figure of $23 was in respect of Newfoundland.

Mr. WOOLLIAMS: This morning there was some discussion about the Canadian industry becoming highly mechanized in order to cut labour costs. That in itself is a question which leads to another consideration which is of no concern to this committee. It is of some concern, but not particular concern. This is with reference to the matter of future employment.

The CHAIRMAN: In the brief which was presented last week, on page 20 it says:

> Lumber, as a commodity, has, for many years, been experiencing increasing competition from substitute products.

Then there is a table showing the inroads being made by alternative building proucts. The per capita lumber consumption in Canada in 1947 was 257 and in the U.S.A. 194; in 1957, 210 as against 177, which is quite a drop. Then they show the lumber usage in house construction. The volume per house in 1920 was 18,900; in 1940, 13,900 and in 1953, 10,500. The source of that information is the Stanford Research Institute. Have you any comment to make on that?

Mr. PEPLER: That is lumber in its natural form. Some of that replacement is through building boards made with chips or pulp; some of it, of course, is aluminum and also some of it is steel—and there I have reference, for example, to window frames.

Mr. MCQUILLAN: I would like to follow up on an answer given a few minutes ago by Mr. Pelper in respect of the cost of wood in the southern states as compared to Canada. You quoted something like $17 or $18 a cord. Would that largely be attributable to the fact that they are producing their wood from second—crop areas where the roads already are developed and where they do not have the capital cost of developing transportation systems similar to what we have in Canada in most cases?

Mr. PEPLER: That certainly is a major factor.

Mr. MCQUILLAN: It follows, in other words, that the sooner we can grow a second cut on an area where we already have developed the transportation systems, the better for the industry.

Mr. PEPLER: Yes.

Mr. McQUILLAN: It then follows that the faster we come to some conclusions in respect of silviculture research and get going on it, the better.

Mr. PEPLER: Yes.

The CHAIRMAN: I think the other day it was on the record that the industry cost of these roads is about $3 a thousand.

Mr. McQUILLAN: We were referring to British Columbia. It varies all across the nation.

Mr. PEPLER: Another major factor is freight. I think for parallel distances the freight cost in the southern states is half what it is in Canada for moving wood to the mill.

Mr. SLOGAN: I have in my constituency a pulp and paper mill. In this past year the federal government has been paying a sum to the provincial government in respect of the access roads program which will cut down the cost of bringing out the pulpwood. However, at the same time, last year the price of pulpwood per cord was $3 or $4 less delivered at the pulp mill. Could you give me any idea why the price of pulp at the pulp mill went down?

Mr. PEPLER: The only possible answer I can give you to that—and it will be "off the cuff" and from general experience—is that we have had a very rapid increase in mechanization in the past five years. It has been more rapid in the last three years, and even more so in the last year. Also, the total demand for pulp was less last year and the efficiency of the labour which was making it was unquestionably greater than when you have to take the whole labour supply into your operations.

Mr. SLOGAN: Would the price of wood at the mill be affected by the increase in freight rates?

Mr. PEPLER: Yes.

Mr. SLOGAN: We ship our pulp and paper from Manitoba down to the central United States; we are more accessible to that market than any other pulp and paper industry. Could you tell me approximately what the increase in freight rates would be?

Mr. PEPLER: I could answer that this way: the traffic section of the Canadian Pulp and Paper Association made representations to the government through the proper channels in regard to what the cost of the increase in freight would be, and that was based originally on the original intended 19 per cent. They are now revising that in the revision to 17 per cent, and also taking into account water competitive rates and other factors which have come with the increase in freight rates. As soon as you have an increase in freight rates, then you have other means of moving your commodity, which becomes competitive.

Mr. SLOGAN: Well, in our instance we do not have any other means. Would you tell me also whether pulpwood shipped from Canada to mills in the United States would come under that freight rate increase?

Mr. PEPLER: Yes.

Mr. SLOGAN: It would? It would be the same as the finished product?

Mr. PEPLER: Yes, unless they have a water competitive or truck competitive rate.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. STEARNS: Mr. Chairman, I would like to ask Mr. Pepler something about the utilization of sawmill waste in the paper industry in the east. I would like to know what the industry is doing to encourage small lumber producers, for instance, to peel their logs and make their slabs into chips and sell them to the paper mills. I think there is perhaps quite a story you could tell about that.

Mr. PEPLER: In that regard we are a catalyzing agent. We are a prospective buyer of chips. We have four or five cases where it has been possible to set up delivery from a sawmill on a continuous delivery basis. We have developed fairly successfully a program in Lake St. John and the eastern townships where equipment is developed which can be used in a very small sawmill or can be used by a broker, who will move his equipment from sawmill to sawmill in order to have the wood peeled and chipped ready for delivery. We are very, very interested in that.

In that regard I would mention also that the Forests Products Laboratory of the Forestry Branch has been very active in that and in the devolpment of the equipment. At the moment, the problem is the development of equipment to peel and chip which is cheap enough for a small sawmill owner to operate. You either have to do something that is of low cost or have to have an arrangement whereby a centrally owned unit goes from one sawmill to the next and have the slabs collected at a concentration point. I would say that we are making very good progress in that field.

Mr. STEARNS: Would you say that any of the paper mills were going to help finance the installation of these?

Mr. PEPLER: Generally speaking, that comes under individual company policy and I cannot answer your question.

Mr. STEARNS: You have not heard of any that are doing it?

Mr. PEPLER: No. The only cooperative part of it on the part of pulp mills is the agreements between the pulp mill and the sawmill; they have worked very closely together in these cases. However, I do not know of a pulp mill helping a sawmill financially. I do not know of a case, but that does not mean there are not cases where this has been done.

Mr. BUELL: One of the difficulties with which we are faced in eastern Canada in connection with the use of waste products from the lumber industry is this: we have two methods of making pulp from wood. We have the chemical method and we have the chip method. In our newsprint industry, which is the biggest segment of our industry, the chemical method is the sulphite process. In British Columbia where the pulp and paper industry was built up to a large extent around the use of salvage material from lumber mills, they put in the sulphate method, which is much more versatile in its ability to use various species. In eastern Canada our lumber industry in large part is based on the use of white, red and jack pine and our sulphite mills are not able to process the waste from these. On the other hand, chips even if of the right species cannot be put into the grinder in our ground wood mills. The raw material must be in log form for this method.

Mr. MARTEL: Are you aware of a project in northern Quebec, north of Senneterre, near Beattyville? They have been studying means of gathering the waste of different sawmills.

Mr. PEPLER: I do not know what stage that is at.

Mr. MARTEL: But you have heard of it?

Mr. PEPLER: Yes, I have heard of it.

Mr. COATES: I was not at this morning's meeting and I am not sure whether the matter of fire protection was discussed; if it has been, I will not ask my question.

The CHAIRMAN: It was discussed. What is your question?

Mr. COATES: Well, if it has been discussed I can read the proceedings later.

The CHAIRMAN: Maybe it did not cover the question you have in mind.

Mr. COATES: I know they are not happy with the amounts of money presented in the estimates to cover fire protection and forest access roads, and I was more interested in having some observations.

The CHAIRMAN: Well, the members made lengthy observations on that subject.

Mr. COATES: Could I take one moment to thank Mr. Buell. I believe he is the representative for E. B. Eddy Company. As the member for Cumberland I would like to thank him for his kind assistance to the people of Springhill in endeavouring to give employment to some of the unemployed miners of that area. It was certainly welcomed. It was a very nice gesture on the part of his company and was heartily accepted.

Mr. MCQUILLAN: I have one more question. The British Columbia representatives of the industry spoke about the need for an expert meteorologist for their fire-weather reporting. I believe I raised the subject. Do you have an adequate weather service report for fire protection?

Mr. PEPLER: Again, Mr. McQuillan, we are never satisfied with what we get. We believe that more can be done in long-range forecasting. I will say this, however, we have had good cooperation from the meteorological branch, within the limits of their capacity. It is a case of supplying them with more funds.

Mr. MCQUILLAN: The capacity is too limited.

Mr. PEPLER: I believe their capacity is limited.

Mr. MCQUILLAN: It is too limited to suit your purposes.

The CHAIRMAN: Any other questions?

Mr. SLOGAN: I was just wondering—and, perhaps, this would be more in order tomorrow—but there is more and more talk of marginal land and going into wood lots, that the income from these wood lots would be comparable to grain farming, and so forth.

Can you tell me how the industry finds the cost of wood brought into a pulp mill from its own leased lands, compared with buying it from wood lots?

Mr. PEPLER: There is a $2 or $3 differential, as a rule, between the cost of the wood from your limit and the cost of purchased wood.

Mr. SLOGAN: Would the purchased wood be more expensive?

Mr. PEPLER: No, the purchased wood is less expensive.

Mr. SLOGAN: So the industry should actually be encouraged?

Mr. PEPLER: When I say "less expensive", it is less expensive per cord, which is the way the wood is measured. Per ton of fibre it is more expensive. So a company balances its over-all cost of fibre in the ton of newsprint by getting as much as it can from the cheapest source per ton of fibre.

Mr. MARTEL: In respect of the production from one cord of pulpwood you get from the farmers, for instance, do you get less product?

Mr. PEPLER: You get less fiber from a cord of wood from a farmer. Generally speaking, it is second growth wood, and it always has more knots in it—in more than one sense.

Mr. MARTEL: In my area they say it is about the same.

Mr. PEPLER: If you are speaking of the Abitibi area, there the farmer is producing the same quality of wood as is produced on the limits; because it is land taken out of a limit and put into colonization. Your major problem there is the very high freight rate from Abitibi to the mill.

The CHAIRMAN: We will adjourn, gentlemen, until tomorrow at eleven o'clock, when we will hear Mr. Ambridge, the president of the Abitibi Power and Paper Company Limited; and Mr. Robert Prettie, of the Northern Wood Preservers Limited, Port Arthur.

Then on Thursday we will have in attendance a delegation from the Canadian Lumbermen's Association. A brief will be presented, and in attendance will be Mr. Harold F. Staniforth, president, Canadian Lumbermen's Association; Mr. K. O. Rooes, director, Canadian Lumbermen's Association; Mr. Bernard Bock, president, National Hardwood Lumber Association; Mr. G. E. Bell, secretary-manager, Canadian Lumbermen's Association; and Mr. J. A. Schryburt, director, Public Relations, Canadian Lumbermen's Association.

Mr. STEARNS: Mr. Chairman, before we adjourn may I propose a vote of thanks on behalf of the committee to Mr. W. A. E. Pepler, Mr. Buell and Mr. Matthews for appearing here, for their fine cooperation and the very excellent manner in which they have answered the questions put by the committee.

Mr. DOUCETT: Mr. Chairman, I would like to second that. Their information has been very informative and the brief presented is certainly a very fine one.

The CHAIRMAN: You have heard the expression of thanks, gentlemen, and that is certainly the opinion of every member of the committee. We have welcomed the opportunity of having you here and I hope your representations will bear some fruit. We look forward to seeing you back again.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 23

TUESDAY, MAY 19, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. D. W. Ambridge, President, Abitibi Power and Paper Company Limited; Mr. Robert Prettie, President, Northern Wood Preservers Limited; Mr. R. G. Robertson, Deputy Minister; Mr. J. D. B. Harrison, Director, Forestry Branch; and Mr. J. H. Jenkins, Chief, Forests Products Laboratories Division.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21264-7—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*)
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, May 19, 1959.
(26)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Fisher, Gundlock, Hardie, Kindt, Martel, McGregor, McQuillan, Murphy, Nielsen, Payne, Simpson, Slogan, Stearns and Woolliams. (17)

In attendance: Messrs. D. W. Ambridge, President, Abitibi Power and Paper Company Limited, of Toronto, Ontario; Robert Prettie, President, Northern Wood Preservers Limited, of Port Arthur, Ontario: and *of the Department of Northern Affairs and National Resources:* R. G. Robertson, Deputy Minister; J. D. B. Harrison, Director, Forestry Branch; J. H. Jenkins, Chief, Forest Products Laboratories Division; D. R. Redmond, Chief, Forest Research Division; and H. W. Beall, Chief, Forestry Operations Division.

Mr. H. W. Herridge, M.P., not being a member of the Committee, by agreement, again sat at the table and took part in the discussion.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Item 281, Branch Administration, Forestry Branch.

A letter dated March 4, 1959, to the Committee from The Truck Loggers' Association, requesting consideration of certain aspects of forest protection and research, was ordered to be recorded in this day's proceedings of the Committee.

Mr. Ambridge was called and questioned on matters concerning the forest industry. Messrs. Robertson, Harrison and Prettie answered questions directed to them.

At 1.00 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m. this day.

AFTERNOON SITTING

TUESDAY, May 19, 1959
(27)

At 3.15 o'clock p.m. this day, the Standing Committee on Mines, Forests and Waters resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources. The Chairman and the Vice-Chairman being absent, by unanimous consent, Mr. McQuillan took the chair.

Members present: Messrs. Aiken, Baskin, Cadieu, Doucett, Fisher, Hardie, McFarlane, McQuillan, Mitchell, Payne, Slogan and Stearns. (12)

In attendance: The same as at the morning sitting.

Continuing on Item 281, copies of a brief entitled *The Forestry Situation in Canada* by D. V. Love, Associate Professor of Forestry, University of Toronto, were circulated to the Committee. It was agreed that the said brief be printed in this day's proceedings.

21264-7—1½

The questioning of Mr. Ambridge was continued; he was retired.

Mr. Prettie was called; he presented a brief on behalf of Northern Wood Preservers Limited and was questioned thereon. Messrs. Robertson, Jenkins and Harrison answered questions directed to them. Mr. Prettie was retired.

At 4,17 o'clock p.m. the Committee adjourned until 9.00 o'clock a.m. on Thursday, May 21st, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

TUESDAY, May 19, 1959.
11:00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Yesterday one of the members asked that we put on the record the exports of wood pulp, paper and pulpwood products from the U.S.S.R. I have that table here. Is it your wish it be printed in the proceedings?

Agreed.

WOOD PULP, PAPER AND PULPWOOD EXPORTS
FROM THE U.S.S.R.

	1953	1954	1955	1956	1957
	(In thousands of short tons)				
Mechanical Pulp	....	....	....	....	....
Chemical Pulp	26	67(1)	104(1)	161	166
Newsprint	8	12(1)	57	67	77
Other paper	....	3.2(1)	11	15.8	18
Paperboard	....	....	0.2	0.1	1.8
(1) Exports to countries in Eastern Europe excluded.					
Pulpwood (thousands of cords)	....	0.9	215	207	232

Source: FAO Yearbook of Forest Products Statistics.
Figures converted from metric tons to short tons and from cubic metres to standard cords.

The CHAIRMAN: We also have a short three-paragraph presentation by the Truck Loggers' Association, dated March 4, 1959. Copies of this have been distributed. Has each member a copy of this? Is it your wish it be placed on the record?

Agreed.

THE TRUCK LOGGERS' ASSOCIATION

837 West Hastings Street,
VANCOUVER 1, B.C.
March 4, 1959.

The Standing Committee on Mines, Forests and Waters,
Parliament Buildings,
OTTAWA, Ont.

Gentlemen:

In the cause of the advancement of the welfare of our National Forest Industries, this Association, representing 171 operators, respectfully submits the following for your careful consideration.

The protection of our forests from fire and disease is a matter of national importance. Therefore, Federal assistance in financing—

1) fire prevention and control courses at Dominion-Provincial technical schools;

2) the establishment of forest lookouts and access roads, particularly in areas as yet undeveloped and in areas where such improvements can serve this and adjoining Provinces and States for their mutual protection;
and

3) further assisting in research in these matters at Forest Products Laboratories;

is a subject we urge you now to undertake for careful study.

Further, and in many ways related to the above, it is realized that our expanding national economy will soon see heretofore unpopulated forest areas supporting our ever-expanding population growth.

This being so, we sincerely recommend that your Committee undertake the study of further assistance to management in order that they may be aided in providing roads, access trails and entry into areas of future population.

Yours truly,

L. S. Eckardt,
President,
TRUCK LOGGERS' ASSOCIATION

LSE:MM

The CHAIRMAN: This morning we have before us Mr. D. W. Ambridge, President, Abitibi Power and Paper Company Limited, Mr. Robert Prettie, President, Northern Wood Preservers Limited of Port Arthur, Ontario, the deputy minister of the department and his officials.

I think this would be an opportune time to indicate to you we have received a brief from a gentleman in Toronto whom we had hoped could attend but who is not able to be present to give his statement and to answer questions. This brief, entitled *The Forestry Situation in Canada*, is from Professor David Love of the Faculty of Forestry, University of Toronto. I am advised the brief is being mimeographed and will be distributed to the members this morning. May I also suggest it should be incorporated in our proceedings? It is a very well-prepared brief. When you receive a copy of it you might glance through it and, if it meets with your approval, we will have it placed in the proceedings.

We now have Mr. Ambridge and Mr. Prettie. Have either of you gentlemen a brief?

Mr. ROBERT PRETTIE (*President, Northern Wood Preservers Limited*): I have a very short brief.

The CHAIRMAN: Would you like to read it?

Mr. PRETTIE: Would you first like to have Mr. Ambridge?

Mr. PAYNE: If we are to hear Mr. Ambridge first, would it be in order for me to go back to a question which has been referred to Mr. Ambridge for reply?

The CHAIRMAN: Yes.

Mr. PAYNE: Mr. Ambridge, in the questions yesterday addressed to Mr. Pepler in respect of marketing, the intent of the questions was to secure information or opinions on the effectiveness of the assistance given by the government, and searching out suggestions as to where marketing help could be given to

industry. Mr. Pepler, in effect, stated he was not too happy with the assistance given by government to the industry in respect of marketing problems. However, he asked me to refer this question to you for amplification. I do not know whether or not I have made the question clear.

Mr. D. W. AMBRIDGE (*President, Abitibi Power and Paper Company Limited*): I understand it; I can understand Mr. Pepler not being happy because there is no assistance. It is pretty hard to be happy with nothing. I know of no assistance whatever that the government is giving.

Mr. PAYNE: Have you suggestions which you would like to make?

Mr. AMBRIDGE: Let me begin by an illustration of what others do. After all, we are in competition with the world. We have no sheltered position anywhere in the world. I ran into this thing personally in Brazil about five or six years ago when I was down there on a trade mission led by Mr. C. D. Howe who, as you will remember, took a trade mission down to South America.

We went through a good many of the countries. When we arrived in Brazil immediately we became aware of a company the name of which I have forgotten at the moment—something like "Ferero", or some Swedish name. It was a very large, efficient, and good export-import firm. I believe it was possibly a third-generation firm; a Swede who arrived two or three generations ago in Brazil and started a very small business which had grown until, at this time—this was five years ago—it was a very large influential organization.

The way that operated was something like this. I spoke at some length to the head of this firm and I am sure what he told me about it is true. The Swedish manufacturers of anything you would like to name, stainless steel, outboard motors, pulp and so forth, would sell their products in Brazil and take cruzeiros for it—that is what they call their currency. They would take cruzeiros. This export-import firm handled this in Brazil and distributed it; that is, the cruzeiros. The cruzeiros were put to the credit of the bank of Brazil and the bank of Sweden. During the coffee season—the Swedish drink a lot of coffee—they would buy the coffee with the cruzeiros at their credit, and the financing would be done between the Brazilian bank and the Swedish bank, both government agencies.

The Canadians have about as much chance of selling anything in Brazil as a snowball in hell. You cannot do it because there are too many of these arrangements around. We have nothing like that.

Mr. FISHER: Would this not be within the province of the Department of Trade and Commerce, to a degree?

Mr. AMBRIDGE: I do not know who would deal with it. I suppose it would be the Department of Trade and Commerce.

Mr. FISHER: One of the fears expressed by people in this business is that Russia is coming into the newsprint market. Have you had any indication of that?

Mr. AMBRIDGE: No, we have not run into the Russians at all, except indirectly. We have met Scandinavians who have said there is a type of thing where it has hindered their world markets. There was a meeting a few weeks ago in Paris. I could not go myself, but I had a man there. We heard from the Scandinavians that the Russians were offering pulpwood in Western Germany at low prices, which enabled the West Germans in turn to lower the price of pulp. That was sort of indirect. We have never heard, however, of any pulp offered in Europe.

We have heard of cases where the Russians will come to some little paper, say in Indonesia, and say that, if they have good editorial support for the Soviet Union in that paper they will get the newsprint for very little, if anything.

I must say that I do not know why we should be giving tens of millions of dollars in the Colombo plan, and why we do not do a little of the same thing instead.

Mr. PAYNE: Mr. Clyne indicated to us, more in respect of lumber products than in respect of pulp I believe, that certain Canadian export markets were suffering from United States competition, which was created by virtue of long-term financing by the United States government. Have you run into anything specific of this nature?

Mr. AMBRIDGE: I think probably Mr. Clyne was referring to the lumber business, of which I know nothing, for which the Lord be praised. However, I do not know anything except the occasional load of five or six hundred, or one thousand tons, which might come from a more or less irresponsible United States producer,—say, that outfit at Tacomah. They dumped a few hundred tons of paper in the Philippines.

Mr. PAYNE: But pulp is not a major factor?

Mr. AMBRIDGE: There is some, but it is very far from being a major thing.

Mr. PAYNE: This question is rather generalized. Are you in any way satisfied, even in an indirect way, that help is provided to your industry in the search for new markets, through a government agency? Is there such help or is there not?

Mr. AMBRIDGE: Not that I know of. The only thing I might name as being of help to us is that the government does provide statistics, through the commercial councillors at the various embassies, legations and what-have-you. I think probably we in our newsprint association have the most complete and accurate statistics of anyone in the world. Most of those figures overseas come from our commercial councillors in those places. They are helping us in that way.

Mr. PAYNE: Is there any method you might suggest by which assistance could be given of a practical nature?

Mr. AMBRIDGE: I certainly think that the government should give some very serious study to the question of how we are going to finance exports, because this business of cash on the barrelhead is absolute nonsense; it is out of date. We cannot compete. We say, put the money, the American dollars, on the table before we will ship anything. That is crazy. We should certainly have some government body or—I hate to say—committee. You know what they say about a committee. They say a camel is an animal which looks as if it had been put together by a committee.

Mr. WOOLLIAMS: Could I ask the question I asked yesterday, in respect of the comparative cost of producing a ton of newsprint in the United States with a ton of newsprint in Canada?

The CHAIRMAN: Should we not elaborate a little more on the subject matter which just has been brought up; that is the question of government participation? For instance, we have the financing in respect of wheat. Would you like to have Mr. Ambridge discuss what should be done if it should operate? He knows what has been done, for instance, in respect of wheat for Poland. You might inquire as to whether or not any representation has been made to the government in respect of participation in a like manner.

Mr. WOOLIAMS: The chairman put the question very well. Would you like to give us a little detail in that regard, as to what your recommendation would be?

Mr. AMBRIDGE: I think the first thing to do is to get a change of attitude. I do not know who is responsible for this. However, for many years in the Canadian government, the general idea has been that we are not going to get ourselves involved in extending credit. We are not going to get ourselves

involved in barter deals. We are not going to do a damned thing, except take the money when they have it for the products they have to sell. I think that whole attitude might have been valid in the first decade after the war. Since then, it is not valid. We have to face the powerful competition all around the world and we cannot deal with it in any such primitive manner as that. It is primitive.

The business of just going to the market and selling and getting American dollars in New York, is primitive, compared to our competitors.

The CHAIRMAN: In recent years have you made any approach to the government relative to that problem which you have been facing?

Mr. AMBRIDGE: No.

Mr. PAYNE: Has any organization from the industry approached them?

Mr. AMBRIDGE: Not to my knowledge.

The CHAIRMAN: To which countries could your export be increased, if you had an arrangement whereby there would be some financing such as you suggest?

Mr. AMBRIDGE: Most of South America, for instance.

The CHAIRMAN: You mentioned the Colombo plan.

Mr. AMBRIDGE: South America and the Far East. They all have to have credit or barter, or something else other than we are giving now. At the moment, mind you, the canadian pulp and paper industry is completely without marketing. The Scandinavians are selling pulp and/or paper in the markets of the world at this time. In Europe, South America, Australia and the Far East at $15, $20 or $25 down, we can sell it.

Mr. WOOLLIAMS: Does that not then come down to the question of cost; that we have priced ourselves out of the market? Could you give us some comparative figures as to how much it costs to produce a ton of newsprint in the United States, Sweden, or in these other countries?

Mr. AMBRIDGE: It would be nice to be able to put down these figures. I was looking at something the other day. While it is not a study, it is an annual affair. We have our statistical organization in the industry which gets up the cost of producing newsprint in every mill in Canada. We all get our own mill's, but we do not see the others. The variation in the cost of producing newsprint in Canadian mills will run $20 a ton as between one mill and another.

Mr. WOOLLIAMS: Is that due to labour costs?

Mr. AMBRIDGE: No, it is due to things like power, labour, and cost of the wood which is indirectly labour; things like that.

Mr. PAYNE: Another factor is this: in the last year has there not been a case where our mills have not been operating to capacity? Would the cost be reduced if they were operating at capacity?

Mr. AMBRIDGE: Very much so.

Mr. PAYNE: How much?

Mr. AMBRIDGE: Suppose you have one outfit working in Ontario at 50 per cent capacity, and another in New Brunswick working at 80 per cent capacity.

Mr. PAYNE: Let us look at the mill working at 60 per cent capacity. Suppose they were working at 100 per cent capacity, what would the relative cost per ton be, compared to its current production as compared to the cost where there is full production? Is it sizeable?

Mr. AMBRIDGE: I do not have any idea. I think it is of the order of $15 a ton, I suppose.

Mr. PAYNE: In other words, at full production you would overtake a great deal of these differentials existing today between the current Canadian costs and the world cost that would enter into the export markets? Is that true?

Mr. AMBRIDGE: I think that is true.

Mr. PAYNE: So it would be of tremendous value to increase our production to the point where it placed on the market actively our full capacity of production?

Mr. AMBRIDGE: That is right.

Mr. SLOGAN: Is it not a fact that some of these countries have extended their capacity a great deal, and that they are waiting for a demand for that capacity?

Mr. AMBRIDGE: That is right.

Mr. MCQUILLAN: Has not this great extension in capacity, particularly in the United States, done a great deal to lower the market? Is that not so?

Mr. AMBRIDGE: That is true of the Americans. They have added to their capacity, their newsprint capacity, and they have added capacity in all segments of the industry; and they are more able to look after their requirements than others.

The CHAIRMAN: Their requirements are increasing?

Mr. AMBRIDGE: That is right, pretty much in line with the population.

Mr. FISHER: You have given us one suggestion, that the federal government needs to become much more active in international deals in order to help the industry get into the market. What about other areas where the federal government does come into play in affecting various industries? I am thinking particularly of taxation.

The CHAIRMAN: Would you try to finish with one subject at a time? We can come back to that, but please follow through as much as you can.

Mr. KINDT: On the question of trade, Mr. Ambridge mentioned that a dollar exchange plan was being tied to it in the matter of expanding trade.

Mr. AMBRIDGE: When did I say that?

Mr. KINDT: I think that is what you meant. It is the dollars which other countries have to buy our commodities that stand in the way of our getting markets in those particular countries?

Mr. AMBRIDGE: You mean the fact that they have no available supply of our kind of money. That is what you mean?

The CHAIRMAN: You mean the lack of dollars.

Mr. KINDT: That is right. In other words, it is the relationship of their currencies to us and their exchange.

The CHAIRMAN: I just simplified it.

Mr. KINDT: That is fine, thank you. Now since that is the position, it seems to me that we ought to be pursuing the point a little further as to what we have in mind, or what could be brought into being to take the place of it. These things are often mentioned like barter, and the new devices such as Australia is putting into effect, and in Japan and other countries.

I wonder if it would not be worth while for the committee to explore some of these methods which international people are putting into effect in order to step up the exports of their countries. The one which Mr. Ambridge mentioned,—these Swedish second or third generation people,—I have followed through with many of them, and I believe that what Mr. Ambridge said is

100 per cent true. These Swedes will ship their commodities to Brazil and take Brazilian currency, and they will prefer to buy commodities from Brazil so long as they have Brazilian currency. This is a method or device they use to stimulate trade between the two countries.

So far as Canada is concerned, we shied away from that because we wanted to deal in dollars, and because we never did get into this field. It is important to me, as a student of international trade, that we get into this field if we are going to step up Canadian exports.

The CHAIRMAN: Do you agree that is the only reason we cannot get into Brazil with our forest products, or is there any other reason, Mr. Ambridge?

Mr. AMBRIDGE: I would not say it was the only reason, but it is certainly a very important one. When I said it should be studied actively and purposely, I had this in mind—we have this to remember: The Scandinavian countries are even more dependent than we are on their forest industries for their livelihood, and that is saying a great deal too. If we push them out of some of those markets they are in now, they will get into the American market, which is the last place we want them. You have to tread easily and acknowledge what you are doing. There are lots of opportunities for trade if we had some method for expanding trade, if we had some means to overcome the lack or shortage of dollars. I would not say we could go in like a bull in a china shop, let us say, into South America, and all of a sudden put up a whole lot of dollars there and take their currency and upset the whole apple-cart, and get the Scandinavians in a corner where they would retaliate by pumping a lot of stuff on the American market. That is not what we want at all. This is not a simple thing at all. It is all the more reason for really and purposely determining and studying how we are to get better foreign trade; because this depends on foreign trade, and that is all we have.

The CHAIRMAN: Would you like to follow that up, Mr. Kindt?

Mr. KINDT: Well, going one or two steps further on, it would open up for study a tremendously complex subject.

Mr. AMBRIDGE: Yes.

Mr. KINDT: In which the dominion government is making no move, as far as I know, in getting into these questions which involve balances of one kind: for example, if you will take so much of my commodity, I will take so much of yours. I find, in looking around the world, that Australia is doing that, and various other countries. On the other hand, we are making certain arrangements with Japan concerning coking, coal, because of the arrangements which Australia has made with Japan.

I wonder if we are not right next door to getting into whatever device is necessary in order to step up Canadian trade with these foreign countries. I like the point which Mr. Ambridge made, and I would like to have it on the record so the department could explore it. If this department is not in a position to explore it, they could take it up with the Department of Trade and Commerce, and the two could work together to go as far as possible in the matter.

Mr. SLOGAN: Is there not an international bank or a monetary fund where these currencies could be exchanged?

The CHAIRMAN: Ask the witness that question.

Mr. AMBRIDGE: I do not know any more about banking than a cat does.

The CHAIRMAN: There are two departments of government to which this could be related, namely, the Department of Finance and the Department of Trade and Commerce. As long as I have been in the house, it has been the policy of the government to shy away from the idea which Mr. Ambridge is now advocating including what the Scandinavian countries are doing.

Mr. AMBRIDGE: There may be a bank, but they do not work for us.

Mr. FISHER: May I ask the deputy minister to comment. The Canada Forestry Act was actually set up to make certain economic studies. I believe it gives you the power. Have you ever done any in this field of marketing?

Mr. R. G. ROBERTSON (*Deputy minister of Northern Affairs and National Resources*): No. It would not properly fall within our field. It is a matter of government policy, that the Department of Trade and Commerce should handle that aspect of it. That is always handled as a Department of Trade and Commerce matter, so we would not expect to get into this field at all.

Mr. FISHER: But you could make a recommendation to them: here is an issue which has been put to us, let us see if you can come up with something.

Mr. ROBERTSON: That could certainly be done, yes, but it would fall to the private companies to offer advice to the government on measures to be taken. It would be the Department of Trade and Commerce and the Department of Finance really under which it would come.

Mr. PAYNE: One statement by Mr. Ambridge related to the Colombo plan. From his words I took it that he felt that the Colombo plan funds were—I hope I am not putting words into his mouth—being used to create possible competitors to Canadian industry. Is that so?

Mr. AMBRIDGE: No, that is not what I meant. If I said that, then I did not mean it. The idea was that we buy a lot of this and that to give to those countries. We are even buying atomic reactors for them. What for, I could not say, but we are buying atomic reactors and giving them atomic reactors with money under the Colombo plan. Why do we not buy some newsprint and give it to them on the same basis that the Russians do it?

Mr. PAYNE: Have you run into any situation of competition due to operations under the Colombo plan, with the development of pulp plants in foreign countries?

Mr. AMBRIDGE: No, no.

Mr. PAYNE: Do you anticipate it?

Mr. AMBRIDGE: The point would be that these would be small plants, and their production would be so small that it would be like dropping water on top of a hot stove.

Mr. PAYNE: It is not a factor?

The CHAIRMAN: Are you talking about the atomic plant at Bombay?

Mr. AMBRIDGE: I do not know where it is.

The CHAIRMAN: It was not built for India to produce power. It is intended as an experimental station.

Mr. AMBRIDGE: What do they want to experiment for?

The CHAIRMAN: Do not ask me.

Mr. STEARNS: We have been talking about the markets of the world for newsprint. How long has it been since your industry has had a rise in the price of newsprint?

Mr. AMBRIDGE: Two years and four months.

Mr. STEARNS: What is the price at New York or Chicago?

Mr. AMBRIDGE: It is $134—United States.

Mr. STEARNS: And you have had various wages increases in the last two years?

Mr. AMBRIDGE: Oh yes.

Mr. STEARNS: When do you expect to get more for your paper?

Mr. AMBRIDGE: I have no comment.

Mr. STEARNS: Do you remember?

Mr. AMBRIDGE: Please do not forget that you have a bunch of—what do you call them around here—the R.C.M.P. who come walking around and into your offices and so on—

The CHAIRMAN: What is the most important factor in cost when it comes to the cost of production?

Mr. AMBRIDGE: It depends on what you are talking about. If you are talking about chemical pulp, the most important factor is the cost of the wood. But if your are talking about newsprint, the most important factor is the wood, labour and power.

Mr. STEARNS: Do you think, Mr. Ambridge, that it is time that your industry was profered some tax concessions on the part of the federal government?

Mr. AMBRIDGE: What would the federal government use for money to provide us with them? They are broke right now.

Mr. FISHER: Hear, hear.

Mr. AMBRIDGE: I am not suggesting that the federal government supply one cent to us without giving up something else. I could name a lot of them.

Mr. STEARNS: That is fine.

Mr. AMBRIDGE: Unless I can see where the money is coming from, we are not interested in having money that we have not got.

Mr. STEARNS: Would you agree with Mr. Darcy Fox's statement to the shareholders last month?

Mr. AMBRIDGE: I would agree 100 per cent.

The CHAIRMAN: Do you want to put that statement on the record?

Mr. STEARNS: I agree with Mr. Fox. It is too long to read.

The CHAIRMAN: Could you give us the essence of it?

Mr. STEARNS: The department referred to what Mr. Ambridge was speaking about.

The CHAIRMAN: You mean the question of taxation.

Mr. STEARNS: That is right; the subject of the hand-out. Do you remember that?

The CHAIRMAN: This statement is available to anyone who wants to read it. It is taken from the *Gazette* for Thursday, April 16. No doubt most of you have seen it. Are there any further comments on that statement? If not, would you like to hear Mr. Ambridge comment on the statement you are talking about, and the particular aspects of their problem?

Mr. FISHER: On taxation, you made some statement to your annual meeting of shareholders about the taxation policy and about the logging tax and its relationship to federal taxation. Is it your contention that there is a lack of taxation incentive under the federal regulations?

Mr. AMBRIDGE: I think it is more a provincial than a federal matter. The thing which infuriates us at the moment in Ontario, just as it does in British Columbia too, is this logging tax, which is an outrageous thing. It just adds another burden as far as taxation goes, on the people. The plea I make to both the federal and the provincial governments is to stop burdening us; stop putting things on us; stop regarding us as a milk cow. Just because we are a big industry, you think we should be a source of any money that any department happens to need for some purpose, remotely connected with the forest products industry. Stop burdening us. That is my plea.

As far as getting more money for this and that, I think it is a disgrace that the federal government, for instance, takes $200 million out of us every year and spends what? Six?—less than ten; and some of it is very questionably

spent, I might say. But nevertheless it is not my purpose here to advocate that the federal government spend any more money anywhere else, and I suggest they are spending enough right now. They are broke right today. But we do not want to break them.

Mr. McQUILLAN: Mr. Ambridge said that the federal government took $200 million each year out of their industry. Are you referring to the pulp and paper industry alone?

Mr. AMBRIDGE: Just the pulp and paper industry. That is the only one we get figures about. The rest do not publish them.

Mr. McQUILLAN: Mr. Ambridge's company operates a number of plants in Canada and also a number in the United States.

Mr. AMBRIDGE: We have one in the United States, so far.

Mr. McQUILLAN: Is that the new one which has been recently built?

Mr. AMBRIDGE: That is right.

Mr. McQUILLAN: In the state of Michigan?

Mr. AMBRIDGE: That is right.

Mr. McQUILLAN: Why did you build that plant there?

Mr. AMBRIDGE: Because we are convinced that we want to grow; our company wants to grow in the United States.

Mr. McQUILLAN: Was there not some question of taxation involved at all in that decision?

Mr. AMBRIDGE: No, the main thing is the cost of wood and the fact that we do not get a tariff against the product we are producing. If we had that kind of thing in Canada, if we had their costs there, say 50 per cent more, we would have a tariff against us which would prevent us from exporting a great many of our products to the United States. The Canadian market is not attractive. It is so small that you cannot build a plant here. The trouble with our country is that the domestic market is so small that you cannot build a plant big enough to support the wage structure, if it has only the Canadian market to ship to. That is our position in a nut-shell.

If you are going to build a big plant today,—and this was a big one; it cost us $21 million; and we take 200 million feet of insulated board, and hard board—you have to have plants with sufficient market to support the wage structure, because if they do not, they are not economical.

Mr. McQUILLAN: What about the question of a favourable tax rate as compared to the Canadian tariff?

Mr. AMBRIDGE: No, because we own no wood in the United States. Their tax concessions come about from the ownership of their wood by means of depreciation allowance. We do not own any wood. We buy it all from the farmer or the settler, or what have you. We will be importing wood from the United States to Canada.

The CHAIRMAN: Would anybody else like to ask a question about taxes? Mr. Ambridge emphasized a very important part that we have to consider as Canadians; the fact that our Canadian market will absorb only a certain percentage of our production, and we must find export markets; so taxation is not your main concern, is it?

Mr. McQUILLAN: What is your tax rate in Ontario as compared to the forest industry, and particularly to the pulp and paper industry, and as compared to any other industry? I asked this question yesterday and they said you would probably be able to answer it.

Mr. AMBRIDGE: What were they here for? Just to make trouble for me?

Mr. McQUILLAN: I think they might have answered it, but they left it for you. I asked what your tax rate is as compared to the whisky industry or any other industry, as a result of this provincial—I am taking the total of provincial and federal taxes?

Mr. AMBRIDGE: You know what these tax things are—unless you are an accountant, which I am not. But in general it is something like this: on the income we make from our operations in Ontario, that is, on all of them, that is, on pulp, fine paper, newsprint, hard board or what have you, fifty-five per cent of our earnings go to either the federal or provincial governments.

Mr. McQUILLAN: That is approximately 5 per cent higher than any industry.

Mr. FISHER: That is what the British Columbia and Ontario briefs stated. They stated the total income tax rate is approximately 2.5 to 5 per cent higher than any other industry.

Mr. AMBRIDGE: Yes, and the reason we are higher is because we make a good amount of fine papers, which are high-priced products in Ontario. Believe it or not, gentlemen, this is the master stroke: the more you process the product to the highest possible grade, the more you pay. If I may say so, it is absolutely stupid.

Mr. McQUILLAN: The same thing applies in British Columbia. If you ship your raw pulp or paper out of Ontario into any other province, or even into the United States under a subsidiary company, you would have some tax benefit. In other words, if you are going to make paper boxes—

Mr. AMBRIDGE: Oh, sure!

Mr. McQUILLAN: —you would be better off to ship the raw material.

Mr. AMBRIDGE: Make it in Winnipeg, rather than Vancouver, yes.

Mr. FISHER: The British Columbia brief that was presented said:

> We find it difficult to reconcile the tax concession given other primary industries on the one hand with the singular treatment accorded the forest industries of Ontario and British Columbia of the highest tax rate of any industry. If there is to be recognition of any prior right of a province then surely this should take the form of payment by Canada of an appropriate portion of the regular income tax collection.

Have you any views on this particular point?

Mr. AMBRIDGE: None that differ from those. I think there is no doubt that the miners and oil people get concessions on earnings which we never hear of. We do not get anything like it. All they have to do is find a hatful of ore somewhere and they build a railway through, even if the market is wanted or not.: But try to get an access road in the forest! They say: nothing doing; pay for that yourself, and when you have paid for it and built it up, we can take it away from you any time we want to. This is the Ontario government talking.

Mr. FISHER: Further to this in their brief they stated:

> Statutory provision for special allowance of mines, oil wells and timber limits has been made under section 11(1) b of the Income Tax Act but the requisite regulation with respect to timber limits has never been issued.

Mr. AMBRIDGE: I think that is true. As a matter of fact, I read that with some interest and made a note to look it up and see what it was, because I remember something about that. However, although I do not know exactly what he is referring to, there is a lot of truth in it. It could be done.

Mr. FISHER: And you think it would be a real help to you?

Mr. AMBRIDGE: Well, anything that will reduce our burden is a help.

Mr. FISHER: Well, you have stated all you are looking for is relief from your burdens. Are you going to make any suggestion as to where the federal government could spend more money?

Mr. AMBRIDGE: Not until I see that they have some money to spend; at the moment, I do not think they have.

Mr. SLOGAN: How does the provincial taxation in Manitoba compare with Ontario?

Mr. AMBRIDGE: Manitoba is an enlightened province.

Mr. MCQUILLAN: In view of the taxation policies, in the total taxation both for British Columbia and Ontario, would you say they are favourable places for investment?

Mr. AMBRIDGE: We would not spend a five-cent piece in the pulp and paper business in Ontario.

Mr. MCQUILLAN: What about British Columbia?

Mr. AMBRIDGE: I have not any idea. I was out there only once.

Mr. MCQUILLAN: You got out of it?

Mr. AMBRIDGE: Yes.

Mr. SLOGAN: Build a few more plants in Manitoba; we will welcome you there.

Mr. AMBRIDGE: You have not any wood.

Mr. PAYNE: Mr. Chairman, in questioning Mr. Clyne the other day in an effort to search around to find ways of increasing the market for the product—I take it from your testimony an increase in markets is perhaps your prime interest—I inquired from Mr. Clyne if he cared to state any opinion relative to the Orient market, specifically referring to Red China. Have you any comments on that matter?

Mr. AMBRIDGE: Well, what we understand about Red China—and we made some inquiries in Hong Kong not so long ago—is that they are exporting paper and newsprint through Hong Kong.

Mr. PAYNE: That was not his information. He stated he had information direct from his man in that area once a month.

Mr. AMBRIDGE: Well, he knows more about it than I do.

The CHAIRMAN: Was he representing paper or lumber?

Mr. PAYNE: Both.

Mr. AMBRIDGE: But I do not know. They told me—and this again is very hazy knowledge—that the Red Chinese are not the easiest people in the world from which to receive payment for your goods.

Mr. PAYNE: We are not talking about long-term credit in relation to China, as has been mentioned, with other import nations.

Mr. AMBRIDGE: I do not know too much about it. I think the South American people would be all right, but the Red Chinese would not have too high a credit rating—at least, I would not think so.

The CHAIRMAN: I think they still owe us for some boats!

Mr. FISHER: In connection with taxation again, your company carries out a certain amount of research from the wood side and the mill side. In connection with the wood side, do you think you could be given some encouragement through taxation to increase your scope of research?

Mr. AMBRIDGE: We would not like to have taxation reduced on the grounds that we use the money that we need for some specific purpose. In that case the government would be running our business; and they have not shown themselves too well able to run their own business, without running ours; so we ask them to stay out of ours.

Mr. FISHER: Well, let us put it this way. If you are doing research on the wood side of it, it indicates you see the need. Have you any views on whether the federal government should take more responsibility there?

Mr. AMBRIDGE: It is easy to say—and especially in connection with research—that everybody should be out doing research and that the federal government should spend more money on it, and so should the provincial government and so should the company,—and if they were not such a bunch of skinflints they would. However, research is not as simple as that. There is no use just spending money. You are better to have one good brain in a back room than you are in having a big laboratory, like some I could mention, which may spend hundreds of thousands of dollars a year and would not produce too much. When you ask me if the federal government should remit our taxes in order to encourage research, I would say that if the federal government had the money—which they have not at the moment—they certainly should; because when you begin to pay 55 per cent I think any person in the tax business would tell you that it is a deathly percentage and that they should remit the taxes and get them down because, otherwise, we cannot maintain our plant; we cannot maintain our credit and we cannot go and look for new customers.

The CHAIRMAN: Have you your annual statement here?

Mr. AMBRIDGE: Here?

The CHAIRMAN: Yes.

Mr. AMBRIDGE: No; what do you want to know about it?

The CHAIRMAN: You are complaining about profits and expenditures and all that sort of thing. I was wondering what your annual statement showed. I think the committee would be interested in seeing the profit and loss statement from a great many lumbering and forest industries.

Mr. AMBRIDGE: Well, let me think. I think last year we earned about $9½ million, after taxes, which is not enough to maintain our credit, maintain our plant and maintain our ability to search for new markets.

The CHAIRMAN: You have emphasized that wages—higher labour costs—is one of your main concerns.

Mr. AMBRIDGE: That is right.

Mr. MCQUILLAN: What would an increase of $5 a ton do to your costs?

Mr. AMBRIDGE: Do to our profit?

Mr. MCQUILLAN: Yes.

Mr. AMBRIDGE: It would take it down by $2½ million. You would have to multiply that out.

Mr. MARTEL: I heard Mr. Ambridge mention a plant in the United States. Do you have tax concessions in the United States for a certain number of years, either from the municipal, state or federal government?

Mr. AMBRIDGE: No, except we can charge for our losses for the first year, and the next five years.

Mr. MARTEL: What is the over-all rate of taxation in the west compared to what we mentioned concerning Ontario?

Mr. AMBRIDGE: I think it is 49 per cent; it is something like that.

Mr. MCQUILLAN: That is without regard to a special depletion allowance?

Mr. AMBRIDGE: No; we have not any timber.

Mr. MCQUILLAN: That is not the case in an American operation.

Mr. AMBRIDGE: An American operation would be different because they would have large stands of timber which they would own and for which they would get depletion.

The CHAIRMAN: What are the special inducements that suggest the ideas of Canadian companies—they may be partly American controlled, but that does not make any difference—closing some plants in Canada and opening up new ones in the United States?

Mr. AMBRIDGE: Well, presumably they would make more money that way.

Mr. MCQUILLAN: Mr. Chairman, are you referring to the statement made by the British Columbia delegation?

The CHAIRMAN: Mr. Ambridge, your company has recently opened a plant in the United States; could not that plant have been opened profitably in Canada?

Mr. AMBRIDGE: No, not profitably; there are a lot of things against it.

The CHAIRMAN: Apart from taxation, what are the other incentives?

Mr. AMBRIDGE: In order to build a plant in connection with our industry these days and support the wage structure, you have to have a big plant, so we build a big plant. If you build a big plant in Canada you have not a Canadian market for the product because we have not enough people. So you cannot build a big enough plant in Canada and confine its sales to the Canadian market. In connection with the plant we are talking about, we could not ship to the United States because there are prohibitive tariffs which prevent us from doing so.

The CHAIRMAN: And you are close to American markets.

Mr. AMBRIDGE: Oh yes, we can ship overnight in a truck from Alpena to anywhere in the Detroit, Chicago and Cleveland areas.

The CHAIRMAN: It was not a question of tax; it was a question of tariffs and availability of markets?

Mr. AMBRIDGE: Yes, and the cost of wood. The cost of wood at our mill in Alpena is one-third to what it is at the head of the lakes.

Mr. GUNDLOCK: There was a figure mentioned here of profits, after taxes and it was stated that this figure was not large enough for maintenance, and that sort of thing. Did I hear that right?

Mr. AMBRIDGE: Yes.

Mr. GUNDLOCK: Do you mean to say that you are taxed before you are allowed to keep up on your maintenance?

Mr. AMBRIDGE: What I mean is this: the kind of depreciation you get in connection with a plant today is not enough to keep it in good health mechanically and technologically. Out of your earnings you have to spend your depreciation, plus, and then you have to pay your dividends. You have to pay them if you want to maintain your credit. You cannot maintain your plants mechanically and technologically with the present depreciation allowance. So, from your earnings you have to maintain your credit, you have to maintain your plant and you have to go out searching for new markets. In my humble opinion, $9 million or $9½ million is not enough to do those three things properly. Now, mind you, it would be very difficult to prove that, and one of the great difficulties about our present economic situation is this: I say to such politicians and our labour leaders—and I put them in one group—

Mr. GUNDLOCK: I do not think you need to do that at all; after all, they are people, the same as anyone else.

Mr. AMBRIDGE: It is hard to convince them what we say is true, and you cannot prove it this month, next month or within the next two or three months. You have to wait for years, and by that time what you have prognosticated is lost in the mists of time.

Mr. GUNDLOCK: With all deference, if that is the case, and even if it is a bit of trouble, it should be brought out because it is a sad situation.

Mr. FISHER: Could you give us an indication of the crisis or the main problem in connection with the pulp and paper industry; are we moving into extremely difficult times?

Mr. AMBRIDGE: Who is this going to be extremely difficult for, you or who?

Mr. FISHER: The Canadian industry.

Mr. AMBRIDGE: Well, I would say this. I think this is quite true. I hate to be a prophet, but I say this: if you look over the world and find out where the areas are which are the producers of forest products, you will find out that the main producing areas are Scandinavia, Canada and the United States. There are pulp and paper mills and there are forest products in Europe quite generally. There is also Germany, Italy, France, and the countries behind the iron curtain, which I do not know anything about. But everywhere you look there are new capacities which can be brought into production more advantageously than they can be in Canada. Now the facts are well brought out. It was in either the British Columbia brief, the Gordon commission or another one—I have forgotten which one—but I ran into it in my reading during the last few days. The information is that Canada is losing its proportion of the world market.

The CHAIRMAN: Will you answer this question, Mr. Ambridge? In view of the continuing increasing demands for wood products—that is of all kinds—do you anticipate lower or higher sales in the United States market, provided the Scandinavian countries remain where they are with respect to South America, and so on?

Mr. AMBRIDGE: In the next few years?

The CHAIRMAN: Yes. I think your thoughts would be very important to this committee. I think it is a very important question.

Mr. AMBRIDGE: I think the sales in the United States of forest products—and by that I mean the whole range of them—pulps, dissolving pulps, cellophane, boxes, kraft paper, newsprint, fine papers—is bound to increase at something like the rate of increase of the population. I do not think it will do much more than that. I am referring to pounds per capita. I think it is going to take a rest, but the capitas keep going on, so the increase is about what the population increase is.

Mr. PAYNE: Mr. Chairman, if I may—

The CHAIRMAN: Do you want to continue this subject, Mr. Payne? We are on an important subject.

Mr. PAYNE: The only reason I wish to bother you at this time is that I feel this is an important factor and I have to leave the committee. I want to preface my remark by saying that I think everyone here has appreciated the rugged frankness of our witness; but I think if we are going to make progress there has to be a little cooperation. After all, some of us are endeavouring to do what we can for the industry. I want to take definite issue with the witness in showing a complete lack of faith in Canada. I would like to go back to what I consider profound in some of the testimony, and I am sure the witness would like to correct his opinion because maybe he feels he is battling with a hostile

audience. But in all the briefs from the west coast and Ontario there was a definite approach that good could come from a proper research program by answering the basic problem that our witness has brought up, and that is wood costs. Through a proper study and research in silviculture in methods of tree farming and different types of tree growth, this fantastic problem of wood costs could in effect lessen the cost of wood production.

These briefs and the recommendations of the delegates before us bear out the feeling that the government should play a more forward role and take the leadership in this very important matter of silviculture and other wood studies in an endeavour to answer the prime problem that seems to face their industry. Am I right? Are you opposed to the presentation of the briefs of this industry, or do you too endorse an enlightened, sensible and urgent approach to this matter of proper research on a cooperative level between provincial governments, federal government and industry? Are you opposed to that?

Mr. AMBRIDGE: Now, it is the easiest thing to say you have the greatest faith in Canada. I am a Canadian as much as anyone else. You said something about me not having faith in Canada. It is easy to say: have faith in Canada; and it is platitudinous. I do not know what you are talking about when you say "research", because you have not said anything yet, except cooperation studies, research and so on. What do you mean?

Mr. PAYNE: It is spelled out in all the briefs.

Mr. AMBRIDGE: I read them all and could not find out what they were doing. If you want to get down to specifics, let us get down to them and see what you mean by research and silviculture. In my travels I find that few people know what the word "silviculture" means. I also find that fewer people than you think know what "research" means or what the probable results of research mean, or how long it takes to bring it about. Let me give you some knowledge of research which, I think—and I run an outfit that does as much research as anyone in this country. We have a very competent and extensive research lab devoted to nothing but research in Canada at our Sault mill. There we have some 65 scientists who do not do anything else except research work on the processes and uses in our mill. It is indeed a very competent outfit. We have a forty-thousand-acre reserve where we are doing forest research of our own. We have together with the Ontario Paper Company and the Ontario government taken part on a project called RC-17, which is a specific research problem in forestry.

You speak about getting the cost of wood down by forest research. With the greatest deference I say you cannot get the cost of wood down with forest and silviculture research because the results of whatever you find will not be around for you to use for fifty years. This RC-17—that is the number of the project—is a project designed to find out why it is that certain areas in the forest seem to have difficulty in regenerating, whereas other areas have no difficulty. One can measure a cut and see the regeneration coming along.

In our particular case, about 12 per cent of the land we cut over does not regenerate properly. We are trying to find out why. We are trying to discover various treatments of the soil and surface and various other methods of cutting in order to see whether or not these sites will respond more favourably to this or that treatment. That is what I mean by forest and silviculture research. Is that what you mean?

Mr. PAYNE: I am taking entirely the interpretations submitted to us by other associations.

Mr. AMBRIDGE: If you would read some of them, I would like to hear them. I have read them. I am telling you the results of this work. We have been at it for ten years. The results are not going to be known to us, or to anybody

else for forty years, or thirty years. By the time thirty years have passed we may have a forest which is established sufficiently so that we know it will be all right. However, thirty years is a long time when you are speaking about the cost and in the same breath speak about silviculture and forest research. With great deference, I say you are not speaking about the same thing. Are you from the Pacific coast?

Mr. PAYNE: Yes.

Mr. AMBRIDGE: All these things to which I am referring are in respect of the forests east of the Rockies. I was on the Pacific coast at one time and got out of it. It is a different forest condition.

Mr. PAYNE: You are opposed to the contention that this broad field of pathology as recommended by all the other associations who appeared before us should not be undertaken?

Mr. AMBRIDGE: Yes. The reason I say that is because I do not know what the federal government is going to use for money.

Mr. SLOGAN: Mr. Harrison reviewed some of the work the government is doing and left with me the impression that while the amount of basic research being done may not be adequate, the fact is that the industry is not taking over from this basic research and applying it. Would you agree with that impression?

Mr. AMBRIDGE: Certainly not. The industry is taking over anything they can get which will improve their operation processes. I would like to see some basic research, or have somebody point to some particular phase of basic research, which has not been picked up by the industry.

The CHAIRMAN: I know you will agree that your industry has been one of the foremost in utilizing research to lower the cost by using all available material.

Mr. AMBRIDGE: Only since the war. Before that it was appalling.

The CHAIRMAN: Since you became research conscious?

Mr. AMBRIDGE: Yes.

Mr. MCQUILLAN: Mr. Ambridge is speaking about the present and he spoke about thirty or forty years being too far ahead. I do not think this committee can take that attitude. Perhaps one of the things which has been stressed before this committee has been the fact that the reason the southern pine is furnishing such competition to our Canadian industry is because the growing sites are in areas where the roads and transportation systems already are developed, and they are able to produce a new crop fairly rapidly. Is not that also essential to the future of the Canadian industry?

Mr. AMBRIDGE: The southern forestry business is another subject altogether. It might interest you to know something about that. We have done a good deal of investigation, naturally, as to what goes on in the south, which makes possible these low costs which have produced this competition of which you are speaking.

In the first place, the average temperature down there is very much higher than it is here. Everybody knows that. In the second place, their terrain is very much more suitable. If you have been through the woods there you know you can go through and knock out a road, with a bulldozer. You do not have to build a road at all. You can log the whole year around. Then they have this so-called slave labour they use down there, which just now is meeting the attention of Congress. Senator Kennedy has a bill before Congress right at this minute in an attempt to get the minimum wage up from $1 to $1.25.

Now, do not forget there is not one single paper company in the south which runs its own woods operation. It is all sub, sub, subcontract until they have a crew of men less than twelve which exempts them from the provisions of the

minimum wage law as it is now, and also exempts them from the workmen's compensation, and so on. They have our coloured brethren down there who work for what they can get and a kick in the pants. That is what they base their low-cost wood on, and do not forget it.

What we have to fight is the so-called slave labour in the United States. You hear the Americans speak about slave labour in Japan and Indonesia. They have plenty in their own country. It is the most serious competition we have to meet.

Mr. McQUILLAN: Did you ever think of sending down a few delegates of the I.W.A.?

Mr. AMBRIDGE: We have talked to the union. I have personally gone to the presidents of the two large unions with which we deal in the United States. It burns me up to go down there, see them and ask him how it is that their great union principles permit the cutting of wood under the situation which exists down there.

If you gentlemen would like a suggestion, I would say it is probably within the realm of possibility that this committee could send a subcommittee down to the southern states and have a good look at what they do down there, and see how you like it.

Mr. McGREGOR: Is that the reason why you said the cost of wood is one-third in the United States?

Mr. AMBRIDGE: That is another matter. That is the cost of the wood we get in Michigan. We buy it from the farmer. This is wood which is cut on the land in the southeastern states. The reason why the wood we get is at the price it is, is because we do not have union labour, since these farmers cut it themselves on their own property and sell it to us.

Mr. SLOGAN: Do you import any wood pulp in Canada from your plant in the United States?

Mr. AMBRIDGE: No.

Mr. FISHER: There have been comments on the question of freight rates. Have you any suggestions or ideas, or can you give us any idea how the freight rates have affected your industry?

Mr. AMBRIDGE: Freight rates, of course, are a very serious burden. As they go up they become more and more burdensome. We do our best in an attempt to offset them by shipping by truck and water and by doing everything we can think of to avoid shipping anything by the railroads.

The Canadian railroads are not particularly renowned for a liberal attitude towards freight rates. For instance, the southern railways in the United States refused to take an increase which their authority down there had authorized them to take. They did not take it simply because they did not want to burden the southern people with any further increases, which just made it possible for the southern people to reach further up into our market because of the freight rates.

If you take a mill like Iroquois Falls, one of our mills, it has its own paper and is favourably situated in respect of wood supply. However, it is away off in the wilderness and the freight rate is killing.

Mr. FISHER: Is it running on shorter time than the other mills?

Mr. AMBRIDGE: It is not running shorter than the head of the lakes. That is really the master place in the world. Other than the head of the lakes, however, it is running shorter.

Mr. SLOGAN: Could you tell me the rate of capacity at which you are operating in Manitoba?

Mr. AMBRIDGE: We would run Manitoba full six days a week except for the fact that one of our big customers is now engaged in a strike and has been for, I think, two months and will probably still have a strike on its hands next month. So in Manitoba when the operation is not drawing any paper we do not run it.

Mr. SLOGAN: Is there any difference in the freight rates from a point in Canada to a point in the United States as compared to a point equal distant in Canada?

Mr. AMBRIDGE: If you could answer that you would really be good, because I cannot make head or tail out of the freight rate structure. Some of the most extraordinary things go on in the freight rate business.

Mr. SLOGAN: Are there any tariffs against newsprint going to the United States?

Mr. AMBRIDGE: No. Newsprint and pulp are two things which go to the United States free of duty. Newsprint is carefully defined. It is quite a story as to what is and what is not newsprint.

Mr. FISHER: The Canada Forestry Act set up contributions towards regeneration schemes to go to the provinces for any lands which are held by the crown, but not for crown lands if under licence. Have you any comments on that? I think that is a correct statement.

Mr. ROBERTSON: Mr. Harrison could discuss that point.

Mr. J. D. B. HARRISON (*Director, Forestry Branch*): That is not laid down by the Canada Forestry Act. That is a clause in the current agreements with the individual provinces.

Mr. FISHER: It has always seemed to me that this is a very unsatisfactory arrangement for the companies which have fairly large limits. It is accepted by the government that it is their responsibility to look after regeneration of their own licensed property; is it not?

Mr. HARRISON: The contribution the federal government makes, that is the agreement under the Canada Forestry Act, at the present time, was started in 1951 and the current agreements expire in 1961. It was not intended in this preliminary stage to go on a large scale into the reforestation question. It was, therefore, the intention to see how much interest there was at the start and that contribution by the federal government was to be limited to plantations on vacant crown land. Various representations have been received by the provinces. The whole matter will be considered when the agreements come up for renewal in 1961.

Mr. FISHER: Since we have some submissions here, you might be prepared to comment on this. What is your view about any kickback to the provinces? Do you feel the money for regeneration should apply to licensed land as well as straight land held by the crown?

Mr. AMBRIDGE: The land itself does not know whether or not it is licensed. I think the distinction between licensed and unlicensed land certainly is not forestry and certainly is not silviculture.

Mr. FISHER: One of the other aspects of the federal government and this department is very much involved in certain forest access road programs. Have you any views or suggestions as to the present plan by the federal government?

Mr. AMBRIDGE: You mean the igloo-to-igloo plan? Right now we are building a road from Port Arthur due north in respect of which we are going

to pay one-third, the provincial government is going to pay one-third and the federal government is going to pay one-third. That is a road 32 miles long which will cost $750,000 to $800,000. We are very well satisfied with that arrangement. We think that is sensible. It is the first time we have ever had anything like that.

Mr. FISHER: Do you think there are possibilities for extension of this on a larger scale?

Mr. AMBRIDGE: We hope so. This road, for instance, could go up still farther. I think the ultimate is 100 miles. I would think that would be a good thing from the point of view of access, fire protection and so on.

The CHAIRMAN: It was an agreement?

Mr. AMBRIDGE: I think the winter unemployment situation greatly facilitated the negotiations; let me put it that way.

The CHAIRMAN: You were speaking about the access roads. Can you amplify that in any way?

Mr. AMBRIDGE: In respect of access roads?

The CHAIRMAN: Yes.

Mr. AMBRIDGE: I think they are most important because of the part they play in fire fighting. Rightly or wrongly, in our company we believe the most important thing you can do to maintain the forests in this country in a healthy state is to keep the fires out of it.

Mr. HERRIDGE: Hear, hear!

Mr. AMBRIDGE: We believe—and we may be wrong—that whatever efforts can be spared by the nation in the interests of our largest industry could well be put into fire fiighting and in that way probably we would have better results than if we put the effort into any other segment. There are many people who say that is not so; that you have to have silviculture and that you have to grow a lot of these little trees, and have to have nurseries and this and that. I ask you, however, what is the use in planting areas with trees, letting them grow so high, and then let them all burn down.

Mr. GUNDLOCK: I am speaking only from memory, but I believe last year in the committee there was a good deal of discussion about the vast areas of forests which had not been developed or exploited. In fact, it seemed to be a terrific problem to spray the budworms and such things because of over-mature trees. I do not know whether it was in respect of pulpwood, lumber or what. Would the witness comment on that sort of thing? I am speaking of these vast areas which simply are going to waste.

Mr. AMBRIDGE: The big example is that the cost of the spraying in respect of budworm infestation is apparent. I now am speaking from memory, but I believe they sprayed a very large area of hundreds of square miles for five years.

Mr. GUNDLOCK: The point I am trying to make is it was simply because of over-mature trees. Otherwise the disease and the bug would not be there. Why are there these vast areas of unused wood? Is it a matter of transportation?

Mr. AMBRIDGE: There is just nobody to use them.

Mr. GUNDLOCK: Is it lumber or pulpwood?

Mr. AMBRIDGE: Both.

Mr. GUNDLOCK: Is it not needed or not wanted?

Mr. AMBRIDGE: Neither needed nor wanted.

Mr. FISHER: Is there any factor which the federal government might introduce in the field which would make for more of a demand? Let us say in respect

of these large blocks up by Sioux Lookout which the A.N.D. Company and others have looked at? What could the government do to make companies such as these more interested?

Mr. AMBRIDGE: They could not do a thing to get us in there. It is beyond the power of the government.

Mr. MARTEL: A little while ago we had a witness who told us that when a new ore body was found the government would build a railroad. If I understood correctly, an ore body is more of a difficult proposition than to grow trees. The ore bodies deplete themselves from year to year. At the same time is it not true, however, that roads or railroads which are built into new mining camps could help the pulp and paper industry in opening up new forests which can be cut?

Mr. AMBRIDGE: I would say in some cases, yes. I am thinking of one particular case in Quebec. I cannot remember the name of the lake.

Mr. MARTEL: Mistassini.

Mr. AMBRIDGE: That whole area. They were in to see me.

Mr. MARTEL: They want to build a mill there?

Mr. AMBRIDGE: Yes. It might be just fine. Maybe that would be a good way to do it. The only trouble is to whom would they sell the products.

Mr. MARTEL: They have a big mining development under way there now. Also there is a large area with excellent forests.

Mr. AMBRIDGE: There are many areas. Do not think we are running out of wood in this country. We are not. The point at the moment in respect of building a mill there is how would they sell the wood. We cannot sell what we are making now.

Mr. MARTEL: Even if it were accessible?

Mr. AMBRIDGE; Yes.

Mr. MCQUILLAN: Could Mr. Ambridge tell us whether or not any of his plants will be using any large amount of second-growth timber?

Mr. AMBRIDGE: We are now using it.

Mr. MCQUILLAN: How old is that?

Mr. AMBRIDGE: We have areas at Iroquois Falls which were cut fifty years ago. They are just about ready to cut again. We have other areas which were burned down where we now are cutting. They were burned down seventy, eighty or ninety years ago.

Mr. MCQUILLAN: By virtue of the existing transportation systems, that wood is in many cases cheaper than where you have to reach out?

Mr. AMBRIDGE: Yes, it is closer to the mills.

Mr. HERRIDGE: I was very interested in the emphasis on the primary importance of fire protection. I do not underestimate the need for silviculture, research and things of that sort. Perhaps, however, you would agree with me on this. I remember a valley being burned out five years ago where hundreds of millions of feet of timber were lost. This was caused by a spark from a locomotive. There was then a good regeneration of coniferous growth, and a few years ago another fire commenced in this growth destroying thousands and thousands of acres of this regeneration. I have seen it happen on a number of occasions. It is a very serious problem to the people in the interior of British Columbia. Have you any suggestions to make to the committee in respect of an improvement of our policy and approach to the fire protection problem? I think it is a number one problem.

Mr. AMBRIDGE: Well, I told you that I do not think it is necessary for me to make any suggestions at all.

The CHAIRMAN: Of course, we all understand that fire protection is the responsibility of the provincial government.

Mr. HERRIDGE: I realize that, but I wondered if the witness had any suggestions.

Mr. AMBRIDGE: I am far from making any suggestions. But I do say this: the forest protection system in Ontario as performed by the lands and forests department is an extremely competent organization, and if there are any suggestions to be made as to how the federal government could help with the fire protection, they would certainly do well to listen to the experience of the Ontario Department of Lands and Forests and, for that matter, the Quebec forest protection organizations. They are very competent people; and if the federal government wants to know where they can be of assistance or how, the place to find out is from them because they have first hand experience and are first class people.

Mr. HERRIDGE: The same comments apply to the British Columbia foresters. But repeatedly, when these things have occurred, the usual answer is: well, we can only do so much; we must have sufficient money to provide sufficient lookouts, patrols, trails, access roads and things of that sort.

Mr. AMBRIDGE: They know what they need.

Mr. HERRIDGE: What assistance do you think the federal government could give in that direction?

Mr. AMBRIDGE: Well, if they could save up some money themselves and put it into this thing, it would be a very good idea.

The CHAIRMAN: After all, provincial autonomy is a factor, is it not?

Mr. HERRIDGE: Yes, but we are talking about further responsibilities.

Mr. MCQUILLAN: Continuous representations have been made from British Columbia and, I imagine, from the other provinces, to the federal government for greater financial assistance in their fire prevention and fire fighting. They get only a pittance now.

The CHAIRMAN: Mr. Ambridge says they have not any money to make further contributions.

Mr. MCQUILLAN: He probably does not know all the facts about the treasury.

Mr. AMBRIDGE: All I have to do is look at the deficit.

Mr. MCGREGOR: Has anyone any idea how many of these fires are deliberately set and also the number caused by lightning?

Mr. AMBRIDGE: There are pretty good figures in the Ontario archives. Although I am speaking from memory, last year was an extraordinary year in that there was only about 60 per cent odd, due to human carelessness. The usual figure is 80 to 85 per cent, but for some reason Ontario had a good year.

Mr. MCGREGOR: Eighty-five per cent?

Mr. AMBRIDGE: Eighty-five per cent due to human carelessness. That is one word for it; stupidity is another word.

Mr. MCQUILLAN: But there are few due to incendiaries.

Mr. AMBRIDGE: I do not know, but I would say there are very few incendiary fires set. You do get the occasional crazy man.

Mr. MCQUILLAN: They are having trouble in the southern clime countries in regard to that.

Mr. AMBRIDGE: I have not heard of it in our forests. The incendiarism is probably nil.

Mr. HARDIE: In connection with the question of research, would you agree the main objection to money spent at this time is that if the government is to increase its spending in connection with this research, it will have to raise taxes on the industry above what you say, and it will be burdensome? The industry is well qualified to do its own research if it is able to sell its products. The main difficulty today is its inability to sell its products in the markets of the world. Would you agree with that?

Mr. AMBRIDGE: Yes.

The CHAIRMAN: That point has been emphasized by the other members—they have priced themselves out of the market.

Mr. HARDIE: They are all able to do their own research if they can sell the products and make the money.

Mr. AMBRIDGE: Gentlemen, let me draw this distinction. There is such a thing as doing research and finding out how to treat areas in order to make them productive, which is the object of most of the research work that is being done, but there are other more academic things. However, once you have found out what to do with areas, then there is the question of who is going to pay for the enormous job it would be to institute these methods in the non-productive areas. Who is going to do that? I do not know, but I know somebody who is not going to do it, and it is us, because we have enough burdens as it is.

Mr. FISHER: That brings us back to the question of contributions from the federal government toward regeneration.

Mr. AMBRIDGE: Yes. If they could save some money and start in to do some regeneration, that would be dandy. Also, I could point out some places where they could save some money.

Mr. FISHER: Let us ignore the factor of the present state of the federal treasury.

Mr. AMBRIDGE: You cannot ignore it. That is what we are talking about. If we are going to do research, let us do it all,—and when we come to get the wherewithall, the cupboard is bare.

Mr. FISHER: They are taking $2 million from you fairly directly.

Mr. AMBRIDGE: Very directly; it could not be more direct.

Mr. FISHER: They are getting it. Is your feeling somewhat similar to what Mr. H. R. MacMillan has expressed, that there are not enough incentives to the industry itself and to all the different branches of forestry from the federal government in this particular regard. Let us ignore the state of the treasury. Is there an inadequate return?

Mr. AMBRIDGE: You mean a return of the money that is poured into the treasury in relation to what comes back?

Mr. FISHER: Yes.

Mr. AMBRIDGE: I think that is the sort of criticism. It is like the business of milking a cow and not feeding it, is one way of running out of milk.

Mr. FISHER: You think that is the key? Well, one of the suggestions I made last year was that this problem was serious enough for a study, not just by this department, but by the Minister of Finance; in other words, the top ministers of the cabinet should put it this way: we are in a crucial period in your industry and the federal government should take further means of finding out how it can help and assist. Would you agree that such a study is imperative and important?

Mr. AMBRIDGE: I certainly do.

The CHAIRMAN: But not by a committee?

Mr. FISHER: Have you ever made any representations to the Department of Finance or the Minister of Finance in this regard?

Mr. AMBRIDGE: The only representations we have made in recent years that I know about—and I do not know how many others have made representations—have been for the purpose of removing some of the excess burdens which had been heaped upon us.

The CHAIRMAN: That is a condition which has existed in your industry for a great number of years?

Mr. AMBRIDGE: Burdens?

The CHAIRMAN: Yes.

Mr. AMBRIDGE: We could not get any money.

The CHAIRMAN: I am speaking of the last ten or twelve years.

Mr. AMBRIDGE: For the last ten or twelve years the industry has been regarded as the milk cow due to the fact that the companies are large and the figures they show as earnings are large. Everybody looks at them and thinks: would it not be nice if I could get them to provide some money so I could do more in my department. This is the government I am referring to, but present company excepted.

The CHAIRMAN: As you say, that situation has existed for some years.

Mr. AMBRIDGE: Yes.

Mr. SLOGAN: I would like to revert to the topic we discussed previously in order to confirm some statements. I ducked out of the committee and had a talk with Mr. "Andy" Niwasser, who was a trade commissioner in several of the South American countries. I discussed this problem of the brokerage and he confirmed that the government does not participate directly, but it is a matter of private brokerage. However, he stated that at both ends they do everything they can to help barter, and so forth. He brought out one point that there have been some Canadian firms that have been doing this. He mentioned one particularly, the Hayes farm cattle exporters. I believe they are from Oakville, Ontario. They have been exporting cattle in return for coffee. I do not know how successful this has been. However, one thing he brought out was that both Venezuela and Brazil have a favourable trade balance with Canada and they should be in a position where they could buy more from Canada without too much difficulty.

The CHAIRMAN: What two countries did you refer to?

Mr. SLOGAN: Generally, I think the South American countries are pretty well on a par with us or, perhaps, it is a bit in their favour.

The CHAIRMAN: What about Brazil?

Mr. SLOGAN: It is highly in their favour and in Venezuela it is markedly in their favour. However, it would seem that territory would be favourable to an exchange such as that, because of the fact they are exporting more things than they are buying from us.

Mr. AMBRIDGE: Mind you, a lot of these South American countries have favourable balances with Canada, but their over-all American dollar exchange is sadly against them. Brazil is a first class example. She has to import $300 million worth of oil because they will not let anybody dig the oil out for them. They do not know how to do it themselves, so it is staying under there for the Brizilian people to have; they are sitting on top of it. Their over-all dollar exchange is against them and when you come to collect your bills—and I know because some money from Brazil is owing us—they say they are very sorry but they have no American dollars and ask us to wait until maybe next September when they will have some. My point is that they may have a favourable balance with Canada but their over-all American exchange is not so.

Mr. FISHER: Do you think we are going to have a state of economic health in this country if the pulp and paper industry cannot continue to get a share of the expanding world market?

The CHAIRMAN: He did not say that. He said his main export market was to the United States and they expect to increase that market.

Mr. MCQUILLAN: I think that has been aptly demonstrated, if not by Mr. Ambridge than by other witnesses, that Canada is not getting its fair share of the world market.

Mr. AMBRIDGE: Yes, of the world market. Of the American market, apart from what the Americans themselves did or made, we get our fair share. But I will say this. It has been said that what is good for General Motors is good for the United States and what is good for the United States is good for General Motors. The same thing applies here: what is good for the paper industry is good for Canada and what is good for Canada is good for the paper industry.

Mr. FISHER: How serious is the situation? Do we really need to get fired up about it?

Mr. AMBRIDGE: Well, we are. I do not know about you fellows, but we are really fired up about it. Would you like to see earnings go down 37 per cent and see yourself back to 1951 earnings after spending tens of millions of dollars of capital which you borrowed in order to increase the efficiency of your plant and then find that you are back in your 1950-51 earnings. We are steamed up.

Mr. FISHER: Well, the presentations which Mr. MacMillan has made in every place has emphasized that forestry and forest industries have failed to convince people generally of the situation and that agricultural pressure groups are stronger in getting government action. How do you suggest we convince the Canadian people and the legislatures that this is a serious situation? You and Mr. Fox can blast off at annual meetings, but is there not a larger responsibility for you to put your case—

Mr. AMBRIDGE: We have operating amongst a few of us in the paper business a committee—and amongst the ones who are in this particular venture are Mr. Fox of St. Lawrence, Mr. Little of Anglo-Canadian, the Powell River Company, and Bloedel came in lately—which we call the newsprint information committee. It has its headquarters in New York City and from there we issue a great deal of good information. It is as good information as we can get. We issue it to all the legislatures in the states and to the publishers in the states. I am sure some of you gentlemen must have a copy of it. Now, that has been very successful. We have been trying to educate the American publishers largely and the legislators down there on the general principle that it is not a bad thing for the Americans to depend very largely upon Canada as a source of supply. After all, we are reliable people and we have proved we are a reliable source of supply. We resent the efforts made in the United States to discredit Canada as not being worthy of the trust and of the business. We have been very successful in that.

At the moment, I am trying to get a similar thing off the ground in relation to Canada. I am trying to get the big exporters interested, people like the aluminum companies, whisky interests and others. I am trying to get it into the heads of the public that this country depends upon its exports for its life and I tell them that this wonderful development that we face will just turn to ashes in our hands if we do not get our exports up and if we do not export one-third of our gross national product. If we do not, we are going down the drain. I would like to have your advice in this regard. We have discussed among ourselves the fact that you gentlemen probably get so much of that

kind of stuff that it is impossible for you to read it all and it is not very effective for us to deluge you people with this kind of propaganda, if you want to use that word. I would like to have some advice in that connection. But what we are trying to do, in one way or another, through editorials in the newspapers or news items, is to arouse the country to the danger we are in if we ever let go of our export position of this stuff we see around us. Every day I sit in my office on University avenue and watch the buildings go up. There, every stick and stone of these buildings depend upon our export business. If we have not got that, this would be a ghost town. We should try to get the people to understand that. I know what the people think, maybe more than some of you gentlemen know, because we have mills all over the country and I go and talk to my people. I am telling you that in our company our people in the mills are getting more and more concerned about the state of health of this country's economy on simply that basis.

The CHAIRMAN: Do you mean your employees know that?

Mr. AMBRIDGE: Yes.

The CHAIRMAN: Since when have you had a strike in your industry?

Mr. AMBRIDGE: We do not have strikes in our company.

The CHAIRMAN: Have you increased your wages in the last couple of years?

Mr. AMBRIDGE: Yes, every time they ask for it.

The CHAIRMAN: Do your employees know that your industry is being priced out of the market?

Mr. AMBRIDGE: You bet they do. I tell them personally. That is what they are concerned about.

The CHAIRMAN: And they still ask for higher wages?

Mr. AMBRIDGE: They cannot do anything else. It is an extraordinary situation. Now, you take our people in the mills. I know them very well and I know all our labour leaders very well. They are a damn good bunch of people, including the labour leaders. But what are they to do? Are they to see every other industry walk past us and have us dragging along behind? Where would we get adequate and competent mechanics if we allowed other industries to walk past us by paying the going wages for mechanics?

The CHAIRMAN: Has your production increased since wages have increased?

Mr. AMBRIDGE: Yes, it has.

The CHAIRMAN: Does it more than compensate for the increase in wages?

Mr. AMBRIDGE: No, it does not. Hitherto we have been able to increase our prices, which has taken care of it. Now, we cannot increase our prices. We have trouble keeping the Scandinavians from cutting the heart out of our price, and if that ever gets started this will be bad; it is a serious situation.

Mr. KINDT: Also, our exchange rate is against your export market.

Mr. AMBRIDGE: To me, the exchange rate is incomprehensible. I do not know anything about banking or exchange. I have not the slightest idea what it is all about. All I know is that to have a 5 per cent or 4 per cent handicap for a country like Canada, which has to export one-third of its products, is a crazy thing. There must be a good reason to permit it to continue, but I do not know what it is.

The CHAIRMAN: Gentlemen, it is one o'clock. Mr. Ambridge, is it convenient for you to come back this afternoon, or have you something else to do?

Mr. AMBRIDGE: No, I have to stay over until tomorrow.

Mr. MCQUILLAN: How many are interested in questioning Mr. Ambridge further?

The CHAIRMAN: That is a good question. Mr. Ambridge has given us a very excellent statement this morning and we appreciate the frankness, so seldom experienced before a committee. Are there any other questions you would like to ask Mr. Ambridge?

Mr. FISHER: I think I have a couple, if you would be willing to come back.

Mr. AMBRIDGE: I am willing and at your service.

The CHAIRMAN: We will adjourn then until the end of the question period in the house. We will meet here in the same room. It will probably be around 3.15 p.m.

AFTERNOON SESSION

TUESDAY, May 19, 1959.
3.15 p.m.

The ACTING CHAIRMAN (*Mr. McQuillan*): Gentlemen, Mr. Murphy asked me if I would take the chair this afternoon. Is that agreeable?

Agreed.

Mr. FISHER: May I, first of all, move that this brief, the forestry situation in Canada by D. V. Love, Associate Professor of Forestry, the University of Toronto, be printed in our minutes of proceedings and evidence of today. The chairman has looked at it and you all have copies. I think it is immediately apparent that this is very interesting information and, in some aspects, substantiates one of Mr. Ambridge's points of view.

Mr. AMBRIDGE: Don't tell me!

Mr. FISHER: I think it would be very valuable to have it on the record.

Agreed to.

THE FORESTRY SITUATION IN CANADA

by D. V. Love, Associate Professor of Forestry,
University of Toronto.

Forestry is defined as "the scientific management of the forest for the continuous production of goods and services". It is evident from this definition that the liquidation of mature God-given timber is not forestry. Forestry involves the investment of money for the purpose of improving the quantity or quality of the forest in a given area. In the absence of such investment, forestry simply does not exist.

A few fundamental points concerning the practice of forestry must be understood before the forestry situation can be fully appreciated. Three of the most significant of these points are discussed briefly below.

1. Investment of money in the growing of forests may be undertaken for one of two general purposes as follows:

(a) As a commercial venture where the wood is grown as raw material for the manufacture of commercial products such as lumber or pulp or,

(b) as a non-commercial venture where wood production is incidental to the other benefits from the forest, including the protection of soil, water and wildlife values.

It is evident that there is considerable inter-relationship between these two purposes of forestry in certain areas such as southern Ontario and the eastern slopes of the Rockies. However, over the bulk of the forest land of Canada in forestry is to be practiced it will be for the purpose of producing wood as a commercial venture. This paper is devoted to an economic analysis of the conditions, in Canada generally, associated with such a venture.

2. The second point concerns the status of forestry as an investment for private capital. The period involved in the growing of timber is much longer than that usually associated with capital and makes it difficult to compare the competitive position of forestry with the many alternatives available for capital investment. Even discounting time factor, however, it is evident that, under existing market conditions and the demands of labour, interest returns and taxes, the investment of funds for the scientific growing of timber is not an attractive alternative in comparison to the others available to private capital.

The production and distribution of wood products by a program of intentional forestry involves the following steps: (a) the growing of timber through investment in management, (b) the harvesting of the crop, (c) the transportation of the raw material to the plant, (d) the manufacture of the commercial products in question, and (e) the distribution and sale of these products to the ultimate consumers. The price set on these products must meet foreign competition not only in the local market but internationally, because we depend to a great extent on foreign markets for the disposal of our forest products. Up to the present the production of commercial products has not involved any appreciable expenditure in the first stage—that of growing the timber. As a consequence little is known about the organization and administration of the timber growing aspects of the operation in spite of its obvious importance to the successful continuance of the wood-using industries.

This lack of knowledge and experience in the growing of forests and the low value attached to standing timber because of its abundance makes the investment of private capital in this venture one of the least attractive of all reasonable alternatives.

3. The third point concerns the intensity with which forestry should be practiced under Canadian conditions. Many people after travelling in European forests come back to Canada with a vivid picture of intensively cultivated forests and they are often highly critical of forest conditions they find here on their return. It is suggested that because our forests are not intensively cultivated our forestry is all wrong. This is by no means true, as over considerable areas natural regeneration and growth are adequate. Where this is not the case and an expenditure is required to produce improved conditions in the forest, then an economic analysis of the alternatives available is necessary.

With these three points established the forestry situation in Canada can now be explored without prejudice and without the confusing influence of sentimental or non-commercial interests.

The Commercial Aspects of Forestry

Because we are concerned here with the commercial aspects of growing wood me must analyze the forestry picture in terms of the factors that contribute to the economic success or failure of such ventures. Such an analysis should include a study of the demand and supply picture of wood products and the related raw materials required. Numerous such studies have been made recently including the Stanford report and The Timber Resource Review in United States and the study of the Canadian forest industries by the Gordon commission. In all cases a considerable increase in the use of forest products is anticipated in the future

and no one seriously doubts these opinions. The only question with which Canadian governments should be concerned, in this regard, is: How much of this expanding future market can the Canadian forest-based industries expect to serve?

A few statistics respecting the pulp and paper industry in North America may serve to demonstrate the trend in this field. Additional studies for a more complete picture covering all forest-based industries was not possible in the time available.

In the five years from 1947 to 1951 the average annual consumption of pulpwood in the United States was 22 million cords. The average for the period 1952 to 1956 was 31 million cords, an increase in consumption from the earlier period of 39 per cent. For the same periods the U.S. imports of pulpwood remained virtually unchanged at 1.8 million cords.

For the same periods annual pulpwood production in Canada increased from 13.8 million cords in 1947-51 to 15.3 million cords in 1952-56, an increase of 11 per cent. (It is suggested that this figure may be somewhat low since, over the same periods, wood pulp production increased 20 per cent and only a small part of this difference can logically be attributed to improved yield of pulp from the pulpwood.)

The increased expansion in the U.S. compared to Canada can probably be attributed to the economic advantages of U.S. pulpwood over the Canadian product. This economic advantage has developed recently as a result of technological advances which have made low cost southern pine and eastern hardwoods suitable for a wide variety of wood pulp products. The statistics respecting the use of southern pine and eastern hardwoods will serve to corroborate this statement.

In the period from 1945-1949 the average annual production of pulpwood in the Southern States was 8.4 million cords. From 1950 to 1954 the production averaged 13.5 million cords, an increase of 61% for the five year average.

The increased use of hardwoods is a more recent development showing a steady progress from 1952 when the total U.S. consumption was 3.8 million cords, to 1956 when the total consumption was 6.1 million cords, an increase of 60 per cent in the four-year period.

It might erroneously be assumed from these statistics that a physical shortage of wood in Canada forced the development of the industry in the U.S. Studies with respect to the wood supply situation in Canada conducted by the Gordon commission indicate that in 1954 Canadians were harvesting only 33 per cent of the allowable cut. Even with the anticipated expansion in the wood-using industries, the 1980 harvest would be only 57 per cent of the then allowable cut. It is evident that the pulp and paper industry development in the U.S. was favoured not because of any physical inability of Canadian forests to produce the required volumes of wood but rather because of the inability of Canadians to put this wood on the market at costs which will compete with U.S. production.

The time is now well past when the bogie of wood famine in the physical sense should influence our forest policies. Concern must be directed toward the solution of the all-important question of product cost.

As previously noted, five steps are involved in the production and distribution of commercial wood products. The first and fundamental stage of this operation—the growing of the timber—is the only one in which the commercial interests involved in manufacturing the product in question have little or no economic incentive to investigate. Yet in the long run the efficiency with which the raw material can be grown, having in mind location and quality as factors of the utmost importance, may well decide the possibilities of expanding, and

even maintaining, the wood-using industries in Canada. Having in mind the economic significance of these industries to the country every effort should be made to create conditions that will maintain them in a healthy condition. Where possible, governments should assist these companies through the construction of forest development roads, through research in the techniques of wood products manufacture and through enlightened taxation policies. But above all, due to the uncertain economic position of investments in the growing of forests, governments must take the initiative in the development of forests which will produce wood, so located with respect to the markets, of such quality and available at such prices that Canadian wood-using industries can remain competitive in world markets.

In the early days of pulp and paper production Canada enjoyed a very material advantage over competing areas. The spruce, so sought after by the pulp manufacturers, abounded in Canada. Development of the pulp and paper industry therefore was rapid. This initial flush of advantage is now rapidly disappearing. Hardwoods are abundant in eastern U.S., and as technical developments increase their usefulness at a relatively low price they will represent an increasingly large proportion of the raw material requirement of the industry. In the eastern and central United States there is a surplus annual growth of hardwoods of 32 million cords. This is just slightly more than the present U.S. production. In other words the total present production of pulpwood in the United States could be doubled and maintained indefinitely by the use of hardwoods.

It appears inevitable that the future expansion of the pulp and paper industry in Canada will be greatly influenced by the pulpwood supply situation in the United States. A concerted effort to reduce all costs associated with pulp and paper production will be required if Canada is to retain any semblance of her previous favoured position in this field.

Pulpwood production costs in southern pine usually include an amount for the regeneration of the cut-over areas to desirable species. This precaution assures the continuous production of cheap wood. Under Canadian conditions such expenditures are much less substantial and indeed they must be less substantial on the part of the industry since trends suggest that even without such expenditures expansion in Canada is not attractive. Unless our forests are to be mined without thought of the future it is clear that the Canadian governments—federal and provincial—must step in and accept responsibility for the production of future forests.

In undertaking to provide the required future forests at reasonable cost it appears that research and experimentation are first-line requirements. Most authorities have accepted this fact and a good deal of research work is in progress in the federal and provincial forest services. Unfortunately most of this research is devoted to the determination of the physical or biological potentialities of the forest land with relatively little emphasis on the economic aspects. In fact, additional wood production from the forest land is useful only if it can be grown at a competitive price. The production of wood of the right species and quality at minimum cost must be classed as research and must be provided with staff and funds adequate for the job. Since a considerable range of products must be considered and an even wider range of conditions respecting soils and forests, it is evident that this work cannot be done in one locality. Experimental management units must be located across the country so that all major regions would be represented. The success of the work undertaken by these experimental units would be judged on the basis of their ability to regenerate, protect, improve and harvest the forest crop at competitive costs.

All aspects of the work of growing desirable forests must be considered over the long term and the efficiency of work judged on the whole operation and not simply on the basis of the costs of harvesting the current mature crop.

When the difficulties associated with the business of growing wood competitively have been solved in the experimental units the techniques can be turned over to industry to be applied generally in the regions to which such methods apply. The pilot or experimental unit is essential to the development of techniques which are biologically desirable as well as economically sound. The present methods of timber growing and timber disposal do not lend themselves to the type of control or analysis which is required for minimum overall tree growing costs.

The future demands that, if Canada is to retain her favoured position as a producer of wood products, steps must be taken to develop methods of timber production which are competitive. Because this phase of the production of wood products—the growing of wood—holds no incentive for the investment of private capital it is clearly a governmental responsibility which must not be denied.

Mr. FISHER: I have only a few more questions.

The ACTING CHAIRMAN: Would you please proceed?

Mr. FISHER: The Canadian Tax Foundation made a study a couple of years ago on forest tenures and taxation. They tended to view the sustained yield idea as being a basis worthy of consideration from a taxation point of view. Their viewpoint is something like this; that nothing in business is fixed or set and therefore when you are attempting, as far as a business enterprise is concerned, to relate those holdings and operations to something which has been in business for a long term as a sustained yield, you are getting into a problem of imponderables. Is this close to your point of view? Let us put it this way. Do you feel as a policy that sustained yield is something that is not a tremendous worry in so far as Canada and the present predicament of the pulp and paper industry is concerned?

Mr. AMBRIDGE: Sustained yield is very desirable. It is possible. Certainly it is the only kind of policy that anybody would agree to. I think out of our industry has gone all this idea of "cut out and get out". Everybody expects to stay in business. Certainly right now everybody is running their operation on a sustained yield basis. I never heard anyone say anything against it. I agree with you, that when you are talking about what will happen seventy years from now, when only a few of the gentlemen around this table will still be in this vale of tears, you are getting into intangibles.

I do not see, however, how anyone could conscientiously operate a large forest area on anything but a sustained yield basis.

Mr. FISHER: The problems of sustained yield not being put on a better basis from the silviculture point of view, and that sort of thing, is not at the moment a crucial problem of the industry?

Mr. AMBRIDGE: I do not think it is by any means the crucial problem. Sustained yield comes into our day by day calculations because of the fact that we have to submit to the department of lands and forests, or their equivalent, in every province our plans for the cutting of the areas in which we intend to operate for the next five years, because the plans are made by us in the first place on a sustained yield basis. They are approved or disapproved by the government as the case may be on a sustained yield basis.

There are other considerations, but not many. The main, of course, is the cutting of your limit so that you can operate on a sustained yield basis. That is how we make our plans and it is the criterion in respect of the government's approval. That is how it gets into our daily plans and our daily troubles and tribulations.

Mr. FISHER: In the January 31 issue of this year of the Financial Post there was an article by John G. McDonald, entitled "Should Ottawa Ease Taxes on our Forest Operators?" Included is this statement:

> One feasible method of adjusting the revenue balance in favour of the provinces would be to convert the federal income deduction for logging and mining taxes into a tax credit.
>
> The revenue loss to Ottawa would not be substantial in the context of a $6 billion budget but would still be a measurable step in the right direction from a provincial point of view.
>
> The provinces will certainly be less tempted to erode the tax rental system in 1961 if, by that time, the federal government has recognized that the sharing of jurisdictional responsibilities under the British North America Act also involves the sharing of revenue sources from which the performance of public functions must be financed.

I would like your comments on that from the point of view of the fact that it is pretty obvious when you hear of a large figure taken from the industry by the federal government and the need of the provinces to get back some of that for the responsibilities they have.

Mr. AMBRIDGE: I am very loath to get into these dominion-provincial arguments, because I do not know anything about them. All I know is that everybody is trying to take something away from us. Whether he has on his head a provincial hat or a federal hat does not make too much difference because the payments go out just the same. I do not want to get into the question of who is right or wrong. I do know, however, we have been told by the provincial officers time and again that what they are attempting to do is to get Ottawa to accept this logging tax as the tax credit, because they believe it is their right. I do not know how they figure out their rights, but that is what they try to do.

I discussed the matter with Mr. Fleming who told me the only way to settle this thing is to get the provinces and the dominion into the same room and talk about it and see if we might get some settlement. I think everyone now recognizes that the logging tax in Ontario and British Columbia is a thoroughly discriminatory, bad piece of business. They are all trying to do something about it and nobody is succeeding in doing anything about it.

Mr. FISHER: When you were speaking with Mr. Fleming in respect of this, did you have any suggestions to make?

Mr. AMBRIDGE: I had only one suggestion. That is, get that damned thing off the books and stop it.

Mr. STEARN: What does the logging tax in Ontario amount to per cord?

Mr. AMBRIDGE: Too much. It is hard to answer that because we bring wood in from other provinces. However, in order to give you an idea of the scale of the tax, it cost Abitibi in 1956, or approximately two years back, something in the order of $600,000 and it will cost us somewhat less now because we cut less wood. It is in that order. I mean it is not chicken feed.

Mr. FISHER: This morning you made some comments in respect of the lakehead region being a high-cost area. Can you see any way which the federal government has anything to do with that? Or is this strictly indigenous and local?

Mr. AMBRIDGE: I do not think the federal government could do a great deal to help the lakehead. Frankly, I do not think so.

The ACTING CHAIRMAN: Have you any further questions, Mr. Fisher? Does anybody else have any questions? I must apologize, Mr. Ambridge, for bringing you back to complete this examination but Mr. Fisher had these unanswered questions.

Mr. AMBRIDGE: I am very willing to do it.

The ACTING CHAIRMAN: I hope you will forgive us. We thank you very much, Mr. Ambridge, for coming, and for the forthright evidence you have given. I think we particularly appreciate directness in these committee meetings, because so often we get a lot of evasive answers when people are not ready to call a spade a spade. I think you called it a shovel this time. Thank you very much.

Mr. AMBRIDGE: I do not see much point in coming to these things and trying to help you gentlemen in your problems unless we can contribute something worth while knowing; and there is no way of doing that unless you call the people who are engaged in these particular things, and who can tell you.

Mr. FISHER: You asked for suggestions in so far as the propaganda action you are trying to organize is concerned, and about a flood of material. We do get a flood which is hard to keep up with, but the sort of thing that does have an impact is a personal meeting on occasion with representatives from groups such as this. I think this can be sponsored and established through some sort of house committees. There are several of them to which this kind of group, I think, could make an excellent contribution. I suggest that we keep that in mind. I do not know what other members of the committee may feel about it.

Mr. AMBRIDGE: We are trying to get this effort off the ground, and we are very anxious indeed to have your advice on the subject of how to bring our activities to the notice of the members of the house. We are neophites about it. We have to have some guidance because we do not know how to do it. We do not want just to produce a lot of literature, brochures, and one thing or another which just end up in people's wastepaper baskets. We would be very willing to organize meetings of that sort, because we are very much concerned with what goes on with our exports.

I think everybody should be concerned as well.

The ACTING CHAIRMAN: I think that most of us on the committee have been concerned, and that is why we have gone to a great deal—or put others to a great deal—of trouble to come here and make representations to us, so that we could have a proper knowledge of the problems of the forest industry of Canada.

Mr. PAYNE: I have one question to ask before Mr. Ambridge leaves. It is in relation to the pathology side or the research side, which he knows about better than I, and which is conducted by the Department of Agriculture. Is it your opinion that such studies would be conducted more effectively in the interests of the industry if they were in fact controlled more directly through a branch of forestry rather than through the federal Department of Agriculture?

Mr. AMBRIDGE: You are talking about forest pathology as it is done in the lab at the Soo?

Mr. PAYNE: Is the Soo one of them?

Mr. AMBRIDGE: I think that is one area in which the government can do its best work.

Mr. PAYNE: Could that be a function?

Mr. AMBRIDGE: That is all fundamental stuff, as I understand it.

Mr. PAYNE: If that were conducted by the Department of Agriculture, I am concerned with your opinion as to whether it would be more effective to your industry if it were in fact conducted by a branch of forestry.

Mr. AMBRIDGE: You mean by another department of the government?

Mr. PAYNE: Yes, one connected directly with forestry, rather than with agriculture.

Mr. AMBRIDGE: I do not know enough about it to have an opinion. All I know is from hearsay, first hand, second hand, or third hand. But from what I hear I understand the lab at the Soo does some very good work, and we certainly would not want to interfere with it.

Mr. PAYNE: I am not questioning the work. I am questioning you as to whether in your opinion you would be more satisfied with the progress made if it were placed under the supervision of people versed in forestry matters?

Mr. AMBRIDGE: I would want to have expert advice before expressing an opinion. I am not going to get into any of these things, because I do not know.

The ACTING CHAIRMAN: Thank you, once again.

Mr. AMBRIDGE: All right, sir. I am very glad to have been here.

Mr. FISHER: Are we not going to call Mr. Prettie?

The ACTING CHAIRMAN: Yes, will you please come to the stand, Mr. Prettie. I would like to introduce to you Mr. Robert Prettie, president of Northern Wood Preservers Limited. I think he was invited here at the request of Mr. Fisher.

Mr. FISHER: Yes, Mr. Prettie has a mill at Port Arthur, and he has operations in Prince Albert, Saskatchewan, and at Prince George, British Columbia. He is in a phase of the business that is rather in between the big pulp operation and the big lumber operation that you get on the west coast. I was hoping he could give us some evidence as to the problems which an organization such as his faces, especially in its relations to the forest products laboratory, the forestry branch, and any other phase of activity that the federal government comes into. I think he has a brief statement to make.

The ACTING CHAIRMAN: Yes, he has a brief statement here. It is your wish that Mr. Prettie reads his statement?

Agreed.

Mr. ROBERT J. PRETTIE (*President, Northern Wood Preservers Limited*): Mr. Chairman and gentlemen: this is almost like having a preliminary after the main bout. You have probably seen one of those shows back in the days of vaudeville when they had a real good thing on first, and then it dropped back and everybody went home. I suppose the main reason I am here is that I come from Port Arthur, which seems to be the vortex of the troubles of Canada, as Mr. Ambridge brought out. Everything seems to circle around, and finally we end up with it.

I come from Port Arthur and from a smaller company. I was speaking to Julian Meredith of the Great Lakes company the other day. He said that little dogs have fleas to bother them, just as big dogs have fleas to bother them too. I was a little confused as to what would be required of me, so I prepared a short statement in the form of a brief which I could read in about five minutes to lead off with, and if there is anything I can add to your deliberations, I would be glad to.

The company of which I am president, Northern Wood Preservers Limited, is in the business of producing and pressure treating timber products such as lumber, poles, piling and railway ties. We also produce one of the principal preservatives used in the treatment of timber, namely creosote oil, and in so doing, develop by-products such as carbon coke, roofing pitch and pipe enamel pitch.

We have no waste. The slabs and edgings from our sawmill are manufactured into wood chips for making pulp. The sawdust and shavings furnish the fuel for operating our boilers.

We have probably one of the most diversified timber industries in Canada and, consequently, we are very sensitive to and very conscious of any government action which may affect forests or products of the forests, whether federal or provincial. Taxes, research, fire protection and access forest roads all have their effect upon our business.

We have felt the impact of increased taxation, not only through federal income tax but also through the Ontario logging tax. If a direct tax of this nature must be levied against the industry, we feel it should at least be deductible from federal taxes. Furthermore, we feel that it would be sound economy on behalf of all governments who collect revenues from the forest industry to plow back a greater percentage of those revenues into assuring their continuity in the future.

A good farmer does not dispose of his entire crop. He keeps some seed to sow next year. A good business man does not declare his entire earnings in dividends. He puts some of his funds into the development of new plant and new techniques. Hence, it should be equally sound economically for federal and provincial governments to apply a larger percentage of their present taxation.

We have felt the value of the research program carried out by the federal government through the Canadian forest products laboratories and we commend the powers that be for finally establishing this important work in a new and modern building. We hope that adequate funds will be made available for continuing and expanding the work of the laboratory.

The study and development of satisfactory working stresses for various species of timber; the study and experimentation with various methods of preserving wood from decay, insect attack and fire; the development and the compilation of authentic data on service records are all of utmost importance to the economic utilization of our forest resources.

Briefs from other parties interested in forest products have, I understand, stressed the need of direct forest research, so I will not labour this point.

I would like to draw your attention to the value of research at the forest products laboratory here. They have been making studies in regard to the development of new and better methods of using timber and of eliminating waste. For example, jackpine was considered a weed tree of little value. However, research into its strength and its treatability have established it as the best species for telephone, telegraph and power poles. It is stronger than the eastern cedar, which it has largely replaced. It treats well; it permits deep penetration of creosote or other preservatives. Hence, it will outlast other species. Untreated, its life is 4 to 6 years in the ground. Properly treated, its life is upwards of 50 years.

Furthermore, the development of jackpine as a pole timber has been most timely as the supply of eastern cedar has diminished and the demand for poles increased.

The work of the forest products laboratories here and elsewhere have contributed much to this important development, yet there is much work ahead for their work in practical studies. For example, there is some research today into the effects of moisture barriers in house construction, which may be of utmost importance. The vast majority of houses are built of wood. However, insulation has been added. Moisture has been added to the air. Moisture barriers prevent this from escaping. Maybe we are creating ideal conditions for early decay. Maybe we should consider some form of treatment for the vulnerable parts.

Similarly, floor joists set in concrete may decay. Maybe they should be treated. Now is the time to find out.

Research is being carried into the use of so-called waste from sawmills. Slabs and edgings are being turned into wood chips to make pulp. The next step is to establish the true value of those chips so that the buyer may offer the most attractive price to turn what might be waste into a usable product, namely pulp.

Such studies are too wide for individuals; they should be concentrated in the forest products laboratory, which is supported by us all.

Research by industry has brought about the new "pole type" building. This is a building erected on pressure treated poles set in the ground. The poles form the foundation as well as the columns. As a result, the building is very rigid. It is about one-third the cost of other such structures. It is admirably suited to use as farm buildings for housing cattle, hogs, feed and machinery.

Some federal funds spent on making known to the farmer, through regular government publicity channels, the merits of such structures would save large dollars in machinery wastage and promote forest products.

Increased knowledge into the use of paints and coatings is important, but equally important is the need for increased knowledge into the preservation of timber through pressure impregnation and the economics that can result from its use.

We are about to feel the value of the federal investment in forest access roads. In our opinion, timber areas cannot be properly managed or protected from fire if the aeroplane is the only means of access. Access roads make it possible to reach and harvest ripe timber which is more remote rather than cut young growing stock before maturity. Proper roads make it possible for settlers to live as a family unit on farms or in towns and to drive into the forest to produce wood. Access roads permit the smaller operator to get into proper areas to take out sawlogs, poles and railway ties.

The development and location of adequate access roads would seem to be a function of government, since their cost and their usefulness extend far beyond the concepts of any individual company or any individual industry.

Federal funds plowed back into access roads, fire protection, regeneration and research today help to assure continued and expanded financial returns to the treasury from the forest industry.

At this point I would like to bring out something that came out this morning in regard to the Lakehead. We attempted to compete in the United States market in the sale of poles from Port Arthur into Minnesota. During the extreme shortage we succeeded in competing for a while. Later, we found we could not compete and we went down to find out why wood was so much cheaper in Minnesota than in the Port Arthur region. We found it was basically a question of roads. In the Port Arthur region we must build all our own roads. When we get 20 to 30 miles into the timber, we must establish a logging camp which is fully modern in every respect. We have to have hot and cold running water, and plug-ins for automobiles. There are as many Cadillacs there as Fords. The whole proposition is terribly expensive. A camp today for 100 men may run anywhere from $50,000 to $100,000. The road will cost anywhere from $3,000 to $10,000 a mile. That cost must be borne by the timber which that camp can take out. So, we have quite an expense to start with.

In Minnesota there is a network of paved roads reaching within a short distance of almost any stand of timber. The settlers live in their own little community; it may be in a town or on their own farms. They drive to work. There is no camp there and no cooking facilities required. They work all day and drive back home again at night. That wood is coming out very substantially cheaper than the wood coming out of our mills. I mention that because it came up this morning. We went into it to find out what happened and what was the matter.

We won't attempt to make specific recommendations because others are undoubtedly doing so. In any case, over the past twenty years, the concern of our business has been continuity.

The steady expansion and advancement of the pulp and paper industry in Canada has produced problems for those who require products from the forest other than pulpwood. The vast dollars, the vast employment and the vast importance of the paper industry to Canada is tending to over-shadow and crowd out other forest industries.

This is just as unnecessary as it is unfortunate. According to forest inventories, Canada has plenty of timber for every purpose. However, poles, ties, and lumber can come only from selected trees—those which are straight enough, sound enough and large enough to make the product for which they are intended. Pulpwood, on the other hand, can come from almost any tree and can be produced from the tops of trees taken for other purposes.

While only about 25 per cent of the cubic footage of solid timber in a virgin stand might go into these selected products, thus leaving about 75 per cent for the production of pulpwood, 25 per cent of the cubic footage of all the timber cut represents a very sizeable volume which can be made into something other than pulpwood. The remaining 75 per cent should be quite sufficient to support the pulp and paper industry.

Hence, it is a strange economy which permits and encourages the production of such perishable products as disposable tissue and disposable newspapers exclusively when there is still a need and a demand for more permanent products from our forests such as buildings, poles, piling and railway ties.

The suggestion that the lumber industry of the east vanished with the large stands of white pine and red pine has been very misleading. Such stands unquestionably produced our finest timber and practically every tree in a stand would make a high-grade sawlog. However, people have continued to need and to use lumber in the building of homes and in general construction. Spruce and jackpine have been accepted in place of white pine. Poles and railway ties have always come from jackpine. The industry has survived and flourished wherever timber of any usable specie was available.

The production of these diverse products other than pulpwood merely require a different concept of logging. The availability of such material is today, to a very large degree, in the hands of the pulp and paper companies who control such vast timber areas.

Many of these large companies have and do permit responsible operators to enter their limits for the production of other products, but in general such operations are permitted on a year to year basis only. This is hardly satisfactory to the secondary operator. The investment he may require to produce lumber economically is very substantial. The antiquated production techniques which permitted waste in the form of sawdust, slabs and edging will not permit him to compete on today's market. Sawmills must be equipped to peel logs so that the slabs and edgings can be turned into wood strips. The mill must be equipped with the most modern saws, planers and handling machinery. Such an investment will hardly be forthcoming unless a continuous supply of logs is assured.

We do not suggest that the pulp and paper industry should give way or in any way jeopardize its position in favour of the sawmill or the so-called secondary industry. This is no more necessary than it is desirable. However, it will be necessary for all of the various parties concerned to enter into long-term agreements, and it will be necessary for the governments concerned to be a party to those agreements if forest industry other than pulp and paper is to survive, let alone flourish, in Canada.

We suggest that it is in the interests of all Canadians and all governments to perpetuate diversity of forest production in the interests of greater stability, wider employment and better returns from our forests.

Thank you for the opportunity of presenting these few thoughts before such a distinguished committee. That is the written part of this, Mr. Chairman.

The ACTING CHAIRMAN: Would somebody like to ask Mr. Prettie some questions?

Mr. FISHER: You have been generally complimentary about the forest products laboratory. The point was brought up by the British Columbia representatives in questioning that there may be a failure on the part of the forest products laboratory to do as much as possible in the smaller parts of the lumber industry in bringing to them their latest developments. Do you see that as a problem?

Mr. PRETTIE: I do see it as a problem, yes. When you look at the small operator, operating a small sawmill or a small operation, he is much like the farmer: he is situated out in a remote area, and his chief problem is to get out enough stuff to sell tomorrow, to eat tomorrow.

The result is, he may not be learning, or the most recent developments may not be coming to his attention. Frankly, that is his fault; we all recognize that. If there is information available, it is certainly up to the party who needs that information to get it. And yet, how to make it more available, I do not know.

Our industry is relatively small, but we make a point of keeping in touch to find out what is going on with all the recent developments, and we have found it very important to do that.

Mr. FISHER: You have suggested a number of fields for study here, such as this moisture barrier, and that sort of thing. Do you feel the forest products laboratory, in recent years, has had the staff, the scope and the funds to really tackle all the problems that are related to the forest products industry?

Mr. PRETTIE: Up until this year the forest products laboratory have been so terribly cramped for space that they could not even think of staff or other problems. I do not know whether you have ever visited the old forest products laboratory here; but really, for a country the size of Canada, and an industry the size of the forest industry, it was a disgrace.

If you go across the line into the United States, where they have the big laboratory at Madison, Wisconsin, and see the facilities and staff they have to work with, it is easily understandable that they can tackle the problems in a bigger and better way. We just could not handle them here any further, and I think they have done remarkably well with what they had.

Mr. HARDIE: Has the witness' company ever approached the National Research Council for any information in regard to building materials that he mentioned in the brief?

Mr. PRETTIE: We have had very remote connection with them—not too much. I might say the lumber industry have not been good salesmen, basically speaking. They have made their products available, and that has been the size of it.

There have been too many in the business. There is no freer market, I do not think, in the world than lumber: if the price of lumber goes up $1 a thousand, 50 small mills start up, and if it goes down $1 a thousand, 50 mills shut down. That is the general lumber industry, not including such big mills as you have on the Pacific coast. There are a lot of small mills also on the Pacific coast that are just in that category, and in the wide scope they cover a lot of markets and produce a lot of lumber.

Mr. FISHER: You are working in three different provinces: do you find the problems are roughly parallel in all three?

Mr. PRETTIE: Yes, they are very largely parallel.

Mr. FISHER: The British Columbia people did make the point that Mr. Payne has tried to make even further a number of times—the need for assistance and instruction in marketing. Have you ever had any contact with the Department of Trade and Commerce, or any help from them in picking up foreign orders?

Mr. PRETTIE: We have had quite a bit of foreign correspondence from their representatives in Detroit and Chicago. I do not know whether we have actually picked up any business from them. We have an agent down in Chicago who is marketing just about all we can market in that area, so that we are a little bit small, perhaps, to take that into consideration. But we have had correspondence from them, trying to open markets to us, without a belt.

Mr. SLOGAN: You find that they do cooperate with you?

Mr. PRETTIE: Yes: they are seeking our cooperation, as a matter of fact. Sometimes I feel guilty that I do not make more use of it.

Mr. SLOGAN: They do supply any information you desire?

Mr. PRETTIE: Yes, we have found that.

The Acting CHAIRMAN: Mr. Prettie, are you aware of the Federal Wood Council, the newly-formed body?

Mr. PRETTIE: No, I am not aware of that.

The Acting CHAIRMAN: I think that has recently been created, to overcome a lot of the difficulties you are speaking about in specifications.

Mr. FISHER: It is fairly new, is it not, Mr. Chairman?

The Acting CHAIRMAN: It has recently been created, within the last few months.

Mr. PAYNE: Getting back to the peak question, which you have already heard. I want your opinion as to what has been done in the matter of research and the effect on the forest industry of the research conducted by the Department of Agriculture. Do you consider this operation good and effective, or can you see an advantage in having it operating under the realm or control of forestry at all, from the point of view of effectiveness? Can you see any advantage that may be gained through such a change, in the emphasis that would be placed on the need for this research by virtue of such a change?

Mr. PRETTIE: I am afraid I am like my friend, Mr. Ambridge; I am not familiar with the differentiation of why it should be in agriculture. It seems rather logical, when you are dealing with trees, to handle it through the Department of Forestry entirely, from the seed to the finished product. It would seem logical, but I have no opinion on it at all.

Mr. PAYNE: Do you feel there is too much or too little emphasis laid on protection?

Mr. PRETTIE: I could not tell you; I could not even give you an opinion.

Mr. PAYNE: I do not want to be frightened off by our rather formidable witness.

Mr. FISHER: I do not think that is a factor at all. He said it is a question of knowledge.

Mr. PAYNE: The other question is regarding research generally, and I do not propose to sit here and define in detail what that involves. Do you feel there would be an advantage to you, in your smaller operation, to gain increased attention, chiefly, no doubt, by budget, with regard to the conduct of research?

Mr. PRETTIE: I think your next question is, just what would you spend it on? I do not exactly know just where we would go from here; but for the past several years I have known of times when there were things came up we could not handle because of—well, it started with the lack of facilities. Now I think if they have the increased funds they can add to the staff, and I certainly go along with Mr. Ambridge in the idea that one fellow with good training is far more important than all the equipment in the world; and that you have to pay for.

Mr. SLOGAN: You mentioned that often people doing wood cutting in the forest, and so forth, are often unaware of the scientific progress being made. It would appear to me that operators, such as yourself, who purchase the wood from these cutters, would be in the best position to provide them with that type of information, probably channeling it from the research laboratory to individuals in the forest who are most concerned with it. Are you doing anything in this regard?

Mr. PRETTIE: When you say "we", we do most of our own production. We do buy it from suppliers in the Port Arthur area, but we get it on the open market, and it is a very satisfactory market; but being competitive we cannot go down very low in our price; we sell it to somebody building a house. We seem to learn, and everyone in the industry seems to learn of the developments taking place. Let us say, in a sawmill they are putting in a new type of saw, a gang saw, one of the newest type. The little cutter that ran back and forth would not produce lumber cheap enough.

Mr. SLOGAN: You mean one that had several blades?

Mr. PRETTIE: They are into that to quite a substantial extent, and when we study it in our plant we have it put in a technical way, and we get the answer for every size of log. If we find it is going to be a good thing we install it right away.

The next thing we know is that somebody else takes a look at ours and then they put it in. It spreads that way, rather than through the small fellow coming down. Some of them read the literature. When you say "small", it is a relative term. The mill which employs only five or ten men does not keep up with developments in the industry. But a mill owner employing 100 men, when he has a competitor producing lumber cheaper, will want to know whether he can get his own lumber down to meet that price. It is in using the latest types of lift trucks and straddle buggies that the difference comes in.

Mr. MITCHELL: It was just mentioned that the little fellows, which I would say are the jobbers, are not keeping up and cannot compete. I think I am correct in saying that in my area most of the larger mill operators have withdrawn from small bush operations and have brought there or put in jobbers. Would you say that the large operator, by using jobbers, can buy that timber from the jobber cheaper than he could produce it if he put his own bush camps in?

Mr. PRETTIE: Yes, I think so, yes. This question of bush camps—and roads and everything that goes with them—is a very costly proposition. You are setting up a small town, practically, or a hotel in the woods, to take out X cords of timber. If you could take out X plus 100 cords it would be a lot cheaper.

Mr. MITCHELL: How does a jobber get there?

Mr. PRETTIE: He lives at home and travels out. Where is your area, the area you are speaking of?

Mr. MITCHELL: The Sudbury area, and K.P.P. is in there, and there are a lot of jobbers; and K.P.P. are in pulp and in chips. The chips, I imagine, come from their various operators, because it is quite costly.

Mr. PRETTIE: Yes, the pulling of logs, and that sort of thing.

Mr. MITCHELL: The pulp operators, K.P.P., have their own bush camps; but they buy from as many bush camp jobbers as they would be supplied by their own camps. There must be labour for the jobber; yet he may be able to produce no cheaper than their own bush camps.

Mr. PRETTIE: I do not think there is any question about the jobber producing logs, whether they be saw logs or pulp logs, at a price lower than the paper company or, perhaps, ourselves, and making a very good thing of it in the process. They do it repeatedly.

Mr. MITCHELL: I do not understand how.

Mr. PRETTIE: I do not, either.

Mr. MITCHELL: Generally speaking, the bush camp would be in the same area, whether there was a large company bush operation or a jobber.

The ACTING CHAIRMAN: I think that perhaps the answer to Mr. Mitchell's question is, possibly, more personal, closer supervision; and always there is less overhead involved than there is for a major company trying to operate small units.

Mr. MITCHELL: I think most of the bush work being done by the jobbers is more prevalent now than it has been, and seems to be becoming more so.

Mr. PRETTIE: That is a step in the right direction, in my opinion.

Mr. PAYNE: You made some very interesting observations regarding the comparison of your area with Milwaukee.

Mr. PRETTIE: Minnesota.

Mr. PAYNE: Minnesota, I am sorry. You spoke of the excellent grid system of roads through the area. Would you broaden that a bit? Did you make inquiries as to the history of the development of those road grids? How were they undertaken?

Mr. PRETTIE: No, I did not go into that. It was a state proposition, of course; the state ran it.

Mr. PAYNE: It was the taxpayers' development?

Mr. PRETTIE: Yes.

Mr. FISHER: I can confirm that. From what I know about lake states, almost all those roads, except the ones in the federal forest lands, have been put in by the state and are maintained by the state. When I say "the state," I mean the state of Minnesota.

Mr. SLOGAN: Is that with the assistance of federal funds?

Mr. FISHER: The federal government of the United States has been getting more into supporting state programs, but in the main it has been a state responsibility.

The ACTING CHAIRMAN: Any further questions?

Mr. FISHER: The federal government is into the forest access road business now. What I am interested in—and I think we have to be interested in it from the point of view of control of those areas where the province builds new roads—is, how can the federal government ensure the road program carried out by the provinces is going through the proper area?

Mr. PRETTIE: I would assume there should be some joint committee to lay out where roads should go, long, long before the development.

Mr. FISHER: We have examples in our general area where we need all kinds of roads. We can stand all kinds of government access roads supported by the federal government, but we have no pattern or no idea of how this should develop.

I wonder if the deputy minister could tell us what the plan of the department is in order to see that this road development is on a rotational basis?

Mr. ROBERTSON: Yes, Mr. Chairman. I was going to suggest perhaps I could make a point of clarification.

Mr. Fisher mentioned that the federal government is in the forest access road business, or some phrase of that kind. In actual fact, the forest access road program that the federal government has participated in has only been in connection with the winter works program. There is also a quite separate thing, the roads to resources program, and as part of that, in some cases, roads may be built to promising areas where the resources to be developed are forest resources. This morning Mr. Ambridge referred to a case where the road involved was giving access to an area where the resources were predominantly forest. However, that need not be the case. It may be minerals or anything of that kind.

What is done in the roads to resources program is that the federal government, along with each province, works out a program. The base period is five years, but some of the programs have been stretched over as long as seven or even eleven years. The program has to be worked out by mutual agreement. An examination is carried out to determine which areas will be opened up by roads and each party, the federal government and the provincial government, must agree on the program. Then the program is set for a period of X years. This has reached the point where the agreement with British Columbia actually has been signed and I believe an agreed program has been worked out with every other province except Quebec. I would have to check on the exact status of it.

In respect of the winter work program, the federal government does not check on the location of the roads to be built. This is largely for the reason of ease in administration. This was a program which we wanted to get under way at very short notice to help ease winter unemployment. What we did was to make an offer to the provincial governments that the federal government would participate in this program, provided the provincial government put up its share and undertook that the road be a forest access road for forestry purposes and that the labour content would be 50 per cent.

Those are the two programs at the present time. However, there is not any forest access road program as such.

Mr. FISHER: Mr. Prettie, in respect of this point of the pulp and paper interest tending to overshadow and freeze out by diversification the smaller operators, can you see any part that the federal taxation policies could play in it?

Mr. PRETTIE: No.

Mr. FISHER: What about the section of the Income Tax Act which has never been implemented, which would allow a special tax concession, such as the mineral people now have, for the logging industry in connection with developing limits. That is, special depreciation allowances.

Mr. PRETTIE: I do not think that would help. I am afraid that is something which I think every one of us in Canada should become a little conscious of. We again ran into it in Saskatchewan where we have a plant. In Saskatchewan we do not process our own timber. We just treat the material. We found the paper interests are coming there and the whole area was going to be allocated holus-bolus to the pulp and paper industry, regardless of anything else which

might come from that forest. There is plenty of pulpwood. If you cut every tree which would make a pole or a railroad tie, or pulp, there is still plenty available.

However, to allocate all of this to a product is just putting it down the drain, and it does not make sense. Surely, it is creating dollars, and dollars which are important for Canada, and we want them. We also want the employment. However, we do not have to give that up. Let us keep some of the material for a pole and for a railroad tie.

The ACTING CHAIRMAN: I believe that is a problem for the provincial government.

Mr. PRETTIE: Yes.

Mr. PAYNE: Would the witness care to say anything in respect of the impact of the seaway, and the markets, as far as the head of the lakes area is concerned?

Mr. PRETTIE: It is not likely to make any great difference to our company for the same reasons, I believe, which Mr. Ambridge mentioned. We definitely are in a high-cost region. We are suffering from high woods costs in that area. The places in which we can compete are quite limited. To open up the seaway and to get to the ocean will not help us any. New Brunswick and Newfoundland produce lumber cheaper than we can at Port Arthur. Of course, on the Pacific coast, it is produced still more cheaply. So to get out from the area we are now in is no great help. We are happy to retain the markets we have. We ship to the south and locally.

Mr. FISHER: Have you any comment to make in respect of freight rates in so far as they operate to the prejudice of the lumber producers in Ontario?

Mr. PRETTIE: I had some information on that subject for an Ontario Committee, but I am afraid we do not have it here. We are in a strange position at the present moment at the lakehead. Big companies ship from the Pacific coast shipments which move through to Toronto at a lower rate of freight than from Port Arthur to Vancouver; quite substantially so. We find lumber moving from our area to Toronto is at a higher rate of freight than up around Hearst. Hearst came into truck competition, so the rate was cancelled. We are left on an island with a high set of freight rates because nobody can bring them down.

The ACTING CHAIRMAN: I am afraid we are close to running out of a quorum. Has someone a particular question to ask the witness?

Mr. FISHER: The forest products laboratory is planning in the next five years to double the program. Is that right, Mr. Jenkins?

Mr. ROBERTSON: Perhaps Mr. Jenkins would answer that question. We have a program which he might indicate.

Mr. J. H. JENKINS (*Chief, Forest Products Laboratories Division*): Our present staff is 59 professional, with a total of 135 in the two laboratories; and under the five-year plan there would be an addition proposed for 28 professional and 34 others, making a total of 62 additional to the present staff of 135.

Mr. ROBERTSON: The increase would be about 50 per cent.

Mr. FISHER: Is the scale of development largely determined by the supply of people available, or by the supply of funds?

Mr. JENKINS: It would be determined by the amount which would be required to make certain changes.

Mr. ROBERTSON: In programming, the rate of increase is not the same in all parts of the forestry branch. I think in forest research it is proportionately larger than this, and in forest management it is larger again. It was a calculation based on estimated need. That is more of what it was.

Mr. J. D. B. HARRISON (*Director, Forestry Branch*): It is based on an estimate of need, which need is calculated in the light of statements made by the industry last year, as well as some of our own knowledge; and it is also influenced by the rate at which we think we would be able to get really competent staff and to have them trained. These things cannot be done too quickly or you will simply be defeating your purpose. We do believe—and I think Colonel Jenkins would agree—that although the increase is of the order he just mentioned, the proportionate increase in forest operations would be very much larger. Do you agree?

Mr. JENKINS: I agree, provided we can get this proposed field extension service on information and technical information, so as to bring the information to us.

The ACTING CHAIRMAN: May I suggest that you will have an opportunity to examine these departmental witnesses later.

Mr. FISHER: Is there anything in what Mr. Prettie suggested in the various fields where you can be doing work that you had not thought of doing, or you did not have the plant?

Mr. JENKINS: I think Mr. Prettie's outline simply accentuated the fields in which we know we should be doing more work, including the field of wood in house construction. Some of the problems he mentioned we are active in.

The ACTING CHAIRMAN: If there are no more questions, then I thank Mr. Prettie on behalf of the committee for his submission and evidence that he has given us. We all appreciate this having taken the time to come down here and present his views on the problems that face his particular branch of the industry.

The meeting is now adjourned until 9 a.m. on Thursday next, when we shall receive a delegation of the Canadian Lumbermen's Association.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
JUN 1 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 24

THURSDAY, MAY 21, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

WITNESSES:

Mr. Harold F. Staniforth, President, Mr. G. E. Bell, Secretary-Manager, and Mr. K. O. Roos, Director, all of Canadian Lumbermen's Association; Mr. Bernard Bock, President, National Hardwood Lumber Association; Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; and J. H. Jenkins, Chief, Forest Products Laboratories Division.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21272-0—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, May 21, 1959.
(28)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Baskin, Cadieu, Doucett, Fisher, Hardie, Martel, McFarlane, McGregor, McQuillan, Murphy, Nielsen, Payne, Robichaud, Simpson and Stearns—(15).

In attendance representing the Canadian Lumbermen's Association: Messrs. Harold F. Staniforth, President, Canadian Lumbermen's Association; K. O. Roos, Director, Canadian Lumbermen's Association, and Chairman Advisory Committee to Forest Products Laboratories of Canada; Bernard Bock, President, National Hardwood Lumber Association; C. Mahoney, Director, Retail Bureau, Canadian Lumbermen's Association; G. E. Bell, Secretary-Manager, Canadian Lumbermen's Association; and J. A. Schryburt, Director, Public Relations, Canadian Lumbermen's Association: *and of the Department of Northern Affairs and National Resources*: Messrs. R. G. Robertson, Deputy Minister; J. D. B. Harrison, Director, Forestry Branch; and J. H. Jenkins, Chief, Forest Products Laboratories Division.

Mr. H. W. Herridge, M. P., not being a member of the Committee, by agreement, again sat at the table and asked questions.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Item 281, Branch Administration, Forestry Branch.

Mr. Robertson presented certain tables which had previously been requested; the said tables were ordered to be printed in the record of this day's proceedings.

Mr. Staniforth presented a brief of the Canadian Lumbermen's Association; he and others of his delegation and departmental officials answered questions arising therefrom.

At 11.05 o'clock a.m. the Committee adjourned until Monday, May 25th, 1959.

Eric H. Jones,
Clerk of the Committee.

21272-0—1½

EVIDENCE

THURSDAY, May 21, 1959.
9 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. I am sorry we are a bit late getting started.

There were several questions asked at previous meetings and Mr. Robertson, the deputy minister, has the answers to them available.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, at the moment the material I have to table is in reply to questions about the following: the buildings occupied by the Department of Northern Affairs and National Resources, together with rentals and the basis of the leases; the number of Indians and Eskimos in the Northwest Territories and northern Quebec, including the numbers under 21 years of age; the figures in respect of education—number of schools, number of classrooms and number of children attending school in 1946, 1951 and 1959; departmental expenditures on the relocation of Aklavik and capital expenditures at Inuvik; the expenditures for the education of native peoples by the department since 1949-50, both operating and capital.

The CHAIRMAN: Thank you. Gentlemen, is it agreed that this information be printed in our proceedings?

Agreed to.

ACCOMMODATION—DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES—OTTAWA, ONTARIO

Building	Location	Area Square Feet*	Rental per Square Foot if not Crown Owned*	Expiry Date of Leases*
Langevin Block	Metcalfe and Wellington Streets	10,600	—	—
Norlite	150 Wellington Street	42,516	—	—
Forest Products Laboratory	Montreal Road	79,250	—	—
National Museum	McLeod and Metcalfe Streets	41,491	—	—
War Museum	Sussex Drive	6,250	—	—
Old Mines Building Annex	Sussex and George Streets	5,000	—	—
Kent	150 Kent Street	61,338	Basement $1.00 Other Floors $2.35	March 31, 1966
Motor	238 Sparks Street	24,755	$2.00	June 30, 1960
Imperial Optical	246 Queen Street	7,500	2.00	February 28, 1962
Canada Life	75 Sparks	1,400	2.50	June 30, 1960
Auditorium	Argyle and O'Connor Streets	5,400	0.92†	July 31, 1959
Keyes Supply	293 Albert Street	5,486	0.86†	December 31, 1959
Vimy Annex	370-372 Sparks Street	5,660	0.90	June 30, 1961
War Museum Storage	7 Murray Street	16,454	1.00	December 31, 1960
Cote	Iberville and Carillon Streets Hull, P.Q.	8,100	1.11	September 30, 1959

*Obtained from Department of Public Works.

†Yearly rental—calculated to nearest cent on square foot basis.

NOTE: Areas given are gross, i.e. include stairwells, corridors, lavatories, elevator shafts, etc.

EDUCATION

NUMBER OF INDIANS AND ESKIMOS IN NORTHWEST TERRITORIES AND NORTHERN QUEBEC*

	N.W.T.	Northern Quebec	Total
Total No. of Eskimos	7,047	3,294	10,341
No. of Eskimos under 21 years of age	4,736	1,399	6,135
Total No. of Indians	4,440	2,400**	6,840
No. of Indians under 21 years of age	2,420	1,300**	3,720

*The Department of Northern Affairs and National Resources is responsible for the education of Eskimos in the N.W.T. and in Northern Quebec; it is responsible for the education of Indians in the N.W.T. only.

**Based on 1954 census for James Bay Indian Agency adjusted by 3% per annum increase. The annual rate of increase provided by the Indian Affairs Branch of the Department of Citizenship and Immigration.

EDUCATION

NORTHWEST TERRITORIES AND NORTHERN QUEBEC

		1946*	1951	1959	
FULL-TIME					
Schools	a) Federal	0	19	40	(plus 6 classrooms in hospitals)
	b) Non-Federal	9	9	8	
		9	28	48	
Classrooms	a) Federal	0	26	113	(plus 6 in hospitals)
	b) Non-Federal	21	34	40	
		21	60	153	
Number of Teachers	a) Federal	0	26	129	
	b) Non-Federal	21	34	40	
		21	60	169	
Number of Children at School	a) Indians	236	450	899	
	b) Eskimos	‡	302	1,189	
	c) Others	‡	314	1,481	
			1,066	3,569	
PART-TIME**					
Mission Schools	a) Indians		0	0	
	b) Eskimos	333 (1949)	496	278	
	c) Others		0	3	
		‡	496	281	

*1946 records on non-federal schools based on information available to the Department. Non-federal schools—include Mission schools, Company schools and two Municipal schools at Yellowknife.

**Operated in remote areas by church authorities 2 to 3 hours per day.

MAY 8, 1959.

EXPENDITURES ON THE RELOCATION OF AKLAVIK AND CAPITAL EXPENDITURES AT INUVIK BY THE DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES, 1954-55 TO MARCH 31, 1959

Total departmental expenditure	$ 7,446,068*
Recovered from Government of N.W.T.	290,620
Net Total	$ 7,155,448
FURTHER BREAKDOWN*	
2 hostels and 1 school	$ 4,971,292
Other expenditure	2,474,776

MAY 8, 1959.

EXPENDITURES FOR EDUCATION OF NATIVE PEOPLES (IN THE NORTHWEST TERRITORIES AND NORTHERN QUEBEC) SINCE 1949-50, BY THE DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

OPERATION AND MAINTENANCE

Fiscal Year	Total Amounts	Recoveries from N.W.T. Government	Net amount
	$	$	$
1949-50	102,144	—	102,144
1950-51	142,971	—	142,971
1951-52	266,081	—	266,081
1952-53	281,044	118,667	162,377
1953-54	311,991	101,266	210,725
1954-55	423,661	101,861	321,800
1955-56	937,338	145,697	791,641
1956-57	1,236,251	148,816	1,087,435
1957-58	1,994,025	173,865	1,820,160
1958-59 (to March 31, 1959)	2,273,713	268,904	2,004,809
CAPITAL			
Buildings and Works	12,578,724		
Equipment	938,244	1,162,793	12,354,175
	13,516,968		

Mr. CHAIRMAN: Gentlemen, we have with us this morning representatives from the Canadian Lumbermen's Association. They are: Mr. Harold F. Staniforth, President, Canadian Lumbermen's Association, and he will present the brief; Mr. K. O. Roos, Director, Canadian Lumbermen's Association, and Chairman Advisory Committee to Forest Products Laboratories of Canada; Mr. Bernard Bock, President, National Hardwood Lumber Association; Mr. C. Mahoney, Director, Retail Bureau, Canadian Lumbermen's Association; Mr. G. E. Bell, Secretary-Manager, Canadian Lumbermen's Association; and Mr. J. A. Schryburt, Director, Public Relations, Canadian Lumbermen's Association.

Now, gentlemen, you have before you a proposed brief. Five or six pages from the beginning of the brief you will notice there is a letter addressed to the Honourable Alvin Hamilton; then there is more brief. After that there is a letter to Mr. Bell from Mr. Hamilton, the minister.

Gentlemen, I do not think we should accept, as part of the brief, letters to the minister or letters from the minister and, if it is agreeable, we will assume that this brief does not refer to those two particular letters. Earlier, I had tried to find out if they had permission from Mr. Hamilton to include them, but so far I have not been able to ascertain that he has given that permission. I think it would be irregular to incorporate those letters in the brief. However, we will accept, with your approval, the material following those letters I have mentioned.

There is another small pamphlet to be distributed, with the compliments of the association. It does not form part of the brief. It is the *Story of Lumber in Canada*.

Mr. Staniforth, would you now proceed with reading of your brief?

Gentlemen, the meeting is informal and you may take your coats off, if you wish, and smoke.

Mr. HAROLD STANIFORTH (*President, Canadian Lumbermen's Association*): Thank you, Mr. Chairman.

Mr. Chairman and gentlemen: we are indeed thankful for the opportunity given us to present this brief to your committee and of appearing before you to furnish any additional information concerning Canada's timber industries which may be of interest to your committee. Our brief has sole reference to the research needs of Canada's lumber industries, exclusive of the pulp and paper industry. We first wish to express our sincere appreciation for the work carried out by the Forest Products Laboratories of Canada, administered by the Department of Northern Affairs and National Resources. Timber industries are aware and most appreciative of the close cooperation with the laboratories and of the constant efforts made to meet industrial research requirements within their present staff limitations.

While this brief was finally prepared and is being presented by the Canadian Lumbermen's Association, it is submitted on behalf of the timber industries throughout Canada and has the absolute support of the following associations:

Maritime Lumber Bureau
Quebec Lumber Manufacturers Association
British Columbia Lumber Manufacturer's Association
Quebec Province Wholesale Lumber Association
Wholesale Lumber Dealers Association
Maritime Retail Lumber Dealers Association
Ontario Retail Lumber Dealers Association
Western Retail Lumber Dealers Association

In the past two decades there has been a substantial decline in the use of lumber in many fields which for generations were considered to be exclusive fields for lumber. The largest proportional decline has taken place in the construction industry which provides the bulk market for lumber sales. We believe that the acceptance of substitute materials in lieu of lumber is largely the result of lack of development in the lumber producing field. In turn the ability to produce materials acceptable as lumber substitutes largely resides in the fact that extensive research has opened the road to the development of these substitutes. There is no criticism of this trend and there is admission that these new materials have well served the uses for which they are intended. The contention of the lumber industry is that mainly be-because of insufficient research, production practices and techniques have changed little from those of former days and that the development of the sawmilling industry has lagged far behind industrial developments in other fields.

While there has been a considerable increase in the total annual production of lumber, and while present production levels are substantially greater than they were two decades ago, comparison of the lumber industry to other segments of the Canadian economy will clearly indicate that the development has been far below the national average for all Canadian industries. In other words the lumber industry has not kept pace with the general development of the Canadian economy. This is in turn reflected in a marked decline in per capita consumption.

Forests as such, and the practice of forestry generally receive considerable attention and it is well that this be so. Unfortunately over the years we have noted that the forest industries are generally included in the comprehensive term "forestry". It is our opinion that unless utilization of the forests, i.e. the forest industries, is separated from the maintenance and protection of the forests, i.e. forestry, it is difficult to clearly differentiate the respective research needs under these headings.

Canada's timber industries fully appreciate the work, interests, and expenditures made by the federal administration and provincial governments for the maintenance, protection and perpetuation of the forests. It is recognized, of course, that any amelioration of the forest estate will be beneficial to the forst industry. However it is also recognized that forestry work, outside protection, is a long-term enterprise which gives little of positive results for many decades ahead. On the other hand the problems of utilization and conversion are such that they must be faced from day to day by the industry. While, therefore, it is true that forestry benefits the utilization side, it is equally true that today's industries must obtain their raw material supply from existing forests and that today's forestry work can only be of advantage to tomorrow's industry.

In a fast developing free economy such as is enjoyed by Canadians, developments throughout the industrial production field are rapid, and obsolescence occurs with a constancy which is readily observable. It follows then that to remain progressive, and to retain markets, an industry must remain alert and follow the general pattern of industrial development. A prerequisite to industrial advances is the essential need for comprehensive research to provide the knowledge upon which the development of techniques and of new products can be based. In many fields of Canadian industrial activities, the industries themselves are capable of providing the necessary research facilities. This does not apply to the lumber industry.

We believe it is not necessary to stress the vital importance of Canada's timber industry to the Canadian economy. Your committee, in previous presentations, was supplied with considerable information and statistical data on the value of these industries to the home economy, to our export trade, and in providing large-scale employment and substantial fiscal revenues within Canada, as well as furnishing import dollars for Canadian purchases abroad.

In a general way, we wish to point out that Canada's timber industries permeate the Canadian economy to such an extent that it would be difficult to find a village, town, or city where some unit of these industries is not playing an important and highly needed role. In addition, and tax-wise, these industries furnish substantial revenues to the federal administration, to provincial governments, and to the municipalities within which they operate. Not unimportant is the fact that through their industrial activities and the moneys they distribute during their production and sales processes they also contribute materially to the activation of many other industries and commercial enterprises.

Granting of the requests contained in our brief will necessarily involve the addition of research personnel and higher expenditures than those made at present. We are fully aware of the unpopularity of suggesting increased

expenditures. We suggest, however, that moneys spent for forest products research should be looked at from one of three viewpoints:

(a) Such expenditures made to assure the continued economic well-being of the timber industries could only react favourably within the taxation structure, since prosperous industries in addition to the general benefits they bring would provide more in the way of revenues to all levels of government

(b) Since many sawmills and other timber-based enterprises operate as marginal industries under present conditions, there is danger for their survival, and any improvement of their present operating standards should be immediately reflected in added tax revenue; and

(c) Better utilization practices and the production of improved consumer goods, as well as the development of new products would benefit the entire economy, and would better serve home and export markets.

In other words we feel that any moneys expended by the federal administration on forest products research will result in increasing tax revenues to an extent far greater than any expenditures made, while if present conditions are continued there is imminent danger that total tax revenues from this source will become progressively lower.

In conclusion, we firmly believe there is immediate and urgent need for very considerable expansion in the field of forest products research, and for the establishment of an industrial information service. From intimate knowledge of our industry, we are also firmly convinced that federal action should be taken at once on a scale adequate to meet industrial requirements. Research is being constantly expanded in competitive areas and favours those who seek to replace wood. Our needs are therefore immediate. We therefore urge your committee to carefully assess the requests which we are presenting and we feel certain that it will be found that the immediate development of new research and expanded services in the forest products fields is a matter of national importance and of great urgency.

Respectfully submitted on behalf of Canada's forest-based industries.

Now, Mr. Chairman and gentlemen, as Mr. Murphy has pointed out, we will skip this letter which is addressed to Mr. Hamilton, and commence two pages further on.

Forest Products Research Proposals

of the

CANADIAN LUMBERMEN'S ASSOCIATION

June 1958

The sawmill industry in Canada and, particularly in eastern Canada, is composed of a great many firms, most of them small in size and completely unable to conduct research work on their own. In fact, they may be compared to the farmer in the sense that the individual farmer is unable to conduct research to any extent, and this work is taken over and performed for them as a group by the federal government. However, the amount of research conducted for the farmers of Canada is far greater than that conducted for the sawmill industry. Some indication of this difference can be obtained from the figures given in the report of the New Brunswick Forest Development Commission. "The federal government collects revenue well above $200,000,000

per year from farmers and expends over $100,000,000 or 50 per cent annually in support of agriculture; the corresponding revenue from forest sources is also over $200,000,000 per year with expenditures running about $10,000,000 or 1/20 of the income for the forest resources".

It is apparent that the amount of money spent on forest products research should be increased to bring it more in line with the amount spent on agricultural research. The needs are equally as important and as pressing and, in fact, may be considered in many cases to be more so because a great deal of forest research must necessarily be of a long-term nature.

It should also be borne in mind that any research work done for the lumber industry affects at least 8000 sawmills and many thousands of retail firms, wholesale firms and woodworking establishments. It must also be kept in mind that a great many people are dependent on the lumber industry and its various components. In fact, there are some 60,000 employees in the sawmill industry, some 70,000 in the wood-using industries, and approximately 150,000 people employed in woods operations. *Any benefits derived from research would affect a great many wage-earners in one of the most important industries in Canada. While all of the work which the C.L.A. is requesting is of an applied nature, we realize the vital importance of fundamental research. We are not in a position to advise with respect to this latter type of research but recognize that fundamental research is an absolute necessity in the forest products field. In other words, we are not suggesting that work of a fundamental nature be reduced or jeopardized at the expense of more work of an applied nature. Rather, we feel that a sound balance should be maintained betwen the two and that both types of research should be greatly expanded and increased.

We are in complete agreement with the applied and fundamental research, publication and exhibit work now being carried out by the Forest Products Laboratories of Canada but feel that the present services of the Forest Products Laboratories of Canada would be greatly increased by the implementation of work in three main fields, (see a, b, & c below), in addition to the extension and implementation of the research projects listed further on. These fields are as follows:

(*a*) Extension work:

In the forest products field there is a large gap between research findings and the application of these findings. A field staff is a necessity if the findings of forest product research are to be applied quickly and effectively.

The Department of Agriculture of the federal government employs a large staff of extension experts. The Forest Products Laboratory of Madison, Wisconsin, also has forest utilization service units operating throughout the United States. A complete new extension service should be developed and maintained by the Forest Products Laboratories of Canada for the benefit of the wood-producing and wood-using industries of Canada.

(*b*) Information service:

The Forest Products Laboratories of Canada could make very effective use of short, up-to-date notes, articles and reports on recent developments, not only in Canada but also in other parts of the world. For instance, new developments in vacuum equipment for handling sawmill chips, new charcoal making equipment, new types of barkers and chippers, and other equipment and techniques used

*These figures refer to man-years of employment rather than to the number of employed at any one time.

in the forest products field, would be of great interest to operators in Canada and would keep them up-to-date.

(c) Short-term industrial research:
It would appear desirable that the F.P.L. of C., be empowered to conduct short term research on specific projects for individual firms. Many laboratories, including the F.P.L. at Madison, Wisconsin, have such authority and, on request, are able to conduct research for individuals for a fee. The revenue thus obtained is used by the laboratories to further additional research. The advantage of such research to the industry is that a competent body of experts is available on short-term request and the unbiased opinion of these experts can be brought to bear on a great variety of subjects. One of the main advantages to the laboratories is, of course, the close touch in which it would keep its members with industrial problems.

In addition to the three main fields listed above, it is considered that there are a number of research activities now being carried out by the F.P.L. of C., which should be extented and broadened so as to increase their value in promoting better untilization of the timber resources of Canada. These are as follows:

1. Expanded and increased studies on logging research:— Over half of the cost of lumber—personally I feel it is more like two-thirds—as a manufactured product is made up of logging costs. Any research that would allow a reduction of these costs would have far-reaching results, not only on the cost of domestic lumber but also on export markets. It is apparent that the two or three men presently engaged on logging research is entirely inadequate when the benefits to be gained are realized. As an initial project, we suggest the compilation and publication of complete information on present developments in the logging industry in Canada. Once this has been done it will be possible to plan a much expanded program of logging research.

2. Investigations on the utilization of sawmill residue:—Investigations should be increased in connection with the utilization of sawmill residue for pulp. While the laboratories have done a great deal of useful work in this connection and are regarded as authorities in the field, much further work needs to be done and should include tests on the pulping qualities of sawmill chips as compared to chips from round wood and an evaluation of the properties of chips from these two sources with respect to their pulp producing qualities. Intensive research should be conducted on means of utilizing bark, particularly along practical lines such as in the manufacture of compost, charcoal briquettes and chemicals.

3. Research work on the improved efficiency of sawmill equipment:— While a considerable amount of basic research has been done on the fundamentals of sawing and the operation of circular headrigs, this research should be translated into practical terms and work is needed on band and gang saws. Information should be made available to the forest industry on matters such as various methods of tailing headsaws, off bearing slabs, a comparison of the advantages of hydraulic, pneumatic and mechanical carriages, methods of reducing men-hour requirements in milling, and alternate layouts for mills of various sizes. In fact, the most urgent need of the sawmill industry is for more accurate sawmill equipment. The C.L.A. recommends that a committee be set up under the F.P.L.C. to advise and direct work on increasing accuracy.

4. Research of the utilization of wood residues from the secondary wood-using industries:—This research should include practical demonstrations on the manufacture of such material as wood flour, briquettes and charcoal. One

of the most important fields however, in connection with the secondary wood-using industries, are market surveys on uses for various products such as charcoal, wood flour, dimension stock, etc.

5. Accelerated research on lumber seasoning:—This research should include fundamental studies on the movement of water and other liquids in wood, the effects of high temperatures on the properties of wood, and methods of drying wood more quickly, particularly the implementation of stress schedules to Canadian species and conditions. Work should be conducted on the pre-drying of lumber and on the physical effects of water curing.

6. Research into the dimensional stabilization of wood:—Any work that would increase the dimensional stability of wood would have a profound effect on a great number of end uses and would undoubtedly lead to the establishment of many new uses. This work should include the investigation of processes for hardening wood for such uses a for flooring and for shuttles and bobbins.

7. Research on the use of timber in structures:—Work is needed on the use of timber in structures in order that this material may successfully compete with other materials. New designs must be developed for engineered timber structures, with particular reference to the use of eastern species in Glulam construction, either in combination with other species or separately.

8. Research on glues:—Expanded research is necessary on methods of bonding wood to other materials, the development of cheap waterproof glues, and improved methods of end-jointing and edge-jointing.

9. Paints and coatings:—One of the most outstanding needs of the wood-using industries is increased knowledge of the actions of paints and coatings on wood both as protective materials and as decorative materials. As yet, no completely satisfactory natural exterior finish has been developed and such a material is urgently needed. Another example is a good finish for hard-wood flooring. This work should include the investigation of plastic overlays (and other coverings) for wood and the bleaching of several species such as maple for furniture use. In addition, a great deal of work should be done on the development of fire-proofing materials for wood.

As the chairman has pointed out the next item in our submission is a letter addressed to Mr. G. E. Bell, Secretary-manager, Canadian Lumbermen's Association. It is from the Hon. Alvin Hamilton, and it does not necessarily form part of the brief. It, together with the other material appended to this brief, constitute a background of the work that has been done.

There are some very pertinent facts here which we will not take the time to read, but we feel it is very important indeed that they be pointed up, and they can be reviewed at any time. Thank you very much, sir.

The CHAIRMAN: Thank you, Mr. Staniforth. Now, gentlemen, we have other gentlemen with us today representing different sections of the industry. They are here for questioning, and the meeting is now open.

If we hear anybody saying that "Canada is broke", we will immediately send for a psychiatrist!

Mr. PAYNE: Mr. Chairman, we had statements made by a witness at our last sitting which indicated that, in his view, concrete results from research by the federal government were long-range and were not of particular value to the industry now. Would you express the views of the potential value to your industry of research? Of what merit is it at this time?

Mr. STANIFORTH: I would say that the the most important point we raise in our brief is the fact that the sawmill industry is composed of a great many small operators, and that as such they are unable to carry out any research work.

Mr. PAYNE: Does not much of the future of your industry depend on a properly planned governmental assisted program?

Mr. STANIFORTH: Yes, definitely.

Mr. PAYNE: I have one other question I would like to put, and this question has been put to other witnesses who have appeared before us. You gentlemen are more aware than I that certain of the long-range research programs are undertaken at the government level under the control of the Department of Agriculture. Does your association feel that greater results on behalf of the lumbering industry could be achieved if this research program was consolidated under the Forestry Branch rather than under the control of other fields of endeavour who would not place the same emphasis on this?

Mr. G. E. BELL (*Secretary-Manager, Canadian Lumbermen's Association*): We definitely do. As we have said at the present time we feel that the amount of research being carried on is insufficient. As you know, we are competitors in the world markets and somewhat over half of the lumber is exported. We must compete with other nations of the world and we have very little say over the price we can get for our material. At home we are faced with rising labour costs and taxes, so that the margin of profit is narrowing all the time. The only way this situation can be overcome is by employing greater efficiency in the woods and mills, and in our milling processes. Anything that can be done in a research way to implement this is a great step forward. I think the program should be under one head.

Mr. PAYNE: One forestry section?

Mr. BELL: Yes.

Mr. STANIFORTH: There is always the danger that we in the business will price ourselves out of the export market; in fact, we have done this in some cases.

Mr. PAYNE: Do you feel that research can be the answer to lowering wood costs?

Mr. STANIFORTH: I think it can be of great assistance.

The CHAIRMAN: What are the other factors contributing to the situation whereby you are pricing yourself out of the export market?

Mr. STANIFORTH: As Mr. Bell has pointed out, the price we get for a product is not necessarily determined by its cost; it is determined by what price it will command on the export market. Our costs are going up every year, mainly on account of higher wages. Of course, we are competing in England and other European countries. We have Russia to contend with, as well as the Scandinavian countries.

The CHAIRMAN: Do your employees know that higher labour costs are decreasing the market for your product?

Mr. STANIFORTH: Oh yes, I am sure that through our union negotiations they certainly do know.

Mr. ROBICHAUD: Is not the high cost of transportation one of the main factors responsible for the high cost of lumber, especially in the domestic market?

Mr. STANIFORTH: It is one of the most important factors. In some instances in our lower grades and some of our by-products, such as chips and so on, the actual freight cost is greater than the actual cost of the wood at the mill.

Mr. ROBICHAUD: And you would agree that this affects your domestic market to a great degree?

Mr. STANIFORTH: I believe the high freight cost has, but it has affected the export market as well, especially to the United States and Great Britain.

Mr. STEARNS: Did you submit a brief to the federal government in January as a result of the high cost of freight rates?

Mr. STANIFORTH: That is correct; we certainly did.

Mr. HERRIDGE: At this time I would like to say that I am very pleased with the general tenor of this brief, and as one who believes it is essential to maintain small scale industries in this country, I am interested to note that you say there are 8,000 sawmills. Could you give the committee any idea what percentage of this 8,000 you would consider small sawmills?

Mr. STANIFORTH: Nearly all of them are small, but I would like to call on some of my colleagues to assist me in answering your question. There are more than 8,000.

Mr. BELL: I think there are 200 large sawmills and the remainder of the 8,000 are small. That is a general statement.

Mr. HERRIDGE: That is an indication of the importance of small scale lumbering.

Mr. STANIFORTH: Yes.

Mr. HERRIDGE: I was interested to note your reference to the necessity of the application of research to the small sawmill and small logging operators, by an extension service.

I would like to ask the deputy minister this question: could he tell the committee what his opinion is of the necessity of giving application to the suggestions made in this brief in that respect.

Mr. ROBERTSON: I think in general we agree entirely on the importance of this. I believe Mr. Jenkins referred to this at an earlier meeting; perhaps you were not present.

Mr. HERRIDGE: Yes, I was present at the time.

Mr. ROBERTSON: I do not know whether or not you would like Mr. Jenkins to enlarge further on this, but it has been considered favourably.

Mr. HERRIDGE: Well, I am interested in this because I have a little experience in this industry myself and I have seen the necessity of the availability of research advice to the small sawmills and small logging operators. They do not enjoy this at the present time. Would Mr. Jenkins comment on the suggestions with regard to the application of research in the logging operation and the use of sawmill residue, such as bark and chips. I would also like to hear his comments in connection with lumber manufacturing and seasoning.

Mr. J. H. JENKINS (*Chief, Forest Products Laboratories Division*): Do you want me to deal with the research in these fields and also how the extension service would apply to that?

Mr. HERRIDGE: Yes, I would appreciate that, because I think it would be very good to have this testimony included in the proceedings.

Mr. JENKINS: I have read the briefs and it is our thinking that this field extension service is visualized as having three purposes; first, to keep the various forest-based industries aware of research developments and technical advantages—that is carrying research right to the small operator; second, assisting in the solution of industrial problems that may arise from the result of these visits and, third, acting as a field liaison to keep the forest products laboratories informed of industrial or other problems and ascertaining where research would be of value. In other words, the Forest Products Laboratories carry out research by means of working in the laboratory and in the field. They receive that information in a usable form, and the field staff, who are fed from headquarters, would visit the operators and explain the results and

the benefits of this research. In turn, while in the plant, there should be certain problems for which they can be of assistance, and in turn they would feed back problems of special importance to the Forest Products Laboratories. If these problems were of a long-term nature we would have them assessed by our advisory committee of industry.

Now, in addition, tied in with that would be a small but vital expansion of our information service, so that we could assemble our information in suitable form for use by the industry and our field officials.

Now, in regard to research we have been doing in the field, we have made a start on some of the problems listed in the industry's brief, but we have been handicapped by shortage of staff. However, within the limitations of our staff, in the logging field we first of all determined the amount and form of the waste or residue that is accruing. That is what is left on the ground after logging. We determined that for all regions across Canada. Then we studied the form of that waste and saw to what extent the possibilities were of utilizing it. The next step was to determine ways of reducing that. One of he things we did was to determine the effects of tree size on logging and lumber manufacture. Even at this late stage in the industry, there is no reliable information on the effect of cutting trees of different sizes.

I think lumber manufacturing was the next point. Part of that field work is tied in with our logging studies because we followed it through to the finished product. As a result of our field work it was obvious there was need for research into sawing in connection with the small mill. There are over 7,000 circular sawmills in Canada which do rather a poor class of manufacturing. So, at the suggestion of industry, we installed a research sawmill at the Ottawa laboratory a few years ago to determine basic information in connection with sawing. We are spreading our information around and, in that connection, we recently started a system of sawmill courses.

The next point you mentioned was waste utilization. In that field we feel we have made very considerable progress. We do not take credit for all the developments that have occurred in recent years in this connection, but we do feel that as a result of setting up an industrial committee, of which I am the chairman—the laboratory supplies a secretariat—very remarkable results have been forthcoming in getting the industry really interested in the utilization of sawmill waste. There have been great strides in that field.

Coming to your last point, lumber seasoning, representatives in both laboratories have been carrying out research in that field for the past 30 years, and we are making progress; but there again I am afraid we have more research available than the industry is now applying.

Mr. HERRIDGE: I have one more question, Mr. Chairman. A number of people in the district from which I come are very interested in paints and coatings, and particularly fireproof coatings, over lumber, especially for shingles and shakes. In our district there is not a market for shakes; they go south. Because of that I have been trying to get some information in connection with satisfactory fireproof coatings for these products. I wrote the National Research Council and they had done practically nothing in that respect. I have written all over the place, and I have been unable so far to get any information with respect to a satisfactory fireproof coating for shakes, cedar shingles and other wood products. Would you say there is a field there that needs immediate investigation, which would be to the advantage of the industry?

Mr. JENKINS: I would say there is a very big field there to determine fireproof coatings that can be applied immediately. The present coatings are so expensive that the product cannot compete. We have done a little work on that.

Mr. HERRIDGE: I would like to ask the deputy minister if he would consider an investigation into satisfactory coatings or fireproofing. That may be a very useful study for the National Research Council to undertake as soon as possible.

Mr. ROBERTSON: Yes, I would certainly think so. I do not know how this would relate to the work done by the division of building research in the National Research Council. The Forest Products Laboratory works very closely with that division. Perhaps Mr. Jenkins could say how the work does dovetail together.

Mr. JENKINS: The division of building research in the National Research Council was set up to investigate all phases of building research; but to avoid duplication and because we work in such harmony, it has been agreed that anything pertaining to wood would be handed over to the Forest Products Laboratories, and that applies also to our consolidation and investigation work we do for Central Mortgage and Housing Corporation. The division of building research was set up as consultant for C.M.H.C., but by agreement, to avoid duplication, anything pertaining to wood is referred to us, and that is an extended portion of our work in the timber field.

In connection with paints, the division of building research has a unit working on paints and coatings in general and we have a small unit working on the application of paints and coatings to wood. It is only by close co-ordination that we prevent unnecessary duplication.

In general, the use of wood in building is looked after by us; that is, with the exception of code work for the national building code and the setting up of point specifications under the Canadian government specifications board. That is looked after by the code section of the division of building research. In that connection, they supply the secretariat and we are the technical members of their committees. However, there is the closest coordination and goodwill, and there is no overlapping.

Mr. HERRIDGE: In connection with markets and customers, I just want to mention this: it has been brought to my attention that a lot of people misunderstand or underestimate the durability of wood products, and particularly the fact that wood roofing can be very satisfactory over a long period of years. I will illustrate. There is a cedar-shake roof on a building in which I have my office. It was put on in 1898, and it is almost as good today as the day it was put on. It is the cost of this fireproof coating that has caused the public to go to these other so-called jim crack roofing materials. If they could produce a reasonably priced fireproof coating, the market for this would be tremendously expanded. Naturally there is a resistance on the part of the public because of a fear of fire. I would urge the deputy minister and all concerned to do all they can to increase their research studies in that direction.

Mr. MCQUILLAN: Mr. Chairman, I would like to ask Mr. Staniforth if he does not think that perhaps one reason for the great inroads of substitute materials being made on the market of wood products, especially in connection with roofing and siding, has been because of the fact that there are so many producers involved in that industry and the manufacturers of substitutes are a comparably small group. They have made a concentrated effort to have specifications designed largely to fit their own products, often to the prejudice of lumber products. Do you not feel that way?

Mr. STANIFORTH: Well, we feel lumbermen as a group are great in number but small in size. As you pointed out, some of these makers of substitute materials are smaller in number but, of course, through very strong financing they are able to carry out high pressure programs and research programs on their own, and in that way they increase their own sales to the detriment of our industry.

Mr. McQUILLAN: What I was getting at is the industry has not been organized in the proper manner to promote their own interests. Is it not going to be a particular field of work for this new council to watch these specifications and see that wood is not prejudiced; in other words, to see that it gets an even break?

Mr. STANIFORTH: This new council is a step in the right direction.

Mr. BELL: One of the purposes of this council is to promote wood as a material in place of these substitute materials. Its purpose is to try to organize the whole industry into one organization that will promote wood. We run up against these other manufacturers who have a lot of money and can promote their product in such a way that the public accepts it. We have never had an organization that has had the power to do that. One of the aims of the wood development council is to promote generally the use of wood.

Mr. PAYNE: On what basis is it established?

Mr. BELL: It is an association of all the major lumber associations in Canada, from the maritimes to the west coast, including the wholesale associations and some of the other associations such as the Canadian Institute of Timber Construction and the Saskatchewan timber board. It has about sixteen affiliated associations together in one group.

Mr. PAYNE: In addition to setting basic standards for your industry, does it coordinate research activity carried on in development fields by other companies?

Mr. BELL: We have just formed this council and up until this time we have been employing personnel and acquiring office space. While we have a tentative program set out—and it will be a coordinating committee—it has not developed to the stage where I am yet in the position to say too much about it.

Mr. PAYNE: It is your hope that this council will undertake certain basic research then as well as coordination work?

Mr. BELL: Whether it undertakes it or not, it should be a coordinating body.

Mr. STEARNS: Are you going to have enough money this year to do any advertising?

Mr. BELL: Our budget is very limited; it is $50,000 for the first year. We feel this is a nice start but not enough to do an effective job. We will do a small amount of advertising. We have an arrangement with the National Lumber Manufacturers Association in the United States by which we will obtain all literature they put out. We will be able to obtain that material at cost. This should allow us to get some good material at a reduced price.

Mr. PAYNE: Do you have any association with the pulp industry as well?

Mr. BELL: They are not in this, no.

Mr. PAYNE: Just by way of clearing up in my mind a matter raised the other day when it was indicated by one witness that his company operated a fairly active research office on the west coast and employed seven personnel. Then yesterday we had a rather startling statement that one of your eastern pulp producers retained a staff of 47 Ph.D's. I found that a rather startling statement and I was unable to clarify it before the witness left. Do you know of any such situation where 47 Ph.D's are actually involved in research work by any one company?

Mr. BELL: There is one pulp and paper company in the province that has a large research establishment. However, I do not know about the 47 Ph.D's. It is a large scale establishment, with complete facilities for research. I do not know how many people are employed to that end.

Mr. McQUILLAN: I think there has been a little misunderstanding in connection with some of the evidence that was presented here by witnesses a couple of days ago. In speaking of research, I am sure he was referring to the pulp and paper industry. He was speaking in connection with it and not in connection with the forest industry in general. As is well known, the pulp and paper industry has been very, very active in research almost ever since its inception. The lumbering industry is an entirely different field to what that gentleman was referring to.

I would like to ask a question at this time. Has any progress been made by the lumber industry in effecting prefabricated units for building purposes? It is a great field, particularly in view of this do-it-yourself wave that has swept the country. I am thinking of the recent gain or recapture of a certain part of the wood sash market due to the pre-package units and the pre-framed doors. Do you feel there is a good future for lumber products in that market?

Mr. STANIFORTH: I think there is a tremendous field for the marketing of our products in all phases of the lumbering industry. The tendency today is to package the lumber in unit packages of 1,000 feet so that it can be readily handled; and it goes right down to the finished items—such as—hardwood flooring, pre-framed door settings and windows and so on. There is no doubt but that there is a great field there; it should be explored and developed.

Mr. McQUILLAN: In other words, you should take a leaf out of the modern grocery store business. They do a tremendous business in pre-packaged goods.

Mr. STANIFORTH: We think it is a field than can be developed and we also think it is something on which we can obtain assistance.

Mr. McQUILLAN: That would be wonderful. You would hope to have some assistance from the Forest Products Laboratories or some similar organization?

Mr. STANIFORTH: I am sure they could be of great help to us.

Mr. BASKIN: I would like to ask a question arising out of the comments of Mr. Jenkins. He mentioned there is more research available than the industry is taking advantage of. What are your comments in this regard?

Mr. STANIFORTH: I think Mr. Jenkins' remark is possibly true, but the reason the industry does not take advantage of it is because there is no field liaison. If they had these field units that could go out and see these operations and say we can help you with this or that, or say, should you not be doing that—or they could say we have such and such a publication that would prove you should be doing it this way—I think that would rectify it very quickly.

Mr. DOUCETT: That is direct advice, by application.

Mr. STANIFORTH: Some of the larger concerns get to the laboratory and they know what it is doing; it is the small operators who do not find out; they do not realize what is going on and what help they can get.

Mr. PAYNE: You referred on page 6 to the need for establishing an industrial information service. Was that referring to this?

Mr. STANIFORTH: Yes.

Mr. PAYNE: I am sure I and other witnesses would like to hear you elaborate on this proposal, because you have not gone into it at any great length here. What do you visualize in this proposal?

Mr. HARDIE: Before that question is answered, I would like to follow up Mr. Baskin's question in connection with research. Is it not true that the industry could be put on the mailing lists of the building research section of

the National Research Council and of the laboratory here, and in that way obtain the information as it comes out?

Mr. STANIFORTH: That is very true. You can get this information, but sometimes it is of a highly technical nature and the actual operators of some of these smaller lumber manufacturing plants are not well enough acquainted with these technical subjects to absorb and use the information. We feel with the extension service that valuable information will be disseminated to these small operators and they will be able to use it to the advantage of the industry as a whole—and especially, as I say, it would be an advantage to the smaller operators who do not understand the information, and who, even if they got it, could not use it to advantage.

Mr. BASKIN: I would like to direct this question to the deputy minister. What is being done about increasing the staff of the Forest Products Laboratory?

Mr. ROBERTSON: Do you mean what has been done up until now or what we contemplate doing?

Mr. BASKIN: What is contemplated.

Mr. ROBERTSON: With regard to what is contemplated I mentioned the other day that we were, or are, in the process of working out a five-year program for development of the whole forestry services including the Forest Products Laboratories. Mr. Jenkins mentioned the figures the other day. Roughly, they contemplate an increase of 50 per cent in the personnel strength over that five-year period.

A 50 per cent increase in strength, will, in our view, accomplish far more than a 50 per cent increase in effective results, because in a sense there is a basic structure being set up there, and what we are adding in the way of personnel will enable a substantial increase in the work to be done by this increase in staff. I do not know if you are similarly interested in the change of strength in past years. It has not been substantial.

Mr. BASKIN: It is not necessary to go into that, but with an increase in staff you will be able to meet the rather urgent requirements of the industry?

Mr. ROBERTSON: What is that again?

Mr. BASKIN: Would it be possible to increase the momentum of taking on this staff in order to meet the urgent requirements of the industry?

Mr. ROBERTSON: Might I ask Mr. Jenkins to deal with that because he is more familiar with the technical aspects of that side of the problem.

Mr. JENKINS: I think the increase contemplated in the five years will be adequate to enable us to meet the requirements as outlined in the industry's brief. But I do think that the research could be speeded up if it were possible to reduce the number of years. The total amount is good, but the period could be speeded up.

Mr. MCQUILLAN: That is one of the objections I have to this five-year plan as proposed. It is the time it is going to take before we have any results from it. It would seem from the evidence submitted that we are in a rather crucial period as far as the forest industry is concerned. I know there is no use in asking the deputy minister whether or not he can speed it up.

The CHAIRMAN: Yes, you can.

Mr. MCQUILLAN: But I would ask him if he would do all he could to speed it up.

Mr. ROBERTSON: What we certainly can do is to consider what kind of accelerated program could be worked out and then to put it in front of the

minister for recommendation. I think that is the best we can do. We could certainly do that much.

Mr. STEARNS: May I ask one question about this increase in staff? As I understand it, it is for work in the laboratories. If you are going to do field work, would you not need more staff?

Mr. ROBERTSON: It includes that as well.

Mr. STEARNS: How many men do you contemplate having as field men?

Mr. JENKINS: In the extension of information services, that is, to prepare the material, we contemplate an expansion of three. In the field extension service, where people are actually out in the field, we visualize seven areas or seven districts based in relation to the industry in various regions, having regard to the services, and that would mean that the total services would number seventeen.

Mr. STEARNS: You say seventeen?

Mr. JENKINS: Yes, made up of eight professional and nine non-professional. The other professionals would be for research at the Ottawa laboratory, and thirteen for the Vancouver laboratory, making a total expansion of 62.

The CHAIRMAN: I would say that accelerated research would be emphasized in the report we are going to make.

Mr. STANIFORTH: While we are on this subject I thought it would be interesting to point out that in our brief, on the first page which is printed in black, we have a comparison of expenditures for the National Research Council, the Mines Department, and the Forest Products Laboratories. We think those figures are most interesting from our point of view because we feel that we are a very important industry in Canada and that we are getting enough attention.

Mr. MARTEL: Perhaps we might ask one of the witnesses if he would tell us how important it is, and how urgently he feels that this research program should be stepped up, and if they want it urgently.

The CHAIRMAN: You mean do they want the five-year program speeded up to three years, for instance?

Mr. MARTEL: Perhaps one of them could tell us about it. I understand in the brief they mention asking for more research, but the other day we had a witness who apparently was favouring a course which was not related to the lumber industry but which was favouring more research to be done by the industry itself than by the government. Now we have a number of witnesses here today who perhaps might tell us what they think about it.

The CHAIRMAN: He also said that the country was broke!

Mr. HARDIE: No, he said that the government was broke.

The CHAIRMAN: I suggested earlier that if anybody said that this morning we would immediately send for a psychiatrist.

Mr. PAYNE: Have we anything on which we can base our costs?

Mr. STANIFORTH: I would like to call Mr. Roos, the chairman of the Advisory Committee to the Forest Products Laboratories, to deal with this.

Mr. K. O. ROOS (*Director, Canadian Lumbermen's Association, and Chairman, Advisory Committee to Forest Products Laboratories of Canada*): Mr. Chairman, I can assure the hon. member who asked the question that we would not be here today if we did not really feel that it was a most urgent matter for our industry. Although, as you know, there is supposed to be a pick up in the industry generally in Canada and the United States, I do not think that it applies equally to the forest industry or to the lumber industry in particular. Some of the problems we have mentioned are temporary, but

they are very basic. They have been coming to a head for a very long time. That is why we urgently recommend that if this policy which is promised on behalf of the Forest Products Laboratories could be speeded up, it would be none too soon, because these problems are not going to be settled over night.

The addition of 62 men may not accomplish very much very quickly. So the sooner we can get started, the better; and while I am on my feet, I would like to make one comment. I would not like you hon. gentlemen to think that the lumber industry is here today to put all their burdens on your shoulders. That is far from the case.

Several of these gentlemen have mentioned selling, trade terms, and so forth. I can assure you that at long last the lumber industry has, I think, finally awakened to such things as the wood development council, and other trade development work that is going on. It will take a considerable sum of money, but the industry is finally taking steps in that direction.

Comment has been made that the industry has not taken advantage of the knowledge that has been learned by the Forest Products Laboratories, and other research agencies. That is quite true, but there again, many of our mills are now putting in new equipment. Automation is gradually getting into the mills. There is a big development in the use of chippers and so forth. So the industry is finally doing its part; but they cannot do this fundamental research work which is so necessary. That is why we are approaching the government to give us help in that direction.

The CHAIRMAN: I have before me a copy of *Newsprint Facts*, dated May, 1959, from which I read as follows:

> *Usage Uptrend Seen After Two-Year Slump*
>
> Consumption of newsprint in the United States, slightly below trend in 1957 and 1958 appears to be resuming its upward march this year, according to an industry consensus at the end of the first quarter.
>
> The rise will reach five per cent as against a long-term average of about three per cent annually, in the estimation of the Newsprint Association of Canada. Better business conditions are expected to bring about the improvement.

I mention that because the witness we had the other day indicated that exports of the industry to the United States would increase in proportion to the population. This item would indicate it would reach a five per cent rise annually. Do you think that is right?

Mr. ROOS: I shall not endeavour to make a comment on the newsprint industry.

The CHAIRMAN: What percentage of your products are exported?

Mr. ROOS: About 50 per cent. I am talking about the lumber industry.

The CHAIRMAN: Are your sales still as high as they were, in the United States?

Mr. ROOS: Our sales have dropped off tremendously in the last several years.

The CHAIRMAN: You say your sales in the United States have dropped off. Have your sales in any other country dropped off?

Mr. ROOS: The United Kingdom market has also been weaker in the last several years.

The CHAIRMAN: What about home consumption?

Mr. ROOS: Last year it was off, but it has been picking up lately. We hope it will continue as long as the house building industry continues; but if that slows up then we are in for trouble.

The CHAIRMAN: What concerns most of the members of the committee about research is this: several sections of your industry—the forest industry—have research, while some do not have so much research, and there is no coordination in research with respect to the industry generally. Is that so?

Mr. ROOS: Well, the only coordination is through the Forest Products Laboratories.

The CHAIRMAN: But not within the industry itself?

Mr. ROOS: That is right.

Mr. HARDIE: What would be the reason for the drop in sales in the United Kingdom and the United States over the past several years?

Mr. ROOS: In the United Kingdom, as you know, the main problem is Russia, which has been selling more and more lumber there; and it looks as if they will continue to do so if it suits them. Then we always have the competition of the Scandinavian countries as well.

The CHAIRMAN: Are their prices lower than yours?

Mr. ROOS: Their prices are lower, and the Russians are able now to set the prices. The Scandinavians would like higher prices but they must follow the Russians.

The CHAIRMAN: What other countries do you sell to? Do you sell to South America?

Mr. ROOS: Eastern Canada does not sell to South America, but I think western producers sell in the South American market.

Mr. MCQUILLAN: It is very small.

Mr. HARDIE: Are the Scandinavian people crowding you in the United States market, or is it just a general decline in building?

Mr. ROOS: No; there is American competition itself. There is tremendous production in the United States which goes up and down at will. When there is any falling off in business in the United States, as there was up until recently, they can more than supply their own markets; and in fact American lumber even comes into Canada.

The CHAIRMAN: Your cost of production is much lower than theirs?

Mr. HARDIE: You say that American lumber is coming into Canada?

The CHAIRMAN: Let him answer the other question first.

Mr. BASKIN: Would you not say that the recession of five or six years has had a great deal to do with the drop off in sales in the United States or Canada?

Mr. ROOS: Definitely.

Mr. STEARNS: Is there not a contributing factor in the fact that in the soft wood industry our lack of standard grading and specifications has had a lot to do with our getting back on the United States markets?

Mr. ROOS: I think that is true. I think probably our merchandizing methods have not been of the best. That is why I think we are slowly but gradually getting ourselves organized and working towards that particular end of it; but it will take time.

Mr. MCQUILLAN: The witness left an impression in answer to a question of yours, Mr. Chairman, that the American mills could produce lumber cheaper than we can. I refer more to America because of their preferred location in putting lumber on the market cheaper than we can.

Mr. ROOS: That is quite true.

Mr. MCQUILLAN: But the big item is freight rates, as far as you are concerned, in getting your lumber to the American markets. I do not think you can say that the American mills over-all produce it cheaper than we do.

Mr. Roos: Not in the east, but they do on the west coast. British Columbia produces lumber much more cheaply than you can do it in the east.

Mr. Martel: I think there is a step-up of the main housing program in the United States.

Mr. Roos: That is right.

Mr. Martel: That should take care of their production for the coming years?

Mr. Roos: We are very hopeful of that. We are counting on it very strongly.

Mr. Martel: Those are local markets and they would need our exports?

Mr. Roos: That is right.

Mr. Doucett: What is your over-all production? Has it become better in the last few years?

Mr. Roos: I think I have the figures right here.

The Chairman: Would you mind going back a few years, let us say, to 1950-55?

Mr. Staniforth: I think the man to answer that is Mr. Bernard Bock, president of the National Hardwood Lumber Association, because he is familiar with some of the mills and he has dealt with the United States, which purchase these hardwoods. He knows that they can produce lumber much cheaper than we can. Possibly you might ask him.

Mr. Roos: In answer to the question about production, the last figure I have is for 1956, and it was 7,739,000,000. I think 1955 was the peak year, and it was 7,920,000,000. 1957 was slightly lower, with 7,700,000,000. Do you have a figure for 1958? I would say it was about 7,500,000,000. Yes, 1958 was even lower. It was just a little over seven billion. These figures are much higher than they were, let us say, in 1939. They are almost double.

The Chairman: How does that compare with 1950?

Mr. Roos: 1950 was 6,553,000,000. In other words, the production of lumber has been increasing.

The Chairman: Your decrease in the years of recession is not exciting, is it? I mean, the great part of your world trade—a couple of years of this recession experienced a decrease in sales of course—but your sales seem to have gone down only by a very small percentage—I mean, by a very small part of your production?

Mr. Hardie: What kind of expansion did they have in the industry over all those years, let us say, from 1955? They must have been expanding their mills and their production. I think any company producing anything wants to expand its production and expand its sales; and that any kind of cutback is serious if it gets up to a certain point.

The Chairman: It is quite apparent from the evidence given before this committee that we have so many mills of various kinds in this country that if they were all to produce at capacity there would be no sale for a great deal of their products. That was admitted again, the last time.

Mr. Hardie: Are you telling them they should go out of business?

The Chairman: I was not giving advice.

Mr. Stearns: I think the exciting part is what they did sell lumber for last year. They had to sell lumber in order to eat, but it was not at the price that they got in 1955-56.

Mr. Roos: That is very true. The active figures do not show the returns that were made. It was most competitive. The thing that is bothering us is

that we think our markets are permanently jeopardized due to our lack of up to date modern methods of manufacturing.

The CHAIRMAN: Your industry is something like the meat packing industry, where there is nothing left of what goes into the abattoir. They do their own research, true enough. We appreciate the need for government cooperation and maybe some coordination. But you are complaining here this morning about conditions which exist in your own industry and which I think are partly your own responsibility. Is that not right?

Mr. BELL: The actual figures of yields in our sawmills only run about 50 per cent. In other words, 50 per cent of the log volume is turned into lumber. The rest goes into residue material. There has been a striving in the trade and possibly through the laboratories to develop the bark, the chips, and the residue material into pulp chips. This could be expanded greatly; but our mills are now in the position where some cannot afford barkers and chippers, and a great many of the smaller mills do not have the volume which would allow them to put in this type of equipment. . So many of these smaller mills cannot utilize this market, or do any research work to develop uses for it. That is one of the points of our brief.

The CHAIRMAN: Yes.

Mr. MCQUILLAN: Is not one of the problems of the industry that of expanding the export industry, and that utilization can only be carried on up to a point where the markets of the world will permit you to send it?

We talk a good deal about utilization and getting down to the chips, the knots, the bark and all the rest of it, but we can only accomplish that utilization if the markets of the world will buy it above the cost of production.

Mr. STANIFORTH: Transportation comes into it too, but we want to utilize over 50 per cent of our trees, and make them into pulpwood or other products. It would depend on our finding markets; and if there is a market available for the pulpwood, we would organize a small mill and make pulpwood from chips. But we have to get them to the market. Your location has a great deal to do with it.

The CHAIRMAN: Mr. McQuillan was emphasizing that your main sales were export, and that your sales depended on foreign demand.

Mr. STANIFORTH: About 50 per cent.

The CHAIRMAN: The other is domestic?

Mr. STANIFORTH: Yes.

Mr. PAYNE: I would like to say a word by way of rebuttal to something you said which I do not think you intended, Mr. Chairman. You were comparing this industry with a processing industry such as the meat packing plant. I think it is much broader than that; and if we studied the figures of the Department of Agriculture as to what was spent on the study of animal growth, plants, feedings of hogs, cattle, dairy, poultry and so on, we would find out that there was a fantastic government research program before the meat ever arrived at the packers.

Here we are in an industry which I feel must be looked at with the same consideration or basis of approach as farming. We have a great many small operators who are not in a position to develop an expensive program for research and so on.

Surely we are entering the field where at least this waste is more important than our cereal grain industry. In the cereal grain industry research is done on soils, and it has even gone to the point of government subsidy. Research carried out in connection with cereal grains is fantastic, and I think we have to bring these matters into perspective.

The CHAIRMAN: I appreciate your argument. As the witness said just a moment ago, through research they are making use of end products which were formerly waste products; is that right?

Mr. STANIFORTH: That is right: they were waste and were burned.

The CHAIRMAN: As a matter of fact, research has played a very, very important part in the expansion of the forest industry?

Mr. BELL: That is correct. Many of these mills are diversified and spread all over. None of them has a volume value on their own to do much with, and we have research and organization, so we can have concentration.

The CHAIRMAN: Mr. Hardie asked a question a moment ago about circularizing these operators. Is there any view on that? Do they accept what you have already said? Also, were you going to make a statement regarding the costs of production in the south? We will have that immediately afterwards.

Mr. BELL: There is a great deal of research done in other laboratories throughout the world. There is a large one at Madison, Wisconsin, and in Princes Risborough, United Kingdom. We would like to see some of the material that comes out of them being made available to our people and coming into our labs, not in great details, but summarizing the research. That would not be stealing anything from those laboratories, but we would just like to have some of this material made available to us. Some of it—for instance, the work done in Australia on sawmilling—is put out in a very interesting form and is not too technical. I think if we had this and put it out to our industry, distributed it throughout the trade, it would be very helpful.

Mr. MCQUILLAN: Do you find the eastern lumber industry have found what we in the west, in British Columbia, have found, that probably more information has come from the Madison laboratories that has been of more use to us than has come from our own Canadian laboratories, by far?

Mr. BELL: They have a very fortunate position down there, due to the fact that they have a large staff, a large budget and a large appropriation, and therefore they are able to put out a great amount of material. We would like to see our own labs expanded and putting out the same amount.

Mr. MCQUILLAN: I am not deprecating the work of the Canadian Forest Products Laboratories at all, but I think if you pick up any trade magazine where any scientific aspect of the industry is being covered, you will find a great many most interesting papers from the Madison laboratories, and I believe we have had more use out of them than from our own Canadian laboratories.

The CHAIRMAN: Were you going to speak on cost of production?

Mr. BERNARD BOCK (*President, National Hardwood Lumber Association*): In the States, their mills are bigger, they reduce their costs and get much more than we do out of it. They produce their lumber much more cheaply. And by tomorrow they may be here with red oak or yellow pine. If we could afford to sell our lumber at the price they are selling in Louisiana or South Carolina, we would start tomorrow morning.

The CHAIRMAN: How do they produce it more cheaply; is it because of labour costs?

Mr. BOCK: It is because of labour costs, and the price they get for their waste.

Mr. BELL: They operate the year 'round, do they not?

Mr. BOCK: They operate the year 'round.

The CHAIRMAN: We heard yesterday about "slave labour": did you hear anything about that?

Mr. BOCK: Not in the States.

The CHAIRMAN: You say there is no slave labour in the States?

Mr. BOCK: Yes. I am concerned with hardwood, and there are about 991 mills on hardwood. If we are thinking of using our waste to turn out money, the equipment offered today by the machinery people would definitely cost more than the sawmill itself. So, definitely we need field staff; somebody to help us cut down our cost.

We have lost the United Kingdom to the Scandinavian people. They use their waste, and therefore it reduces their cost considerably.

The CHAIRMAN: In the foreseeable future do you see much use being made of waste, to reduce costs?

Mr. BOCK: If we could do it, yes, sir.

The CHAIRMAN: You say, "If you could do it"; but I say, do you see it in the foreseeable future? Are you going to reduce your costs by using the end products, what was formerly waste?

Mr. BOCK: Definitely.

The CHAIRMAN: To what extent, in the industry?

Mr. BOCK: I would say, at least 20 per cent on the logs value.

Mr. HERRIDGE: Mr. Chairman, I would like to ask the deputy minister a question along this line.

The CHAIRMAN: Please let me ask one more question. To what extent will that reduce the cost of production so that you will be able to meet competition?

Mr. BOCK: I would say, about 12 per cent.

The CHAIRMAN: When do you expect that this will commence?

Mr. BOCK: If we could find a way to do it, we would start right away; but it is too expensive right now for the small sawmills.

Mr. STEARNS: Is it not true that the installation of a chipper and barker runs in the neighbourhood of $125,000?

Mr. BOCK: Yes.

Mr. HERRIDGE: Mr. Chairman, I was most interested in what the witness had to say about this. They are facing the same problems as many operators in the southern interior of British Columbia, and are looking at it from the same point of view that we are. The same things are involved; the consolidation of wastes with a view to utilizing them to a greater extent.

In connection with the application of research and information that is presently available to a much greater extent, I am wondering if, as a first step, we cannot also use to a greater advantage the present personnel of the federal and provincial governments. I am referring to our department here and the B.C. forest service. I mention that because it is the one I know: I am a most parochial individual. As at the present time, in the district from which I come, small mills are being erected by enthusiastic persons who want to go into lumber production in a small way. I have noticed on a number of occasions that they have made quite unnecessary mistakes through not getting the proper engineering advice. They make mistakes sometimes with the layout of the site; they make mistakes sometimes with machinery erection, burners, conveyors from the lakes and with things of that sort, it seems to me.

The district forester and the local forester know all these men; they visit them periodically, and I am quite sure they are quite willing to cooperate.

I would like to ask the deputy minister two questions. What is done at the present time to secure the cooperation of, say, the B.C. forest service and the dissemination of the information available? The forester could, I suggest, write to these men and say, "you had better write to the B.C. forest lab., Vancouver, right away and get some advice", and so on. I am quite sure that

if that had been done, in a good many cases a considerable waste of money would have been avoided and, as well, many mistakes.

Would the deputy minister inform the committee as to what is being done at present to get information to these people through those channels, and what could be done in the future to use, to a greater extent, the possibilities for cooperation between your service and the B.C. forest service who, I am quite sure, would be quite willing to do all they could in this respect?

Mr. ROBERTSON: Mr. Chairman, Mr. Herridge's question is really relating to forest products research, rather than forestry research, because we have been talking about sawmilling and that sort of thing.

Mr. HERRIDGE: Yes; I apply it to this.

Mr. ROBERTSON: But there is a difference in degree. I do not think that at the present time there is a great deal of coordination with regard to forest products research. But I would like to have Mr. Jenkins answer that question, because he is much better qualified to do it than I.

Mr. JENKINS: The handing out of the information you mentioned, Mr. Herridge, is of a somewhat technical nature, and we have close relationships with the various forest services. But their attitude is that they are so busy with utilization of industry problems that they are definitely not very concerned. As I say, while they are willing to cooperate, I do not think they would appreciate being asked to act as a clearing-house. All of the district foresters for all of the forest services receive copies of our information, and we do know that they often tell a small operator, "You had better write in to the Forest Products Laboratories". But I do not think—because of the technical nature of it—that it is a field in which they are very interested, because they have other duties to perform. I do not think they would act as a clearing-house.

Incidentally, because we have no regular staff for it, we are not in a position at the present time to mail to the thousands of operators. That is something that was provided for in that expansion of three men which I mentioned. At the present time we simply lend key personnel to the lumber associations, and more recently we have been getting out—on a shoe-string—a news letter. This is a monthly news letter, describing our activities, and we send it out hoping that it will result in more interest. But with our present staff we are not in a position to mail to all of the 8,000 mills, or a total of about 11,000 in the industry as a whole.

Mr. MCQUILLAN: I would like to ask Mr. Jenkins a question, Mr. Chairman. It appears to me that what he has said several times is that the failure to disseminate a lot of the information they have is because they have been hamstrung financially. Am I correct in saying that you would like to have more of your staff getting out into the areas where the lumber is being produced and becoming personally acquainted with these sawmill operators, so that they have personal knowledge of the problems and can give the sawmill operator personal advice?

Mr. JENKINS: I would like to answer "yes" to your first question.

Mr. MCQUILLAN: Thank you.

Mr. JENKINS: As regards the other question: if we could only have limited funds—if they were to say "you can only have a certain percentage of what has been asked for", I think our most effective use would be in improving the dissemination of our information.

Mr. BASKIN: How many men are there on the staff at the present time who understand the problems of a small sawmill operator? How many practical men have you that you could send out and who could talk sawmill language?

Mr. JENKINS: We have a utilization section in which there are four—it is in Ottawa—forest engineers; and in Vancouver, three. Then the other members in some of our other sections—say, in the plywood field—have a general knowledge. But in our sawmill staff—men with appreciation of sawmill utilization—there would possibly be four in Ottawa and three in Vancouver; although I would like to add to that, myself, making a fifth one.

I would like to mention, also, that recently we have introduced an innovation that is a course in improved lumber manufacturing. Several years ago we found out that the best way to get across the results of our lumber seasoning information—information which we had arrived at from our research—was to conduct courses at the laboratories on lumber seasoning. We have been doing that, on and off, for the past 25 years. Then last year we found we had enough information, as a result of our sawmill research, to justify putting on a course, and this time we have decided to carry the course to the industry instead of industry coming to us. So, in cooperation with the Nova Scotia Department of Lands and Forests, we put on a course in Nova Scotia which was so successful that more recently we have, with the cooperation of the Northwestern forestry association and the forestry service, put one on at La Sarre and Timmins, at which there were 50 attending for the two days. That was arranged with the cooperation with the Department of Lands and Forests. And we have had requests for two in the interior of British Columbia, one in Prince George and one in Penticton, Mr. Herridge, and we have had another request for one in the North Bay area on October 6.

The CHAIRMAN: Gentlemen, it is 11 o'clock. I think that perhaps you will all agree that maybe it is not necessary to have another meeting with these witnesses present. Is that agreed?

Mr. MCQUILLAN: I do not think it is necessary, Mr. Chairman. I feel we have covered the field pretty well, and we are beginning to return to the same subjects. Have we any other witnesses to call?

The CHAIRMAN: No.

Mr. MCQUILLAN: There is one thing I would like to ask now: it seems to me that the last report of this committee that we had was dated May 7.

The CHAIRMAN: There is a more recent one, dated May 12. The rest will be following right along. There was some delay because there were so many committees sitting; but the last one I had—it came in last evening—was Tuesday, May 12. The others will be coming along shortly.

Gentlemen, would you consider our scheduled meeting for Monday morning next, at 11 o'clock, when it is suggested we sit "in camera" to consider the draft of a report to the House on the estimates of the Department of Mines and Technical Surveys. At the beginning of our meetings on the current department we were invited by the minister to visit the Forest Products laboratory here. If it is agreeable to the members, we could meet "in camera" first—I do not think it would take long to approve the draft report—and then adjourn. There will be a bus waiting outside, and we could go out to the laboratory and be guests of our friends there, have a tour and see what is going on in that very, very important lab, and then lunch there. Would that be agreeable to the committee? We will probably have the tour before lunch; is that agreeable?

Agreed.

The CHAIRMAN: That also would include Mr. Herridge and others who very kindly anticipated in our proceedings and who are not ordinarily members of the committee: they are also invited.

Mr. HERRIDGE: Thank you, Mr. Chairman.

The CHAIRMAN: We should be advised today of those who will attend. The clerk of the committee will be contacting you, and I hope that we will have a good representation. And, gentlemen, if there are other members who are interested in this subject and would like to go out there, they will be welcome. Thank you very much. The meeting is adjourned until Monday at 11 o'clock.

Mr. HARDIE: Mr. Chairman, I asked questions at the first and second meetings of this committee when we were discussing the Northern Affairs estimates, and I am wondering if I can have the answers to those questions now. Whether they be tabled or not, I do not care; but if I could have the answers before we come back, it would be appreciated. I am referring particularly to questions on oil and gas.

Mr. ROBERTSON: The answers on the oil and gas questions that Mr. Hardie asked, Mr. Chairman, have not yet been completely compiled. I checked, because Mr. Hardie asked me the other day. I will go into it and see when they will be ready.

Mr. HARDIE: May I have the ones that are ready?

Mr. ROBERTSON: I will see where they stand.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS

No. 25

RECEIVED
JUN 3 1959
Library of Parliament

MONDAY, MAY 25, 1959

Including

SECOND REPORT TO THE HOUSE

respecting the Estimates 1959-60 of the

DEPARTMENT OF MINES AND TECHNICAL SURVEYS

and the

DOMINION COAL BOARD.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21274-6—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

REPORT TO THE HOUSE

TUESDAY, May 26, 1959.

The Standing Committee on Mines, Forests and Waters has the honour to present the following as its

SECOND REPORT

1. Pursuant to its Order of Reference of February 13, 1959, your Committee has considered and approved Items numbered 186 to 210 inclusive, as listed in the Main Estimates of 1959-1960, relating to the Department of Mines and Technical Surveys; and Items numbered 211 to 213 of the Main Estimates of 1959-1960, relating to the Dominion Coal Board.

2. Your Committee held 10 meetings on the Order of Reference of the House concerning the estimates of the Department of Mines and Technical Surveys, and 3 meetings concerning the estimates of the Dominion Coal Board.

GENERAL

3. While it is evident that the functions of this department touch all aspects of Canadian economic development its chief responsibility is the growth of our mineral industry in all its phases.

4. The mineral industry is growing faster than Canadian industry as a whole; a clear illustration is the fact that between 1947 and 1957 the index of physical volume of mineral production increased 173 per cent while that of all industry increased 51 per cent. In this same period the total value of Canadian mineral production increased 231 per cent; mineral fuels increased 403 per cent, industrial metals increased 217 per cent, and metallics increased 188 per cent.

5. Similarly the per capita value of mineral production has increased at a much greater rate than our gross national product. Between 1947 and 1957 the per capita value of the gross national product increased 80.7 per cent whereas that of our mineral production increased 151 per cent.

6. Thus the growth pattern of the mineral industry is demonstrably quicker than that of the total Canadian economy. Despite this, the department has neither grown nor focussed its activities in the past decade in a growth sense at all comparative to the industry. Today the department is not able to meet adequately some of its responsibilities; and such inadequacies may accelerate in the near future unless the challenge is met. The most remarkable feature of the evidence before your Committee is the lag in the expansion of the staff and facilities of all branches of the department.

7. In almost all fields of national scientific endeavour, this department should have lead and should lead the way. There is little need for this Committee to apportion blame for the present state. Both the people and those responsible for policy in Canada have been slow to realize the urgent need for expenditure and leadership in this field. The Department of Mines and Technical Surveys, your Committee insists, must be recognized as a vitally important one, not one of inferior significance. The scientific function of the department cannot any longer be circumscribed by caution, hesitancy and

21274-6—1½

lack of support. It is imperative that all branches of the department embark on an accelerated program of expansion, and planning for expansion; and that the provision of the needed money, staff and facilities be an immediate consideration of the government.

8. The importance of fostering policies which give a leading role to this department in all phases of national development cannot be over-emphasized.

9. Canadian science as a whole has been retarded through inadequate financing, and this undesirable situation will continue unless adequate government financial participation is forthcoming.

10. Geography forces Canada to take a leading part in any northern matter, whether civil or military. This is an obligation which we cannot evade, but which we cannot fulfil effectively without adequate research. For the effective development of the north a major expansion of research is essential. Without thorough and continuing research any development in the north is certain to be much more costly and may easily be misdirected.

MINERAL RESOURCES DIVISION

11. This division carries out economic studies on all phases of the Canadian mining industry and administers the Emergency Gold Mining Assistance Act. The valuable services rendered by this division could be enhanced in the following ways, namely,

(a) *Greater Research in Production Methods and Marketing Trends of Minerals.*

(i) More stress should be given by the division to research for new uses of minerals already in production in Canada, although some of this work is carried out by the Mines Branch. A greater measure of co-ordination on mineral research between the division and the Mines Branch would be useful.

(ii) The division should not only study the possible effects of present exports and marketing trends but also try to anticipate future trends so that planned production schedules by industry can be worked out for the next ten years or more. Although the present outlook for such minerals as lead and zinc is depressed by the present world-wide over-supply, nevertheless there is optimism in regard to long-term prospects for those minerals, as consumption is bound to increase with the increase of population and a greater industrialization of the Asiatic and African nations. The division should explore possible new methods of more efficient production so that these may be applied in later years when the demand picks up; a study should also be made to ensure that means are found of conserving the future productive capacity of mines which have been obliged to close down temporarily.

(b) *Strategic Minerals*

(i) An inventory of strategic mineral in Canada is being prepared. The importance of this work cannot be overemphasized.

(ii) Canada has a shortage of certain strategic minerals such as manganese, chromite and most of the ferro-alloy metals. Your Committee considers that the division should endeavour in every way to keep abreast of development in the rapidly changing situation in regard to strategic minerals, and particularly that

information on such development should be compiled and widely distributed to prospectors and other interested persons.

(c) *Record of Production by Canadian Mines*

(i) Under present regulations, the division appears unable to obtain sufficient information to make possible an accurate assessment of mineral resources and inventories. The Committee suggests that the division at least make a report regarding these deficiencies so that the appropriate recommendation could be made.

(ii) Your Committee recommends that disclosures of exploratory and development information by mining companies be made to the department on a confidential basis in order to assist national planning and development.

(d) *Prices for Minerals*

The importance of Canada's mineral industry cannot be overemphasized. Minerals comprise 31 per cent to 38 per cent of all of Canada's exports. While production of such minerals as lead and zinc increased in 1958, yet the value of production in dollars decreased. A study of trends in prices of minerals should be undertaken. Similarly appropriate tax concessions, if found to be desirable, should be considered.

SURVEYS AND MAPPING BRANCH

General

12. Like other branches in the department, Surveys and Mapping Branch has for many years been unable to adequately discharge its responsibilities. Despite maximum effort by personnel of the branch, the scientific information and other material produced by the branch has year by year fallen further in arrears.

13. This branch is the major federal government agency responsible for the surveying, mapping and charting of the land and water areas of Canada. An expansion in the personnel and facilities of the branch is essential to the proper and adequate discharge of these responsibilities.

14. The demand for maps and charts provided by this branch has been steadily increasing for many years to the point where today it is virtually impossible for the branch to meet this demand. Without such maps and charts the orderly and economic development of our national resources will continue to be seriously hindered. Just as urgent is the requirement of these maps and charts for the purpose of national defence.

15. The efficiency of the branch should be materially increased when it moves into the new Surveys and Mapping building in 1961. Because of vitally needed expansions in the branch, however, it appears doubtful that the new building will be adequate to house the additional requirements of more professional and technical staff, several new printing presses and other much needed technical equipment and instruments.

16. As with other branches in the department, the staff increases in this branch should be progressive over the period of the next five years to facilitate training and to increase assimilation.

17. A new ship, the "C.G.S. HUDSON", is expected to be commissioned in 1961. This new ship will help to meet the requirements for more charting in northern waters and the urgent need for oceanographic research. As will be

seen elsewhere in this report, however, the addition of this one ship falls short of the requirements of the branch in meeting the urgent necessity of accelerating charting and oceanographic work.

Geodetic Survey of Canada

18. Serious restrictions over the years have limited the work of this division. It is essential that additional professional staff be developed so that the establishment of adequate primary control can be accelerated. This is a condition precedent to the proper and adequate discharge of the responsibilities of the branch in providing basic control for surveying, mapping and engineering projects throughout Canada. In addition to precise triangulation into northern Canada, a much denser network of precise horizontal positions and elevations is now required in the more settled areas of Canada.

19. Unless this division is allowed increases in staff and facilities, their work, which is the basis upon which all other surveys are carried out, will, as in the past, substantially retard the rate of national development.

20. At the present rate of progress the surveys of this branch will take 50 years. This does not meet the urgency of the situation.

International Boundary Commission

21. The work of this division, which is to ensure that the boundary between the United States and Canada is well defined, appears to be progressing satisfactorily.

Topographical Survey Division

22. The evidence indicates that the work of this division has a long way to go. The general plan of the division is to complete the mapping of the whole of Canada on a scale of 1:250,000.

23. The division has been confronted with space difficulties which have resulted in minimizing the efficiency in the operation of their equipment. Overcrowded conditions have also resulted in restricting the production of which the equipment is capable.

24. Again, the evidence indicates that the work of this division has not been keeping pace with the development of our resources.

25. Additional office staff is required to accelerate the most urgent requirement of the completion of the 1:250,000 scale mapping of Canada. The revision of the maps of the more settled areas is long overdue.

26. The increasing number of special developments being undertaken by the government is increasing the demand for more large scale mapping. The division should be equipped to meet these demands or the projects will obviously be delayed.

Legal Surveys and Aeronautical Charts Division

27. All legal surveys of lands owned or administered by the federal government are the responsibility of this division. This includes federal lands in Yukon and Northwest Territories. The division has been required to face continually increasing requests from other federal government agencies for legal surveys. An increasing number of surveys are being conducted in Yukon and Northwest Territories.

28. The division has had great difficulty over the years in keeping up with the demands for legal surveys. This has substantially contributed to an undesirable situation with regard to new applications for and the allocation by conveyance of crown lands.

29. Without additional staff the division will continue to be unable to meet requirements for legal surveys which have and are following the developments in Yukon and Northwest Territories. An additional 30 continuing and 30 seasonal employees are indicated by the evidence, over the next five years.

30. Aeronautical charting of Canada is lagging and should be accelerated to meet increasing demands.

Provincial and Territorial Boundary Surveys

31. This division seems to be progressing satisfactorily.

Map Compilation and Reproduction Division

32. The extremely heavy work load relative to staff and facilities to perform it has reached a critical stage. Immediate relief is essential. This division has been unable to keep pace with the field work of the Topographic Surveys Division. Map compilation and reproduction have been steadily falling behind over the last five or six years.

33. As a result of the above the backlog in map compilation and reproduction now amounts to 400 to 500 maps. This condition is much too serious to ignore.

34. While space requirements will be greatly eased when the branch moves into its new quarters and this division will be better enabled to keep up with current requirements, such a move will not allow the backlog of maps awaiting publication to be digested.

35. Evidence indicates that a staff increase, projected over the next five years, of 100 continuing employees is desirable. The need for immediate implementation of these staff increases is emphasized.

36. Without reform in this division, continuing inadequate map and chart information will be the result. This will have far reaching and detrimental effect on all national development desires of the government.

Canadian Hydrographic Service

37. With the present complement of ships and staff this division will be unable to produce the charts necessary for the important navigable areas of Canada in 100 years.

38. The work of this division includes responsibility for charting the coastal and inland waterways of Canada, collecting and publishing data on tides and water levels. Oceanographic research has recently been added as a responsibility of the division.

39. This division, like others in the branch, has had its work impeded to a serious extent by a lack of money, staff and equipment. The Hydrographic Service is being called upon to increase its charting activities on inland waters and to undertake extensive revision surveys on both coastal and inland waters. Relatively little is known about Canada's coastal waters.

40. To adequately meet the demands upon the division, the evidence indicates a requirement for an increase of staff by

30 Hydrographers,
60 Oceanographers,
100 Compilation and office staff, and
300 Ship's officers and crew,

these staff additions to be projected over a five-year period.

41. If these expansions are not allowed, charting will continue to proceed at a slower rate than that required to meet the normal demands on our

accessible coastlines. Increased activity in the Arctic has added to the coastlines where charting information is urgent. Tidal and current information from this area is urgently required.

Oceanography

42. Very little factual information exists about the oceans which surround our country on three sides. The Polar Continental Shelf Project will meet this need in the Arctic Ocean.

43. With the exception of a very modest program in oceanography by the Fisheries Research Board over the years, oceanographic research has stagnated and, as a result, little is known about the Atlantic and Pacific Oceans off our shores. Evidence indicated the appalling fact that not a single oceanographer has been in the employ of the department for at least 10 years. One has recently been employed and it is hoped to have another on staff by June, 1959.

44. The Geneva Convention of 1958 concluded that the mineral resources of the continental shelves belong to the adjacent nation. This provides a strong economic reason for an aggressive effort in oceanography in the Arctic.

45. In addition, with the recent emphasis on the danger of ballistic missile-carrying submarines, prudence in defence planning dictates a pressing need for oceanographic information.

46. Oceanographic research is essential to supply the needs of all agencies of government and industry if any advances are to be made in the fields of defence, commerce and science. The department would appear to have a well-designed ship now in the course of construction, suitable for securing data on the physical conditions of our oceans and the continental shelf areas.

47. This one ship is the first step in the right direction but a greatly accelerated program is necessary before we have sufficient information to

(a) plan adequate defence measures against underwater craft, or
(b) assess the resource potential of our adjacent ocean areas.

The provision of two additional ships for this work is considered an immediate necessity. Personnel requirements have been indicated under the Hydrographic Division.

GEOLOGICAL SURVEY OF CANADA

General

48. The studies made by the Geological Survey of Canada, are the foundations upon which the nation's reserves of metals, non-metallic minerals and petroleum resources are discovered.

49. The mineral development of Canada is triggered and, to a large extent, paced by the availability of adequate geological mapping. If these maps are not available the opening up of new mineral areas is precluded.

50. Having regard to

(a) the non-renewable nature of mineral resources,
(b) conservation requirements,
(c) anticipated future domestic and world demands for minerals, and
(d) future economic feasibility of development of known producing areas,

it is essential that Canada be in a position to exploit new mineral areas (yet to be discovered and/or proven) by 1980.

51. The serious lag in the expansion of the services of this branch, in contrast to the rapidly accelerating pace of Canadian mineral and industrial

development, has for many years been prejudicial to national development. Our geological studies are simply not keeping pace. The evidence shows that this condition was recognizable at least ten years ago and has since been compounded.

52. Despite overwhelming difficulties the personnel of the branch have produced prodigious quantities of vital scientific and other material. The deplorably adverse conditions under which these personnel have been required to function in the past should not be allowed to prevail. Money, staff and space are urgently required.

53. By undertaking the expansions necessary in the branch it would be feasible and desirable to complete the reconnaissance-mapping of Canada by 1970. At the present rate of progress, with two-thirds of Canada yet to be reconnaissance-mapped, it will take until at least 1980 to complete the program. Unless the present program is substantially accelerated, the lack of fundamental and essential data required in planning for national development projects, will be denied to the prejudice of the national good.

54. The immediate goal should be, therefore, to complete the geological reconnaissance-mapping of Canada at the earliest possible date, with the more detailed maps to follow. Only by following such a course can Canada's mineral wealth be assessed and its orderly and efficient development assured.

55. It is essential that the geological survey must not only keep pace with the mineral industry, but work ahead of it, providing the industry with geological information well in advance. If this objective is not met the function of the survey is not only seriously impaired but, as well, the information which is eventually supplied by the survey will have been obtained at an excessive cost in relation to the effort expended to obtain it. This has proven to be the fact.

56. Expanding the facilities of the branch would also allow the correlation of important data lying in files of private companies. This data which is available to government would materially reduce the burden if it could be utilized.

57. The surveys of this branch vividly emphasize the vital importance of obtaining the geological information available (from all sources) before those concerned with mineral exploration and development move into the areas. If this foresight is not exercised, great amounts of capital will continue to be wasted on blind-alley prospecting and unguided, uninformed exploration programs. The Geological Survey must always be working well in advance of the demand.

Conservation

58. The life of the average mine or oil pool is approximately 20 years. As Canada becomes increasingly dependent on minerals for her livelihood the natural resources that are being removed should be replenished. This can only be accomplished by

(a) the discovery of new deposits, or
(b) the extension of old deposits.

The Geological Survey is the exploration arm of government. Government should contribute toward the replenishment of wasting resources. Government should therefore provide the timely basic data upon which mineral exploration depends—geological maps.

Budgetary Observations

59. The budget for the survey in 1956 was $2,520,000. The total revenue to the federal treasury by taxes from mining and mineral companies amounted to

$90,000,000. The amount budgeted was therefore only slightly over 2½ per cent of this tax revenue to the government. The percentage figure declines even more markedly (to 1 per cent) when taxes paid by secondary industry dependent on mining and mineral products are included in this calculation.

60. In keeping with the leading role that all branches of the department should be playing, a more proportionate share of the national income should be allotted to allow this branch, and the department as a whole, to properly discharge its responsibilities.

61. Evidence shows that from 1927 to 1957 the number of field parties active in the summer increased from 50 to 69. This number has been increased again in the last two years (average increase of 20 parties) but it still falls far short of meeting the urgency of the situation.

62. Development in the mining and mineral fields are often unexpected and rapid. This requires flexibility within the budgetary allotment to all branches in order that these emergencies may be met. This is particularly true in the Geological Survey. It is essential that the senior officers of the department be allowed the flexibility of altering plans, and to meet emergencies as they arise. Accordingly, the practice of allocating funds only for specific projects should be modified in favour of more latitude within the budgetary allotment.

63. An alternative to this would be to allow the director of this and other branches in the department a contingency fund of 15 per cent to 25 per cent of the branch budget for use in meeting emergency programs during each fiscal year.

Personnel

64. It is evident that if the Geological Survey is to discharge its increasing responsibilities it will be essential to increase the present staff of the branch.

65. Just as the recommended increase in the tempo of geological mapping would be impossible without additional qualified geologists so there is a like requirement for an increase in other staff of the survey.

66. Evidence indicates that for every geologist, geochemist or geophysicist the survey requires an addition of at least two chemists, laboratory technicians, secretaries, clerks, etc.

67. A very pressing requirement is the immediate increase in staff of draftsmen and cartographers. There is a serious backlog in map production due to the lack of such personnel.

68. If qualified geologists are not recruited now it is not likely that they will be available in future years due to the rapid rate of absorption by accelerating demands of industry. Evidence indicates that there is stiff competition by industry both in Canada and the United States for the services of trained geologists. Qualified personnel are available now, for the first time in years, and should be recruited now.

69. Serious consideration should be given to incentive plans so that more young Canadians will be attracted toward university study in those scientific fields of endeavour designed to qualify personnel for the work undertaken by this branch and others in the department.

70. In connection with the basic research program, the Geological Survey now makes grants-in-aid to universities for basic research being carried out at those institutions. In 1958 the survey provided grants-in-aid totalling $50,000, but when this is compared with the $2.6 million available to the National Research Council it is evident that funds for such grants should be increased, particularly as geological studies are specifically exempt from N.R.C. allotments.

71. The evidence emphasizes the vital necessity for increasing the overall staff requirements within this branch by 200 continuing employees and 175 seasonal employees over a five-year period. Suggested distribution of increase is as follows:

Geologists	65
Geochemists	12
Geophysicists	10
Cartographers	45
Laboratory Staff	35
Administrative and Clerical	30

72. If these increases are accepted it will enable the survey to complete the reconnaissance scale mapping and reports for Canada by 1970.

73. Essential laboratory facilities should be provided to augment field information as well as for the furtherance of the science of geology in particular and fundamental research generally.

74. With such increases in staff and facilities the detailed mapping and special investigations, which have, until now, lagged so far behind reconnaissance surveys, would become possible.

75. The survey has requested $3,497,226 to cover expenditures for 1959-60. The expansion suggested, carried out over a five-year period and upon reaching fulfillment, will require an estimated cost of $2 million.

Northern Transportation

76. The development of northern Canada requires and must be preceded by new and improved transportation facilities. Prudence demands the assessment of the resources in any given area *before* determining the routes of new roads. It follows that adequate geological knowledge of the areas to be served is essential to effective planning.

77. The future of the Canadian north appears to be dependent on mineral resources, the exploitation of which will substantially contribute to the growth of Canada as an industrial nation. Canada should accelerate the stock-taking of the quality and quantity of these mineral reserves. The first phase of any properly planned program of taking such an inventory of resources is reconnaissance geological mapping. Evidence shows that such mapping will indicate the most likely areas for the production of metals, industrial minerals and petroleum.

Arctic Geology

78. The vital importance of accelerating the pace of Canadian scientific endeavour generally in Canada's Arctic is dealt with commencing at paragraph 99.

79. The Geological Survey's studies of the Canadian Arctic are vital in view of the economic and, recently, military significance of the Arctic archipelago and surrounding ice and waters. No intelligent development of these areas is possible unless the survey greatly expands its work there.

80. Of immediate concern is the necessity to obtain adequate geological information of those areas of our Arctic islands which are now covered by applications for oil exploratory licences or permits. Before any development or exploitation leases may be valued it is imperative that government be aware of all geological facts.

Buildings

81. The evidence indicates myopic planning of accommodation for the survey. The new branch building which commenced construction in 1956

will, it is hoped, be ready for occupancy by 1959. But, well before 1963 the space provided will be inadequate to permit efficient function of the branch.

82. The appalling working conditions which existed for many years in the various quarters housing the branch have been largely responsible for the inability of the branch to retain qualified personnel. It is essential, therefore, to reassess space requirements of the branch with a view to future needs considered in the light of the branch expansion.

MINES BRANCH

83. The information elicited on the Mines Branch was depressing. The branch does not have the funds or the staff it needs to carry out the work it should do and wants to do.

84. The compelling point is the urgency for increased and varied production of minerals and metals in Canada, particularly for on-site processing. This urgency is closely related to the need for more complex and detailed processes and equipment. Private research and experimentation lags in Canada, comparatively, and understandably, in relation to the United States situation. Our Mines Branch must give a lead. Expansion and zest must provide more fundamental research. Figures were available to your Committee on recent and projected expansion of the branch in terms of scientific and technical personnel, equipment, etc. The pace has been too slow, even unimaginative. The projected staff increase for the next five years—150 persons is deemed inadequate.

85. An examination of the record of publishing by this branch, both in government publications and in scientific and technical journals, indicates that it lags behind several of the other branches with comparatively fewer personnel, such as the Dominion Observatories, the Geological Survey and the Geographical Branch. There may be extenuating circumstances for this situation but your Committee recommends that this aspect of the branch's work be examined closely by the senior administration of the department. An active program of publishing reports, studies and experiments is necessary to bring the fruits of the branch's work more to the attention of industry and the public.

86. There is no indication that the branch is doing any studies in the field of conservation of mineral resources. An overall study in this field would be worthwhile, in view of the exhaustible nature of such resources.

87. The research in this branch should be concentrated on the long-range projects. The many and varied problems requiring immediate research should not continue to engage 90 per cent, as it does now, of the resources of this branch. This "first-aid" research should be assumed by private industry. This would free branch resources to deal with such important problems, requiring much research, as developing new alloys to meet the needs, for instance, of supersonic flight, extraction of heavy oils (tar sands), etc.

88. Private industry must be encouraged to undertake much of the research now done by this branch. The branch should gradually free itself from being the crutch upon which private industry depends in matters of research.

89. If the government wishes to continue to provide these research services to private industry (which it should not), and if long-range research is to be undertaken (which it should be), then the resources of the branch must be greatly expanded.

90. It should also be noted that the equipment used by this branch in research projects is costly and a considerable investment is required to enable efficient research.

91. There should be a progressive increase in the resources of the branch of 3 to 4 per cent per annum to continue until the branch is able adequately to deal with demands which flow from its proper function.

GEOGRAPHICAL BRANCH

92. It is apparent that the main difficulty in this branch is in getting geographers, partly due to inadequate members being available, but largely due to the inadequate salaries paid. Your Committee recommends that the government consider providing a stronger inducement in higher salaries in order to strengthen this important part of the department's activities. The main role of the Geographical Branch is to provide geographical information for other government departments. It is apparent that this role will keep expanding with the increasing need and demand for land use studies. Given the necessary funds, the department could play a part in increasing the supply of geographers by a geographical-scholarship program which would take advantage of the increasing number of high school students who are now taking geography.

93. None the less important are the land use and classification surveys which the branch is carrying out. For the geography of the land is constantly changing and in this process of change, development and redevelopment such surveys are vital in providing objective reports of the existing situation from which our national progress can proceed in an orderly fashion. But your Committee is convinced that it would be in the national interest to accelerate this work on a country-wide basis so that we will build up a geographical series of land use maps similar to the series of geological, soils, topographical and forestry maps now in existence. The land use maps should be on scales similar to these other series, ranging from approximately 1 mile to 1 inch to 4 miles to 1 inch in southern Canada and 8 miles to 1 inch in northern Canada. Such a program would not only be of service to the people of Canada but would also be of benefit to those who are concerned with the total world picture and are endeavouring to encourage the individual countries to produce such records.

DOMINION OBSERVATORIES

Geomagnetism

94. A satisfactory network of magnetic stations has been established but the magnetic survey of the Arctic has not yet been completed. A much greater density of stations will be required to meet future demands, not only for general mapping and further geological studies but also for use in conjunction with airborne surveys searching for economic minerals.

95. The success of airborne magnetometers in delineating mineralized areas depends directly on eliminating the effects of magnetic disturbances originating on the sun, which cause induced disturbances within the earth's crust. The records from the fixed magnetic observatories are therefore of paramount importance to the geophysical exploration of the Canadian Arctic.

Gravity—Seismology

96. Gravity and seismological studies have been progressing satisfactorily. It is important to observe that the various gold and base metal discoveries already made in areas like Yellowknife and Rankin Inlet make it practically certain that other discoveries will eventually be made further north, and undoubtedly gravity and magnetic methods of geophysical prospecting will be used extensively. It is also now known that some geology in the Arctic

Islands is favourable for oil, and it will only be a matter of time before the area is fully explored with seismological methods.

97. Of all the branches in the department this one has been the exception. Apart from the airborne magnetometer work a satisfactory situation in staff, space and funds has existed.

98. One of the most disturbing features of the evidence, however, is that budgetary restrictions have been placed on the airborne magnetic work of the branch. This should not be permitted to continue having regard to the important contribution which is made by aeromagnetic surveys to the discovery of new mineral resources.

POLAR CONTINENTAL SHELF PROJECT

99. The Arctic Archipelago, the polar ice cap and Arctic waters are of vital economic and military significance. Large areas of sea-ice may be used as air fields and semi-permanent bases for scientific or military purposes. Submarines are capable of surfacing through the polar ice-cap and in open leads without detection. Similarly, the same possibility exists regarding Hudson Bay and other such areas.

100. Canada's development above the 60th parallel and particularly in the Arctic has seriously lagged over many years. The disregard of the development of these northern areas of Canada over the years has been compounded to the extent that the situation now confronting the government will require emergency measures if it is to be rectified.

101. By contrast, development of similar latitudes in Russia shows a marked advance; so much so that the Canadian government is placed in the position of obtaining most of its Arctic scientific knowledge from information supplied to us from time to time by the Russians.

102. Suggested personnel additions for this work are discussed under Hydrographic Division.

103. A scientific group has now been sent to the Polar Continental shelf to study hydrography, oceanography, geology and other geophysical characteristics of the shelf and adjacent land areas. The expedition this year is in the nature of a reconnaissance. Because of the vital nature of the work being undertaken it is essential that this group be expanded by at least four times next year with steady increases thereafter.

104. The scientific work on the Arctic Ocean Continental Shelf should be a continuing effort until the mineral potential and major physical features of the area are known.

105. In a rapidly shrinking world our sovereignty in the north must be continually reviewed and strengthened. There is no more effective way, no means less costly, and no method intrinsically more useful, of strengthening our sovereignty in the north than by the conduct of thorough scientific field research programs and the publication of their results. The Polar Continental Shelf project is one of such programs.

DOMINION COAL BOARD

106. Your Committee heard a statement by the Chairman of the Dominion Coal Board and learned that the situation of the Canadian coal industry had not improved over the past year, but had definitely grown more serious due to slowing up of industry, conversion of railways from steam to diesel power and competition with other fuels. It was noted that increased subventions

were made available to both eastern and western coal with a greater degree of flexibility allowed the Chairman of the Dominion Coal Board in assisting the eastern coal industry in maintaining present customers, and in the acquiring of new outlets in the province of Ontario. Your Committee was pleased to note that as a result of this policy, and the aggressive action of the Chairman of the Dominion Coal Board in co-operation with Dominion Steel and Coal Company, a recent sale of approximately 700,000 tons of coal resulted, a large proportion of which is to be consumed in the province of Ontario.

107. During its consideration of the estimates of the Dominion Coal Board your Committee heard evidence from Mr. D. B. Young, Manager, Coleman Collieries Limited, Coleman, Alberta, on the problems of the coal industry in western Canada and, in particular, as they relate to the Crowsnest Pass area. Mr. Young indicated that the present depressed condition of the industry is due to the dieselization program of the railways and the competition from natural gas and oil. Mr. Young stressed the importance of preserving at least a nucleus of the industry in western Canada.

108. Your Committee was pleased to note that as a result of research and the trade mission to Japan in 1958, coupled with increased coal subventions, markets were secured in Japan for approximately 100,000 tons of Crowsnest Pass coal and 60,000 tons of Canmore coal to be used in carrying out further tests from a coking standpoint in both the steel and water-gas industries. Your Committee recommends that further scope be given the Dominion Coal Board with regard to future negotiations in Japan, and that consideration be given to allowing the board to negotiate future sales to industry in that country on a 3-year basis at present subvention rates.

109. Your Committee is aware that the Maritime Coal Production Assistance Act is at present without funds. It is further aware of an application before the Dominion Coal Board for consideration of a wash plant in the Cape Breton area of Nova Scotia. Your Committee recommends that consideration be given to introducing legislation similar in nature and scope to the Maritime Coal Production Assistance Act, however enlarged, to cover the whole of the Canadian coal industry.

110. Your Committee learned with regret of losses of coal markets in both western and eastern Canada through a lack of liaison between the coal producer and the consumer. Your Committee recommends that every possible effort be made to ensure that this situation is corrected.

111. Your Committee noted that the recent conference held between the federal government and the government of Nova Scotia was only the first of a series through which medium it is proposed to bring forth a long-term coal policy for the maritime provinces, and your Committee commends both governments for their efforts in this regard.

112. Your Committee records its high opinion of the obviously great scientific and technical skill of the senior officials of the Department of Mines and Technical Surveys, and its appreciation of the assistance given to it by the Minister and his officials and by the Chairman and the officials of the Dominion Coal Board.

113. A copy of the Minutes of Proceedings and Evidence in respect of the said estimates is appended.

Respectfully submitted.

J. W. MURPHY,
Chairman.

MINUTES OF PROCEEDINGS

MONDAY, May 25, 1959.
(29)

The Standing Committee on Mines, Forests and Waters met *in camera* at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Baskin, Cadieu, Coates, Doucett, Fleming (*Okanagan-Revelstoke*), Godin, Hardie, Korchinski, Kindt, MacRae, Martel, McFarlane, McGregor, McQuillan, Murphy, Nielsen, Payne, Robichaud, Simpson, Stearns and Woolliams—(21).

The Committee considered the draft of a report to the House on the 1959-60 estimates of the Department of Mines and Technical Surveys. The said draft report had been considered and revised by the Subcommittee on Agenda and Procedure which had recommended the draft as revised to the Main Committee.

Certain revisions were made to the draft report.

Not having completed its task, at 11.45 o'clock a.m. the Committee adjourned until 3.00 o'clock p.m. this day.

AFTERNOON SITTING

MONDAY, May 25, 1959.
(30)

At 4.20 o'clock p.m. this day the Standing Committee on Mines, Forests and Waters resumed, *in camera*, its consideration of the draft of a report to the House on the 1959-60 estimates of the Department of Mines and Technical Surveys, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Cadieu, Fleming (*Okanagan-Revelstoke*), Hardie, Korchinski, Martel, Martineau, McFarlane, Murphy, Nielsen, Payne, Simpson and Stearns—(12).

The Committee made further revisions to the draft report and adopted it as revised.

It was unanimously ordered that the report as revised be presented to the House.

At 5.25 o'clock p.m. the Committee adjourned until 10.00 o'clock a.m. on Tuesday, May 26, 1959.

Eric H. Jones,
Clerk of the Committee.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
JUN 4 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 26

TUESDAY, MAY 26, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

WITNESSES:

Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; Mr. J. D. B. Harrison, Director, Forestry Branch; and Mr. E. A. Côté, Assistant Deputy Minister.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21302-5—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, May 26, 1959.
(31)

The Standing Committee on Mines, Forests and Waters met at 10.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Coates, Doucett, Fisher, Fleming (*Okanagan-Revelstoke*), Godin, Hardie, Korchinski, Kindt, MacRae, Martel, Martineau, McFarlane, McGregor, Murphy, Nielsen, Robichaud, Simpson, Stearns and Woolliams. (20)

In attendance: Messrs. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; E. A. Côté, Assistant Deputy Minister; J. D. B. Harrison, Director, Forestry Branch; D. R. Redmond, Chief, Forest Research Division; H. W. Beall, Chief, Forestry Operations Division; G. M. Carty, Chief Administrative Officier; M. A. Currie, Administrative Officer; J. D. McLeod, Chief Engineer, Water Resources Branch; and A. F. C. Sincennes and G. A. Lahaie, Administrative Officers, Water Resources Branch.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Item 281, Forestry Branch, Branch Administration; the said item was approved.

The Chairman recorded that on the preceding day members of the Committee had made a tour of the Forest Products Laboratory in Ottawa which had proved to be most interesting, and had had luncheon there. On behalf of the Committee the Chairman expressed appreciation of the said tour and luncheon.

Items 282 to 291 inclusive, concerning the Forestry Branch, were severally called, considered and approved.

The Committee reverted to the items of the estimates concerning the Water Resources Branch. Items 271 and 272 were severally called, considered and approved.

On Item 273, Studies and surveys of the Columbia River Watershed in Canada, Mr. Robertson made a statement on the progress which had been made on the Columbia River negotiations by the International Joint Commission; the said item was approved.

The Committee reverted to and re-opened Item 271 for further consideration. Copies of a submission by Messrs. D. R. Gundlock, M.P., and E. W. Brunsden, M.P., were distributed to the Committee; the said submission was read into the record of this day's proceedings. Item 271 was confirmed as approved.

Item 274 was called, considered and approved.

Item 275, Branch Administration, Northern Administration Branch, was called and allowed to stand for consideration at the next meeting.

At 12.05 o'clock p.m. the Committee adjourned until 9.00 o'clock a.m. on Wednesday, May 27th, 1959.

Eric H. Jones,
Clerk of the Committee.

21302-5—1½

EVIDENCE

TUESDAY, May 26, 1959.
10 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Would you please come to order.

I think the members of the committee would like to have our visit to the Forest Product Laboratory yesterday recorded in our proceedings. Members who attended formed a very favourable impression of the laboratory itself, the organization and the personnel of that division of the department. On behalf of the committee, I would like to say how much we appreciated the opportunity of making the visit and everything that we saw in the new laboratory. It will provide a great contribution toward the work it has been set up to do. We also enjoyed having a very tasty lunch. The members are very grateful and highly appreciative of Mr. Harrison and Mr. Jenkins for arranging the visit.

Agreed.

The CHAIRMAN: We are on item 281 of the Forestry Branch. We have spent several days on this particular item.

Mr. FISHER: Does that concern the Forestry Branch?

The CHAIRMAN: Yes.

Item agreed to.

The CHAIRMAN: The next is item 282—operation and maintenance.

FOREST RESEARCH DIVISION

Item No. 282. Operation and Maintenance ..... $ 1,470,567

We have had a marvellous review of the Forestry Branch, but if there are any questions, do not hesitate to ask them.

Item agreed to.

The CHAIRMAN: Item 283 is next.

Item No. 283. Construction or Acquisition of Buildings, Works, Land and Equipment ..... $ 123,240

Mr. FISHER: With what is that concerned?

The CHAIRMAN: The construction or acquisition of buildings, works, land and equipment. The amount is approximately $40,000 less than it was a year ago.

Item agreed to.

The CHAIRMAN: Item 284 concerns administration, operation and maintenance of the Forestry Department Division. The amount is approximately $40,000 more than it was a year ago. Is there any comment on that item?

FORESTRY OPERATIONS DIVISION

Item No. 284. Administration, Operation and Maintenance ..... $ 343,468

Mr. FISHER: At the present time how many professional foresters have you in the high grades?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Are you referring to the forestry operations alone?

Mr. FISHER: Yes.

Mr. J. D. B. HARRISON (*Director, Forestry Branch*): There are nine in the forestry division and they are forestry officers grade 3 and upwards.

Mr. ROBERTSON: The operations have been relatively restricted since 1930. In 1930 the forest resources of the prairie provinces passed over to the province. Now we are at a stage where we are going to have to increase the operation side again because some of the forest resources of the territories are becoming of commercial significance.

Mr. FISHER: From a top level point of view did you give any consideration to going out and recruiting some of the foresters who have been in the industry and bringing them in at a fairly high level? I bring this up because I am more and more convinced after spending a week-end talking to a number of foresters that we have still this basic split between the industrial foresters and the government foresters; and when I say a basic split, it is a difference in attitude and objective. I think, if on the higher levels you could get a couple of experienced people in, such as the chief foresters of large pulp and paper companies or lumber companies, you might inject what the industry tends to think is realism into your operations and at the same time improve the relationship.

Mr. HARRISON: Well, in connection with chief foresters of companies, I am afraid there would be certain questions about the financial incentive. So far as I am aware, the paying rates would be pretty high by our scale. We have no direct operations ourselves, except on a very small scale. The other functions in regard to forest management and the forest operations division are advisory and mainly have to do with forest surveys, the formulation of working plans and providing technical advice to other organs of the federal government who are actually administering the forests. Therefore, it is difficult to see how we could use a very senior man from industry in that particular field, because our main job up until now has been to assist with production.

Mr. FISHER: They have been also working more and more toward forest management in long-term planning and I was just wondering if there is not more of a role for you to play.

Mr. HARRISON: That might develop, but I do not think we are quite there yet.

Mr. FISHER: If you have not produced an economic survey in your department in connection with that, you are allowed to, or encouraged to, are you not, by the legislation?

Mr. HARRISON: The economic studies?

Mr. FISHER: Yes.

Mr. HARRISON: Well, we have been able to undertake only one extra study with industry. There has been a lot of work done in connection with the Bureau of Statistics. They have trained forest economists and they work directly with the top foresters and management of companies. It works out very well indeed.

Mr. FISHER: Is it not ironical that we have this large industry and there are no more than three—can you name more?—forest economists in Canada or economists who specialize in the forest industry?

Mr. HARRISON: We have three in our own section and another one is coming in. In connection with professional economists on the outside, yes, I could name three.

The CHAIRMAN: Does that include industry?

Mr. HARRISON: Yes, that includes industry. There are a lot of men in industry who have hit certain aspects which might be called forest economics.

The CHAIRMAN: Is there a university course for that?

Mr. HARRISON: Yes, post-graduate. The men generally take forestry and then go on to an economics masters degree.

Mr. FISHER: When I scan the literature in the field I notice more and more that the Americans are producing economic studies not only of the large-scale ones, but also the smaller ones within a regional framework, and this sort of thing; and it appears to me we should be doing more than we are.

Mr. HARRISON: So far as the United States forest service is concerned, they have a large economics division which is represented at the various forestry experimental stations outside of Washington as well as at headquarters; quite a few of them are economists. That division, or a large portion of it, is due to the fact that in the United States the national inventory of forest survey is carried on by the forest experimental stations and is part of the economics division. It is a big routine job. I entirely agree with you that the time is coming quickly when we will have to have much more in the way of economic analysis, especially with different kinds of forest treatment coming in, to judge the merits of alternative procedure.

Mr. FISHER: I have one more question in connection with forestry. In connection with the regeneration encouragement and regeneration plans under the Canada Forestry Act, has any consideration been given to broadening that, so that some of this money that may go for regeneration practices could be spent on crown lands of the province that is licensed to companies?

Mr. HARRISON: Yes, thought is being given to that. Representations have been made by certain provinces, notably our own, and the agreements, as they stand now, are up for revision in 1961. No doubt at that time there will be a conference and decisions will be taken. However, the matter is actively under consideration.

Mr. FISHER: If this should develop, taking Ontario as a model, would you not agree that the scale of contributions would probably skyrocket to a certain extent—that is, if there was a moving ceiling?

Mr. HARRISON: You mean the amount?

Mr. FISHER: Yes.

Mr. HARRISON: Yes, of course it would skyrocket. The problem is what best could be done with the funds made available to the Forestry Branch for assistance to the provinces. The original decision was that we should concentrate on industry and, no doubt, that was the right decision. At that time it was decided that we should do a little in reforestation as an experiment to see how many provinces wanted it and then we would move into the capital assistance requirements. Those things have been successful but they are constantly under review.

Mr. FISHER: I have one last bit of criticism that was brought to me by two different people who have left the forest service. It had to do with your recruiting plans and the way you have gone about acquiring specialists in certain fields from foreign countries. Now, I tend not to go along with their general line of thinking, but is there any possibility that in recruiting outside of Canada—and perhaps this is because you can get people from outside to come in at the lower scale of wages—that you may be cutting off opportunities for Canadian foresters?

Mr. HARRISON: The only cases in which we bring in men and are allowed to do so by the Civil Service Commission, is when men of the requisite training are not available in Canada. Now, there may have been certain comments made. Certain men have certain ideas about their own standing, but all these cases are carefully examined. Preference is given definitely to Canadians.

Mr. FISHER: I have another question, but it is on the order paper—I hope it is.

The CHAIRMAN: Have you a question, Mr. Kindt?

Mr. KINDT: I would like to add an additional thought to that brought out by Mr. Fisher in connection with the university training in the United States in regard to forestry economics. The question of marketing, economic uses of the forest, cost studies of different types of forests, regeneration studies, and so on, are all taught. I took my forestry economics from Mr. Kirkland, a United States forester, and we went into all of those matters. I was later connected with studies in connection with it, and so I partly agree with you that studies of that kind should be taught in Canadian universities. The time is not far distant when more extensive studies of that kind will need to be undertaken here in Canada.

Mr. FISHER: The Scandinavian countries are producing economic and work studies which we do not seem to have touched on at all.

Mr. HARRISON: I would like to clarify one thing. At two Canadian universities, and possibly three, it is now possible to take post-graduate degrees in forest economics by a cooperative agreement between the forestry school and the economics department of the university. Some pretty good products have come out of these universities, but they are few in number because the opportunities for employment have not been available.

Mr. FISHER: What happened to fellows like Wilks who, you might say, is a forester and economist? We only seem to toss up an interesting job like that once in every two hundred times.

Mr. HARRISON: Well, I am very reluctant to discuss individuals. We have three very well trained men on the staff at the present time. It may interest you to know that one of them departed to the United States; he hought the grass was a good deal greener there. He did not put in twelve months there before he was applying for a vacancy we had. He is now coming back; therefore, working conditions cannot be too dreadful.

Mr. KINDT: I have one other point in connection with the whole field of general economics. Any person studying general economics must get his principles first and then his forest economics. Agricultural economics and his different branches and fields of economics are simply additional studies probing into this particular economic field; but first of all he has to get his principles.

Mr. HARRISON: Well, in the whole field of forest economics—and I happen to know the top men in Europe and in the United States—there is quite an argument, which I think is connected with the stage of development in which we are, about whether it is best for a man going into forest economics to take forestry first and then economics on top of it. There has been a tendency so far to favour the man who takes his forestry course because there is so much specialized language and so much depends on a recognition of what stage of development we are really at. If that is followed, then we can more fruitfully study economics and fit it into the Forestry Branch. I worked in the field myself. There is general favouritism for the course I outlined, and it may be changed.

Mr. FISHER: Was it a shocker to you when Mr. Moore came up with his book on forest taxation and tenure to find that here was an approach by an economist that almost denied sustained yield as something that should have an economic appreciation?

Mr. HARRISON: To be quite candid, I do not agree that was what Moore had in his mind as a definition of sustained yield because the alternative he gave, which is continuation production, to my mind is a very good definition

of sustained yield. His difficulty in connection with sustained yield was that he thought if you are operating at all you had to take each patch of forestry and work it on a continuation production cycle, which is rubbish. You do not. If a paper company has several thousand square miles that can be worked, it is a sustained yield operation; on the other hand a province could lay out a district and never sell more than one square mile of timber at a time and yet operate the whole district on sustained yield. In connection with that argument, I think the trouble with Moore was his definition.

Item agreed to.

Item No. 285. Construction or Acquisition of Buildings, Works, Land and Equipment ..... $ 36,330

Item agreed to.

Item No. 286. Contributions to the Provinces for assistance in forest inventory, reforestation and forest fire protection in accordance with agreements entered into by Canada and the provinces ..... $ 2,200,000

Mr. FISHER: Do we have the figures showing how much went to Quebec?

Mr. HARRISON: The province of Quebec has not participated.

Mr. DOUCETT: Where does the $550,000 increase come from; is that just an average over the total expenditure?

Mr. HARRISON: The agreement which was made over two years ago with respect to forest fire protection provided for the contribution of federal money to assist in the purchase of capital assets, fire equipment, lookouts and the like, and the plan accepted was that in the first year the contribution would be $500,000 for Canada, $750,000 last year and $1,250,000 this year. That is where this increase comes in. Next year the figure will be $1,250,000.

Mr. FISHER: So that is divided among the different provinces?

Mr. HARRISON: Yes, proportionately.

Item agreed to.

Item No. 287. Contributions to the Provinces pursuant to agreements entered into with the approval of the Governor in Council, by Canada with the Provinces, of amounts equal to one-half of the amounts confirmed by the Provinces as having been spent by them in establishing forest access roads and trails for the attainment of adequate fire protection as well as other aspects of forest management ..... $ 1,000,000

FOREST PRODUCTS LABORATORIES DIVISION

Item No. 288. Operation and Maintenance ..... $ 820,097

Items agreed to.

Item No. 289. Construction or Acquisition of Buildings, Works, Land and Equipment ..... $ 68,190

The CHAIRMAN: Gentlemen, there is a reduction there from $259,260 to $68,190, a reduction of approximately $191,000. I think we should have a comment in connection with that.

Mr. HARRISON: The sum for last year was a residual amount required to complete Canada's commitment to provide the sum of $2,250,000 for the erection of a pulp and paper laboratory for use by the Pulp and Paper Research Institute of Canada. That commitment has now been fully honoured and it does not exist any more. This goes far to explain the great reduction in this amount.

Mr. MCFARLANE: Mr. Chairman, I would like to ask a couple of questions under item 289. Could the deputy minister tell me whether or not Wood Buffalo national park comes under the national park requirements?

Mr. ROBERTSON: Yes.

Mr. McFARLANE: In this park we have three firms that are lumbering and taking out over 26 million feet of lumber. Who is paying for the roads into these commercial areas?

Mr. ROBERTSON: There are two types of roads being built. One type is for the administration of Wood Buffalo park and is similar to what we do in the national parks elsewhere for warden trails, fire protection and that sort of thing. Then there is a second road under construction which ultimately we hope will link Fort Smith with the provincial highway system, probably at Vermilion Crossing. This road is being built to a higher standard than the parks maintenance road. But if you are thinking of any roads that are for the operations of these companies, they have to do anything that they require in their particular area.

Mr. McFARLANE: Well then, do I understand that they are paying for the construction of these roads into their lumber operations?

Mr. ROBERTSON: In their own areas we are building the roads that are needed for parks operation and administration.

Mr. McFARLANE: The point I am getting at is this. The lumber industry is taking out of this park approximately 2 billion feet or a little more. Are they building their own roads into their operations?

Mr. ROBERTSON: Well, some of the roads that we have to build are used by them in their hauling operations just in the same way as some of the roads that are built for provincial purposes are used for lumber hauling; but the actual roads they require for their work have to be built by them.

Mr. McFARLANE: Well now, I understand, sir, that there are also three bridges built in connection with this lumber operation; could you tell me if these bridges are being built by the lumber companies or by the parks department?

Mr. ROBERTSON: I do not know what bridges those would be, I am afraid. The only bridges I know of off hand would be bridges—I have seen some of them—on the road that I spoke of that is linking up Vermillion Crossing. There might be creeks, or something, on some of the other roads: I really do not know.

Mr. McFARLANE: The angle I am getting at is the fact that I have been endeavouring for some time, through the National Parks Board, to obtain permission to build a road through one of the other parks, and I feel that if it applies in the case of Wood Buffalo National Park, it should also apply to all other parks.

Mr. ROBERTSON: There are no roads being built by us for the purposes of these companies. The situation in the park is different from any other national park because—I suppose it is a result of nature—there is a very large forest stand along the Peace river—Mr. Harrison is better acquainted with this than I am. It is along the lower Peace and certain of the other tributaries that flow in at that point. There is an exceptionally large stand of homogeneous timber—homogeneous age—virtually all of it over mature, and almost all of it in the kind of condition that unless something is done to remove substantial amounts, it is going to go back, die and be destroyed.

In the other national parks this kind of thing is handled by the parks service, because usually it is on a small scale: it is what we call sanitation cutting, that is done to keep the forest from getting over—age and then going back through destruction, and so on. In the case of Wood Buffalo National Park, because of this accident of nature and this vast forest of homogeneous age, and because we have not a parks service there on the same scale as we have at others, it has had to be handled on a quasi-commercial basis. I say "quasi-commercial" because there are restrictions that would not apply if it were not a park.

We do not build any roads particularly for the purposes of this operation at all, but there are roads that are built for parks purposes which are of use in hauling. But most of the lumber movement is done by river; it is not done by road at all.

Mr. McFARLANE: I do not know whether I am making this quite clear or not; but the lumber company is constructing roads in that park to get the lumber out?

Mr. ROBERTSON: Just in the area where they have been given the right to develop.

Mr. McFARLANE: That is the point I am after. Thank you very much.

Mr. COATES: How is the lumber company selected?

Mr. ROBERTSON: Tenders were called. I have forgotten when the last tender call was. It was three years ago, I am told.

Mr. COATES: And the firms that are now working in the area were the lowest tender?

Mr. ROBERTSON: It was not the lowest tender, no.

Mr. COATES: The highest?

Mr. ROBERTSON: No, not the highest either. What was called for was a tender that would involve the establishment of a lumber industry in the northern part of the province, or the southern part of the territory, because we had in mind the matter of encouraging industry in that area.

One of the companies that tendered was not prepared to establish an industry there; it wanted to remove those logs, I think to Edmonton, for processing. The other company would establish and is establishing an industry at Fort Fitzgerald, in Alberta. That one, because it would establish an industry there—which was one of the conditions in the tender—was given the concession.

Mr. COATES: Where did the tender stand in relation to the other tenders?

Mr. ROBERTSON: They offered less on a stumpage basis, but I have forgotten the figures at this moment. There was not a substantial difference; they were lower, but they agreed to establish an industry in that corner of the province rather than simply bringing the raw material out to the south.

Mr. McFARLANE: In view of the fact that there are, in a good many of our parks, substantial stands of mature timber that have to be logged out—after all, our timber growing is over a period of years—should we not give some consideration to logging out this mature timber? How much of it is seen by our travelling public?

I am speaking specifically now of the Kootenay National Park and the Yoho National Park. Generally, when you stop at any one of those places you are advised to keep the windows of your car closed, and in one or two cases, people who have not done this have been very seriously injured. They are advised to stay in their cars. How much of our parks are being seen beyond what they see outside a main highway? Would we not be wise to develop our parks and take off a lot of this mature timber?

Mr. ROBERTSON: The purpose of the parks is not only the matter of being seen by the tourists or visitors who go there, but another part of it is supposed to be to retain these areas as wildlife and fauna refuges—if you want to put it that way—in something like a state of nature.

You cannot do that very sucessfully if you have lumber extraction on anything like a normal commercial basis. As I say, we do take out a great deal of lumber in the various parks by using our parks administration; but they do it on a highly selective basis, which a commercial company simply could not do. They would go broke if they tried to do it that way. Certainly, our feeling has been that it would be undesirable to go beyond that sort of selective controlled approach in handling this kind of thing, because it would

not fit in with the purpose of the parks in trying to keep these areas as areas in a state of nature, really. We do not keep them purely in a state of nature. In a state of nature there would be fires every now and again—we try to prevent the fires, and to offset that we have to have sanitation cutting.

Mr. FISHER: On the same line, Mr. Chairman; could we do this better? A forest comes to maturity and then it begins to go to pieces: are you sure your sanitation cutting is meeting that particular requirement? It seems to me that when a forest reaches maturity—I am all for seeing it cut—in so far as the state of nature is concerned, I certainly imagine that your forest management plans for a park, if they were well laid out, that would not make that much difference.

I think you will agree that, after a cut, in many places conditions are improved for various kinds of fauna, and the rest—especially deer and other animal populations, rabbits, and that sort of thing. There is quite often a step-up after a cut, especially within a decade. I would just like to go along the same line as the other member of the committee was questioning on, to see whether you could not expand your cutting operations in this particular way to take advantage of timber that has reached maturity.

Mr. ROBERTSON: This, I may say, has been the subject of a good deal of debate within the department and within the Parks Branch and the Forestry Branch. One extreme view is that "state of nature" means "hands off", you do not do anything at all. This view cannot be accepted altogether, particularly when we have forest fire control, because that means we are not having a state of nature condition absolutely.

The other view is more or less along the line that has been suggested here. In effect, what we have at the present time is a compromise. But it could well be that the sanitation cutting does not go far enough at the present time.

Mr. FISHER: We have talked about American examples. Of course, they have more park land under their control, but is it not the fact that they do more commercial cutting?

Mr. ROBERTSON: I do not think so. I think it is rather the reverse.

Mr. HARRISON: I think they are more rigid than we are. They are very strong on no cutting in the parks. That is not the case in some parks in Europe, but it is in America.

Mr. FLEMING (*Okanagan-Revelstoke*): Is it not correct that—in the mountain parks particularly, where a great deal of this timber is located—you would have to have a full scale operation to justify the high cost involved in bringing out this timber from the high terrain? In other words, sanitation cutting is not economical, from a commercial point of view, in these mountain regions, where the cost of getting the timber out is so high?

Mr. ROBERTSON: That is right.

Mr. FLEMING (*Okanagan-Revelstoke*): And in that regard you would be tending to defeat the purpose of the parks, in the mountain regions where the cost is so high?

Mr. ROBERTSON: That is our concern.

The CHAIRMAN: Item 289 agreed, gentlemen?

Item agreed to.

Mr. DOUCETT: Mr. Chairman, the other day I made inquiries—with regard to the evidence on pulp and paper—and I asked a question concerning what, if anything, was being done regarding the white pine stand that used to be on the upper Ottawa valley, Madawaska and Bonnechere, and if there was any possible chance of that very important species of pine being replanted, or of something being done to bring it back in that area.

Anybody who knows anything about forests knows that some of the finest forests in the early days came from that area. In fact, all those lands that were privately owned had the pine rights reserved on the properties. I was just wondering if the government is giving any attention to this or has made any survey, or if there is any possible chance of that great area that was denuded several years ago being reforested, or anything coming of that type of forest again.

The CHAIRMAN: Is that crown land, or privately owned land?

Mr. DOUCETT: Some is crown land and some is privately owned; but there are thousands of acres of crown land in those areas.

Mr. HARRISON: The history of what happened in the white pine stands in the Ottawa valley and adjacent areas has been touched on. It was a magnificent stand when Philemon Wright settled across the river, and it had some of the finest timber we ever will see. A great many of those trees were 250 years old and upwards.

I do not suppose we will ever intentionally grow timber in 250 and 300 year rotations again; it just takes too long and costs too much money. A great deal of that forest was logged, and unfortunately a great deal more of it was burned. Thirty or 35 years ago it was pretty well accepted that you could not get white pine regeneration without fire; it just naturally came in after fire, sometimes. That was not a very bright outlook.

It has been demonstrated, in the interim, that white pine will regenerate very well indeed on certain forest sites; on others, it comes in with the greatest difficulty. I think we did about the earliest work on that at the Petawawa forest experimental station, and we got it to regenerate all right, here, but not there, so to speak.

Since that time a lot of research work has been done to establish those forest conditions where it will regenerate well. The Forestry Branch has done a lot of experimental work on white pine. The Ontario Department of Lands and Forests is very keenly interested, and through the investigations that have been made and through the inventory that Ontario has carried out—with federal assistance, in recent years—a pretty good picture has emerged of what the white pine resource now is. There are a few stands of the big, old timber left, and they will not last long—that is sure. There is quite a surprising amount of young forest coming in: there are some beautiful examples, for instance, in Algonquin Park, which I have seen. But it is going to take a long time yet—perhaps another 50 years—for this young material to mature to a size that is worth logging.

Very little second growth, I suppose, is being cut; but it cannot be much. The Ontario Department of Lands and Forests has an area—I think it is 1,000 square miles, but it is a large area, anyway—which is just in Algonquin Park and just adjacent to our Petawawa forest experimental station across the river. They are testing different forest methods of managing the younger white pine there and are giving it pretty intensive treatment. I will put it this way: we are never going to see the magnificent old stands of enormous trees, because it takes too long to grow them in this modern age. On the other hand, a great deal of attention is being given to the question.

There is one other point I should mention. You mentioned planting. Planting white pine has, up to now, been an exceedingly dangerous procedure and people, generally speaking, do not do it except under special conditions. One of the reasons is the attacks of blister rust, which is not one of the most important things. The important one is the white pine weevil. This is an insect which—as the word implies—attacks the young tips of the tree. A good deal of experiment has been carried out to find conditions where you could plant safely and where there is a certain amount of shade. If the

plantations are wide open, you are going to get weevils and lose your plantation. In that connection, the Department of Lands and Forests of Ontario has been concentrating on developing strains of white pine for planting that may be blister rust resistant and, perhaps, weevil resistant also. Also, there is this experimental work done in Petawawa, and there is the closest contact between those two agencies.

Mr. DOUCETT: Would you say the white pine is a more delicate tree and more difficult to grow, and it grows more slowly than other species of pine; and would it be possible to utilize it in less years than the old, original stand of pine?

Mr. HARRISON: We will certainly have to do that; but in 100 years, on a good site, you can grow a very substantial tree—I cannot say, offhand, how big; but it would be a good, big, solid tree—and I would not say it was delicate, except to the two things I mentioned.

Mr. DOUCETT: But would blister rust and weevil affect it more than other types of pine?

Mr. HARRISON: Yes, it is much more susceptible.

Mr. FISHER: Is Mr. Heinburger the only man who is working on it?

Mr. HARRISON: Of course, Dr. Heinburger used to be with us. He works on the soft pine, the white pine, poplars. Our people are concentrating on the hard pine, red pine and spruce. But there is the closest cooperation between the two, which makes a pretty effective team.

Item No. 290. Grant to Canadian Forestry Association	**$ 20,000**
Item No. 291. Eastern Rockies Forest Conservation Board—Remuneration and Expenses of the Federal member of the Board	**$ 5,575**

Mr. MCFARLANE: I am speaking now specifically of the Kootenay and the Yoho parks. Due to their geographical location and the restrictions that are being put on the roads through the parks, we are having considerable difficulty in handling traffic through the northern part of the province. We have the Yoho park and the Kootenay park, and we have two highways through there, with the trans-Canada highway going through the Yoho park and a secondary highway going through Kootenay park.

At the present time there are two bridges in the Kootenay park, with a carrying capacity well under what the lumber industry situated west of the parks can economically take over those two bridges. I understand there has been a certain amount set aside this year to either replace the bridges or increase the carrying capacity. The lumber industry on the western section of the parks is not able to use this road through, and it necessitates that they travel 100 miles south, or 100 miles north, either to connect up with the trans-Canada highway or with the southern trans-Canada highway in the south. I think we should give some consideration to this, because I believe when the parks were first established it was quite in accord with the times; I do not believe they looked forward to the time when we were going to have the trucking industry handling our lumber from British Columbia. But we have reached the stage now when 20, 30 or 40-ton trucks on our roads are recognized, and I feel it is stifling the industry west of the Yoho and the Kootenay parks, and I am not too happy about the situation. Driving a truck an extra 100 miles would increase our costs, and we are in a very competitive market. I feel that if the lumber industry up in the northern section can travel over a good road, they can compete with other lumber industries elsewhere.

Would you give consideration to this? There are two bridges, one at 61.4 in Kootenay park, and another one at 62.4, which I think could be strengthened or renewed so we could handle traffic through that area. We recognize the trucking traffic is here to stay, and I think we should do something about it.

Mr. ROBERTSON: Mr. Chairman, I agree with the last statement made by Mr. McFarlane: we recognize that the trucking traffic is there and we have to do something about it. For park purposes, we would prefer it was not so; but it is, and there it is. I do not gather there is any difficulty in Yoho park; the trans-Canada highway will be able to take anything and everything, once it is through there. In fact, it is through, I think, now.

Mr. MCFARLANE: Yes, it is through there now.

Mr. ROBERTSON: The two bridges that Mr. McFarlane refers to are on what we call the Banff-Windermere highway.

Mr. MCFARLANE: That is right.

Mr. ROBERTSON: There was an investigation made into the question of strengthening those bridges to see if their load factor could be safely raised. According to the engineering advice we received, this could not be done, except at a cost that would be completely out of line, and we were advised that the right course was to replace the bridges.

The appropriations this year—unless my memory fails me—do include the replacement of one bridge. The second bridge is not provided for this year. I would expect it would be provided for next year.

This means a one-year delay in the operation; I recognize that. But the road construction was started at the Mount Eisenhower Junction in Banff and has been working southward. Of course, there is no provision this year for a second bridge, and I do not think it could be done even if we were to try to upset the construction schedule. But one is to be provided this year, and one next year, if my memory is correct.

Mr. MCFARLANE: I think you are right there; but it is unfortunate they are stopping just four tenths of a mile short of this second bridge, which would enable us to open up this end of the country considerably. As I said, we are in a very competitive industry, and we are having to transport lumber 100 miles north or 100 miles south, which is quite an item.

Mr. ROBERTSON: They probably stopped short of that bridge because they had not a bridge designed at this point, and the bridge design people could not take it on. That may well be the reason; I do not know for sure; but that is the plan, and we cannot alter it at the present time, unfortunately.

Mr. MCFARLANE: I would just like to bring it to the attention of the committee so, if we can do it, it is not forgotten next year.

Mr. ROBERTSON: I can assure you that we will not forget it next year, Mr. McFarlane.

Mr. MCFARLANE: Thank you.

Mr. ROBERTSON: Particularly not now.

The CHAIRMAN: I think your arguments should be effective, Mr. McFarlane. Are there any other questions on items 290 and 291?

Mr. STEARNS: Is item 290 the grant to Canadian Forestry Association?

The CHAIRMAN: Yes.

Mr. STEARNS: I would like to say a word on that. In this pamphlet, *Our Forests—Riches That Grow*, one paragraph says: "Public education programs are conducted through all possible . . ."—

The CHAIRMAN: Will you identify the pamphlet?

Mr. STEARNS: Yes. It is the pamphlet you gave me this morning, Mr. Chairman, *Our Forests—Riches That Grow*, and it is page 7, about two thirds down the page.

The CHAIRMAN: This is from the annual report.

Mr. STEARNS: Up until a year ago the federal government contributed only $10,000 a year to the Canadian Forestry Association; last year they raised

it to $20,000. That amount is not anywhere near enough. We have reorganized the Canadian Forestry Association within the last few months into a federation. I am able to speak for the province of Quebec. In the province of Quebec, the Quebec Forestry Association is the sponsor of all the 4-H clubs. We have over 400 clubs in the province now. We teach the boys and girls forest conservation. It seems to me that a contribution of only $20,000 by the federal government is not anywhere near enough if the government is serious in wishing to educate the youth of today in forest management, tree farming and so on. Perhaps it should be more in the neighbourhood of $100,000. This amount would be well spent by the Canadian Forestry Association through the different members of the federation which have been just formed. I wanted to get that point on the record. I think it is tremendously important, and I think that $20,000 is simply giving lip service to something that is not going to help us educate our children in forest administration.

The CHAIRMAN: We will have a statement from the department. Perhaps the deputy minister would make a comment.

Mr. ROBERTSON: Perhaps Mr. Harrison could say more than I about forestry. Of course, in connection with the level of grants, this is a matter of policy for the government and not simply a departmental policy. All of these grants depend on government decision in relation not simply to one association or organization in isolation, but there are general policies on grants of this kind.

The doubling of the grant was in the direction that Mr. Stearns wants but not to the extent that he wants it. Is there anything you can say, Mr. Harrison, in connection with the association operations and so forth?

Mr. HARRISON: Mr. Chairman, as Mr. Stearns has already pointed out, the society has recognized itself. They had their annual meeting on March 31 last. They reconstituted themselves as a federation. The Canadian Forestry Association itself then becomes the organ of the various provincial and/or regional forestry associations, which have been established gradually, the general idea being that the C.F.A. itself, with head office in Montreal, will foster and encourage forestry in a manner in which it can best be done, and the various provincial or regional bodies will maintain local contact with the problems. The association is nearly 60 years old. It started purely as a public effort. It was the unofficial voice of forestry in Canada. Over the years it has obtained support from industry. The grant from the federal government has been mentioned, and some of the provinces contribute quite substantially to the provincial organizations. The new set-up will function in a much clearer way than it has up until now. The president is appointed annually and holds practically a full-time position. He is a very able man.

As the deputy minister has said, the question of the size of the federal grant is a matter for the government, but these questions are subject to review from time to time. The picture of C.F.A. will be much clearer some months from now than it is at the present time.

Mr. FISHER: Is the Canadian Forestry Association a publisher of the magazine *Forest and Outdoors*?

Mr. HARRISON: Yes.

Mr. FISHER: Does any of this grant go toward that publication, or is it self-sustaining?

Mr. HARRISON: An effort is made to keep it self-supporting. They have had a drive on recently for more advertising.

Mr. FISHER: I have not been impressed by the forestry aspect of this magazine. It seems to me that its trend is more toward the American type of fishing and hunting magazine, and the proportion given to forestry seems

slight in connection with the rod and gun aspect of it. I know they are related, but I have to defend the forest aspect of it. It is a magazine supported by government subsidy?

Mr. HARRISON: There is no government subsidy for *Forest and Outdoors*. I might add that when the government increased its grant last year there were no strings attached to it, but the view was expressed by my minister that this was in recognition of the excellent work done by the C.F.A. in promoting the tree farming movement in Canada.

Mr. STEARNS: That is why I brought the matter up. I know nothing can be done this year and Mr. Harrison says we will know a great deal more about the Canadian Forestry Association a year from now. I would like to point out that if our government is going to help the forestry associations, they have to do it to a much greater degree than in the amount of $20,000 a year.

Mr. KINDT: I would like to ask Mr. Harrison a question in connection with farm wood lots and the relative importance of farm wood lots in relation to Canadian forestry; also, what thought is being given to farm wood lots as a part of the whole picture of Canadian forestry.

Mr. HARRISON: Well, the farm wood lot is very important indeed, for several reasons. One reason is that, from the professional forester's point of view, it is the most accessible forest we have. You can undertake all sorts of things in the way of management that you could not do on a commercial scale in the deep woods. It is also a very important source of supply for industry. A lot of the smaller sawmills, about which we heard a good deal the other day, get a lot of their wood from farm wood lots. There is a lot of lumber in them which can be used by furniture making plants, and the eastern townships of Quebec particularly keep a close eye on it. If they spot a good tree they will buy it. Also, in some parts of the country they are an important source of pulpwood for the pulp and paper industry.

One very important purpose they serve—and it is a rather less exciting subject—has to do with improving the statistics. Of course, they are privately-owned lots; but you may be interested to know the Forestry Branch is cooperating with the Dominion Bureau of Statistics. Last year in New Brunswick we developed a much better method of sampling in the statistical sense, and that scheme is extended this year to Nova Scotia, Ontario and perhaps one or two of the prairie provinces. We are finding out what the wood lots realy consist of, what we have got, and what is done with it.

The provinces have extension foresters who on request furnish advice to farmers on how to manage their wood lots. In certain cases plantation stock is made available if they want to plant. Some farm wood lots have been registered as tree farms. Some of these men show remarkable skill in looking after their wood lots. Some have been quite well handled for a couple of generations. In one or two cases industry itself has set up demonstration areas to encourage farmers to produce wood for the mutual benefit of the farmer and the industry. The farmer has a market and the industry gets the wood. There is a remarkable example of that in Hawkesbury which has been very successful. Harrington is a particular area I am thinking of; it is run by Canadian International Paper. They manage that area themselves, and have encouraged farmers to come in and see how it is done. The farmers come in; they may work there for a short time. If my memory is correct, they had a field day for farmers last summer which drew 4,000 people from the neighbourhood. They may be small but there are more registered tree farmers in the county in which that lies than in any other area in Canada. Of course, there is an outlet for all kinds of wood. They use hardwood as well as softwood.

Mr. KINDT: Do they practise selective cutting?

Mr. HARRISON: Oh yes, where it is appropriate.

Mr. FISHER: Mr. Chairman, I have to leave the committee at this time, and I would like to know what the plans are in approaching the item in connection with estimates of the National museum.

The CHAIRMAN: It looks as if we shall be through with this item in a couple of minutes. Then, if it is agreeable to the committee, I propose that we start on estimates of the Water Resources Branch, and perhaps finish them. The minister will be away until the first of next week, and after consultation with some of the members we thought we would try to finish up, if we can, next week, and that we would start tomorrow morning at 9 o'clock on the estimates of the Northern Administration Branch. This would be in the absence of the minister, but we will leave the item open so that you would be in a position to ask questions of the minister when he returns.

Mr. FISHER: I wanted to be on the committee for everything but the estimates of the National Museum. But Mr. Argue wanted to come on at that time, and he wants to call some witnesses. I would like a bit of notice so that we could arrange between ourselves for him to come on the committee and for me to get off it.

The CHAIRMAN: Of course, we will try to do that. I may say the committee thus far has not had any objection to any member of the House of Commons coming in here and asking questions, even though he was not on the committee.

Mr. FISHER: He felt in this case that he would require a bit of notice.

The CHAIRMAN: We will have a meeting tomorrow and we might have one on Thursday. On Monday we might be able to go into the administration item of the Northern Administration Branch. Then there are also the items concerning the tourist industry. Are you going to be ready for that?

Mr. AIKEN: Mr. Fleming and I were interested in having representatives of the tourist industry here when the estimates of the Canadian Government Travel Bureau are being considered. We would appreciate having an estimated date set so we could give them notice.

The CHAIRMAN: Well, would you suggest the date when your witnesses could come, because I know the members of the committee would accommodate them.

Mr. AIKEN: They would like to leave it as long as possible so if we expect to be finished possibly next Thursday—

The CHAIRMAN: I cannot say now that we shall be finished with other items by next Thursday. The National Museum items will likely take the day. I see Mr. Fisher smiling; he thinks it may take two days. Suppose we do set a date; would a week from Monday suit your witnesses—June 8th?

Mr. FLEMING (*Okanagan-Revelstoke*): I think possibly it would.

The CHAIRMAN: Then there would be the National Museum items to deal with after that.

Mr. COATES: While discussing procedure, Mr. Chairman, I wonder if I could ask a number of questions with regard to information I would like to obtain which would assist me in some questions I would like to ask when we reach items 275 to 280 relating to the Northern Administration Branch. Unless I have this information ahead of time, it is only going to delay the committee.

The CHAIRMAN: I wonder if we could finish the items on the Forestry Branch before you ask your questions?

Mr. KINDT: I have just one additional question to ask Mr. Harrison. I was wondering if he could qualify for the committee the functions of the Canadian Shade Tree Association which held a meeting in the Beacon Arms Hotel the other day. What is the function of that organization? Do they make it a point

of growing these wolf trees with tremendous branches or are they interested in forestry, regeneration, thickness of growth and all that sort of thing?

Mr. HARRISON: I do not know much about them. So far as I know, their field is ornamental planting. They are not concerned with forestry.

Mr. MCFARLANE: I would like to ask Mr. Robertson a couple of questions. Could you tell me the portion of the act you use in the letting of contracts for logging in the parks. You have issued three lumber contracts in Wood Buffalo Park. Could you give me the portion of the National Parks Act which covers that item?

Mr. ROBERTSON: I have not the Park Act here.

Mr. MCFARLANE: If you are unable to give it to me now, could you drop me a line on it? I have one other question. Several of the trucking firms—and I am referring now especially to the Kootenays—are having difficulty in getting permission to operate through Kootenay Park. They are not having such a great deal of trouble getting permission over the trans-Canada highway, but they are experiencing difficulty in getting permission to operate a truck service going through the Banff-Windermere highway. I do not think any of their trucks will be over the tonnage in connection with the two bridges I mentioned previously, so I do not think that is the point at issue. It is just a question of their having considerable difficulty in getting permission to operate a truck service through the Kootenay Park.

Mr. ROBERTSON: I will be glad to check into that and drop you a line on it.

Mr. MCFARLANE: I would be pleased if you would.

Items 290 and 291 agreed to.

The CHAIRMAN: There was some information requested when one of the delegations was here the other day regarding wages in the forest industry in British Columbia. I have a table here. Is it agreed we have it printed in our proceedings?

Agreed.

WAGE RATES IN THE FOREST INDUSTRY IN BRITISH COLUMBIA

(Extracted from D. B. S. Catalogue 72.003 Monthly Man Hours and Hourly Earnings February 1959)

	Average Weekly Hours		Average Hourly Earnings	
	Feb/59	Feb/58	Feb/59	Feb/58
Forestry (logging)	25.5	36.5	$2.51	$2.37
Manufacturing—				
Wood Products	37.3	37.6	$1.93	$1.91
Saw and Planing Mills ..	37.3	37.6	$1.94	$1.92
Pulp and Paper Mills	38.6	38.3	$2.40	$2.38

The CHAIRMAN: Now, Mr. Coates, if you wish, you may ask your questions at this time. After you have completed your questions, we will proceed to item 271. You are asking the questions at this time so that the department will have an opportunity of making this information available?

Mr. COATES: Yes, when the item comes up. I would like to know the total expenditure for furnishings for the homes of employees since 1952-53.

Mr. ROBERTSON: We will not be able to have that for tomorrow, but we will try to get the figures as soon as possible.

The CHAIRMAN: We will not finish it in a day anyway.

Mr. COATES: I think I have most of the figures, but I would like to have your figures to see if they are comparable with those in public accounts for those years.

Mr. ROBERTSON: You wish them by years?

Mr. COATES: Yes, 1952-53 up until the present time.

Mr. ROBERTSON: You want the expenditures for houses for employees in the north?

Mr. COATES: Yes. And, if possible, the value placed by the department on these furnishings at the present time.

Mr. HARDIE: You mean the value as of 1952-53 and the depreciated value now?

Mr. COATES: What I want is the worth of these furnishings at the present time, so far as the department is concerned.

The CHAIRMAN: Do you have a write-off system?

Mr. ROBERTSON: No.

The CHAIRMAN: I do not know how you can get information relevant to the present day value.

Mr. COATES: If you cannot, it is all right.

Mr. ROBERTSON: We do not have a write-off system; there is no purpose in it.

Mr. HARDIE: Maybe he would be satisfied to get at the present time the value as originally laid down.

Mr. KINDT: Or would it be an apraised value?

Mr. COATES: You can forget about that; if you would get the amount spent, I would be satisfied. Also, I would like the details of a contract awarded to Tower Construction Company Limited under votes 407 and 777 at Fort Simpson in 1952-53.

Mr. HARDIE: You have the wrong place.

Mr. ROBERTSON: I do not think there was one.

Mr. COATES: It is for the construction of the chief warden's home.

Mr. ROBERTSON: Possibly I am wrong. It was a contract given to Tower Construction Company for a chief warden's home at Fort Simpson?

The CHAIRMAN: Well, whatever year it was, you can get the information.

Mr. COATES: And in connection with that, I would like to know the number of tenders and such things as that, and whether this firm submitted the lowest tender.

The CHAIRMAN: You want particulars of the tenders?

Mr. COATES: Yes. Similarly, in regard to Campbell's Limited. I believe it is under item 406 of 1952-53.

Mr. HARDIE: What was that?

Mr. COATES: It was a contract for $18,650.

Mr. ROBERTSON: What was that for?

Mr. COATES: It was for the placing of concrete foundations under two houses. I cannot tell you where it was located.

I would also like to have the details under which B. G. Linton, Hay River, Northwest Territories, has received contracts for maintenance of the Northwest Territories section of the Mackenzie highway each year since 1952-53. I believe it is on a unit price basis that he does this work and I would like to know the method by which he obtained the work and the amounts he received since 1952-53.

Mr. ROBERTSON: He did not have the contract last year; it went to another company. However, I will get the details for you.

The CHAIRMAN: Are there any other questions, Mr. Coates?

Mr. COATES: Yes, I would like if possible, the details on the contract awarded to the Tower Company at Aklavik. I believe the amount was $410,400 in 1953-54.

Mr. HARDIE: They had a number of contracts; which one do you want?

Mr. ROBERTSON: Do you know what that covered?

Mr. COATES: It was for a day school, principal's residence, teachers' apartments and a workshop.

Mr. ROBERTSON: That contract was not carried through, but I can give you the details. Do you want the winding up details as well?

Mr. COATES: Yes. And further, while on Aklavik, if you could give me some information as to the number of buildings constructed at the old site since the department's decision to change the site to Inuvik. I believe there were some preliminary expenses with regard to the relocation of Aklavik and the contract was awarded to the Tower Company. I would like to have the details on that.

Mr. ROBERTSON: Just to be sure—you wish the preliminary expenses?

Mr. COATES: Yes, with regard to the relocation of Aklavik.

Mr. ROBERTSON: The only thing I can think of offhand involving the Tower Company is the winding up of the day school, the contract which you have mentioned, which was not executed because of the decision to change the location. However, I will check on that.

Mr. COATES: It is under votes 324 and 625 in the estimates of 1954-55.

Mr. ROBERTSON: It was a contract to the Tower Construction Company?

Mr. COATES: Yes. There was a large amount of equipment purchased that year for the relocation of Aklavik. I would like it if you would give me the method by which this equipment was acquired.

The CHAIRMAN: Did you wish a breakdown of the equipment?

Mr. COATES: I have a breakdown, but probably the committee would like to have it.

Also, I would like the details of the contract awarded to O. I. Johnson Construction Company under vote 326 of 1954-55 at Fort Rae.

I would also like the details of a contract awarded to John A. McIsaac Construction Company in the amount of $14,500 for landscaping at Upper Whitehorse.

Mr. ROBERTSON: I do not think that would be one of our contracts. I suspect that probably would be a National Defence contract.

Mr. COATES: It comes under your items 328 and 698 of the 1954-55 estimates.

Mr. ROBERTSON: What was that year?

Mr. COATES: 1954-1955. I would like the details of a contract to the same company for the bridge at Mayo, and the details of a contract to Tower Construction Company for a two classroom school at Cambridge Bay. Then I would like details of the contract to Pan Abore 1951 Limited at Churchill, Manitoba, and the details of a contract of the Tower Company at Frobisher Bay.

Mr. ROBERTSON: Could you give me the year, or any information?

Mr. COATES: Yes, 1955-56, and it is under items 316 and 698.

Mr. ROBERTSON: It is a contract awarded to the Pan Abode 1951 Limited at Churchill, Manitoba. Have you a year on that?

Mr. COATES: That is 1955-56. The details in regard to the purchasing of further equipment for the relocation of Aklavik.

Mr. ROBERTSON: In what year?

Mr. COATES: In 1955-56.

The CHAIRMAN: Have you many more questions?

Mr. COATES: No.

The CHAIRMAN: The reason I ask this is this: if you send a memo to the deputy minister of what further you require, we might expedite the proceedings of the committee. Will you send it to Mr. Robertson?

Mr. COATES: Yes.

The CHAIRMAN: Gentlemen, are there any other members who have questions?

Mr. HARDIE: There is one answer that you could possibly get for me on this year's estimates.

The CHAIRMAN: Will you send a memo too?

Mr. HARDIE: With regard to the contract on the road from Dawson city, Yukon, into Peel Plateau, why was it made on a rental basis instead of on a unit price basis? Is the survey completed well enough to call for tenders on a unit price basis?

The CHAIRMAN: If there are more questions on which you would like answers when we go into that department, if you will furnish the questions to the deputy minister, Mr. Robertson, he will have the answers ready for you when we open up the estimates of that branch.

Mr. MCGREGOR: Mr. Chairman, I have some questions here which I would like to ask. Is it all right to just hand them over?

Mr. ROBERTSON: Yes.

The CHAIRMAN: We are through with forestry, and I think you all agree that we have had an excellent review of this industry, which is so important to our economy. It is the most thorough review that I think any committee has ever given this industry, and I think the results should bear some fruit. Now, if it is agreeable to the committee, we will start on item 271, concerning Water Resources Branch.

Mr. HARDIE: Before we go on, on a question of order regarding other meetings, Mr. Chairman; a while ago you and I spoke of the possibility of cleaning up this committee's work possibly at the end of next week. Since then Mr. Fisher has intimated that we are going to call witnesses on the National Museum estimates, and Mr. Aiken has suggested that witnesses will be called in regard to the estimates of the Travel Bureau. That changes my attitude as far as the Northern Administration Branch is concerned.

If we are to go on with Northern Administration Branch tomorrow, I would be willing to go on with that for the one meeting—tomorrow—without the minister; but I feel there is a definite possibility that I may ask the committee on Thursday—or maybe tomorrow—to call witnesses on the estimates of the Northern Administration Branch. In that event I could not possibly ask my witnesses to come for meetings this week, or possibly next week, so the estimates of the National Museum and the Travel Bureau, if they are to go on next week—

The CHAIRMAN: It is a week from Monday for the Travel Bureau.

Mr. HARDIE: Yes. Possibly the following week we could come back to Northern Administration Branch.

Mr. FLEMING (*Okanagan-Revelstoke*): I do not think the estimates of the Travel Bureau should take more than a day.

Mr. HARDIE: The way this committee is going, I would not hazard a guess whether it would take one meeting or twenty.

Mr. FLEMING (*Okanagan-Revelstoke*): I am suggesting to you that it will not take more than one day.

Mr. HARDIE: That may be, or it may not be. Mr. Fisher indicated a few moments ago that he would be calling witnesses.

The CHAIRMAN: He did not indicate calling witnesses; he indicated Mr. Argue would be calling witnesses for one meeting.

Mr. HARDIE: He indicated that Mr. Argue was going to call witnesses. We are likely to be on them for a few days. That changes any agreement I made with the chairman a little while ago on calling witnesses on the Northern Administration Branch tomorrow morning. I would agree to that, for the convenience of the committee, so we could clean this up, because it was intimated to me that we could possibly clean this up next week. I cannot see it now. Therefore, I propose now to call witnesses on the items relating to Northern Adminisrtation Branch, not next week, but the week after.

I cannot agree to go ahead with the Northern Administration Branch and clean it up in a matter of a couple of days.

The CHAIRMAN: When you and I were discussing it, I was not aware that there would be any indication from Mr. Fisher that there might be additional witnesses required. We had thought we might finish the museum item in one day, and when I was speaking with you I had that in mind. I can appreciate now that the museum item might take a little time. Of course, we can sit longer than two hours.

Mr. HARDIE: You know I have something to settle with the minister on the oil policy, which will come up on the items of the Northern Administration Branch; and if that is the case, I cannot agree to go ahead. I will agree—because I committed myself on that to the chairman a little while ago—to going ahead tomorrow with the Northern Administration Branch; but I will not agree to go ahead any further without the minister.

The CHAIRMAN: The minister will be here on Monday next. Actually, I think it is all satisfactory; I expect we can finish with Water Resources Branch today probably, and if so, we will start tomorrow morning on Northern Administration Branch. The minister will not be here, but he will be here on Monday, and we will continue then. We will start on item 271.

Mr. HARDIE: On Monday?

The CHAIRMAN: We will start tomorrow on Northern Administration Branch, and continue on Monday when the minister will be present.

Mr. HARDIE: At the same time, I may call witnesses, which may delay that to the following week.

The CHAIRMAN: The steering committee will be glad to hear any representations regarding witnesses.

WATER RESOURCES BRANCH

Item No. 271. Administration, Operation and Maintenance, including Canada's share of the expenses of the International Executive Council, World Power Conference ..... $ 1,389,466

The CHAIRMAN: Is item 271 passed, gentlemen?

Item 271 agreed to.

The CHAIRMAN: Item 272?

Item No. 272. Construction or Acquisition of Buildings, Works, Land and Equipment ..... $ 214,400

Item 272 agreed to.

Item No. 273. Studies and surveys of the Columbia River Watershed in Canada ..... $ 170,740

The CHAIRMAN: Item 273—this item got a thorough going over last years—studies and surveys of the Columbia River Watershed. Do you want a

statement from the deputy minister on that? The minister had promised to make a statement, and it is a delicate situation. I think we should have something on record.

Some hon. MEMBERS: Yes.

Mr. ROBERTSON: The vote, as you will notice, is down somewhat for the Columbia river. The reason for that is that the studies which were undertaken by the water resources branch, pursuant to the reference on the Columbia river that was made by the International Joint Commission in 1944, are substantially complete. In fact, the report of the international Columbia river engineering board has been made to the International Joint Commission, and we are really at the point of winding up studies on the Columbia river.

The matter of main interest now, of course, in connection with the Columbia river is the negotiations that are going on with the United States to arrive at some mutually satisfactory arrangement for the development of the river. The federal government has been in consultation with the government of British Columbia from time to time, and actually the reason for the minister's absence for the rest of this week is that further meetings will take place with the government of British Columbia in Victoria on Friday. The reason for these discussions is, of course, that, while the federal government comes into this picture of the Columbia river because of its international aspect, the water resource belongs to the province. Consequently, it is both federal and provincial indifferent aspects of its character.

I think I can say that the cooperation of the government of British Columbia is good at this time and that the discussions are going very satisfactorily. In the International Joint Commission there have been several meetings recently. The main thing that is under discussion is the question of principles that would be applicable between the two countries for the division of downstream benefits. I do not know whether the committee is familiar with this downstream benefits concept. The point is, that if dams were constructed in Canada to provide storage in Canada to release a regulated flow of water down the Columbia for development in the United States, there would be very substantial benefit in the United States over and above what there would be if the water came down in a state of nature. These benefits downstream, from works upstream, are what are referred to as downstream benefits. The International Joint Commission is at the present time working on this problem of arriving at principles that would be mutually acceptable to the two countries for the handling of downstream benefits.

The last meeting of the International Joint Commission was at the end of April. There is to be a further meeting starting next Sunday, May 31.

I do not know that there is much more I can say about it, except that the discussions are going on actively, and I think satisfactorily, at the present stage.

Mr. KINDT: May I ask who, at Washington, D.C.,—if you happen to know—is heading up the work there on downstream benefits?

Mr. ROBERTSON: There are a number of agencies involved, Mr. Kindt.

Mr. KINDT: Army engineers?

Mr. ROBERTSON: Army engineers, yes. The Corps of Engineers is very actively involved; the Department of Interior is actively involved; the Federal Power Commission; and then, of course, in the Pacific area, Bonneville Power Administration, and so on. There are a number of people who are interested actively. I could not single out one and say that one is heading up the work on downstream benefits. Indeed, they have a committee that handles most of the work.

Mr. KINDT: Who, in turn, is coming up with the decisions with respect to benefits? That is a theory matter. They, in turn, will need to get together and look to, say, the army engineers with respect to benefits.

Mr. ROBERTSON: The army engineers are involved at all stages on their side. In fact, Mr. Webber—who is a member of the International Joint Commission—is also a member of the Corps of Engineers, and the Corps of Engineers is represented at all stages in these discussions. I am quite sure that, through this committee, they get the views of all the agencies as they consider this at each stage. Mr. Côté reminds me that the Bureau of Reclamation is also very much involved on the United States side.

Mr. KINDT: Who is on our side?

Mr. ROBERTSON: On our side of the International Joint Commission, the members, of course, are General McNaughton, Mr. Dansereau and Mr. Stevens. I have already mentioned British Columbia as being very actively involved. There is their power commission, the controller of water rights, the Minister of Lands and Forests—I think is the name. On the federal side, in addition to the International Joint Commission there is the Depatment of Northern Affairs—particularly through the Water Resources branch—the Department of External Affairs, the Department of Trade and Commerce—in the energy aspects of the matter—the Department of Finance, in relation to the financial aspects—because the financial aspects are very important in the whole thing. Then there are the Department of Agriculture and the Depatment of Fisheries who are involved in committees that are connected with it. There are a large number of agencies on both sides.

Mr. FLEMING (*Okanagan-Revelstoke*): Could the deputy minister tell us whether, in the course of this survey, and related to it, there has been any consideration given to the amount of commercial timber that will have to be cut for these storage schemes? I have heard estimates of this figure as high as 10 billion feet of commercial timber. What is concerning people in the interior lumber industry is what effect 10 billion feet of timber coming into the market, in a relatively short time, will have. Has any consideration been given, in the surveys, as to that cut and, with the sudden impact on the timber market, what effect will it have on the economics of the province?

Mr. ROBERTSON: I wonder if Mr. Côté could deal with this?

Mr. E. A. CÔTÉ (*Assistant Deputy Minister of Northern Affairs and National Resources*): There has been some consideration of this matter of timber. We have not heard of any estimate as high as 10 billion feet.

Mr. FLEMING (*Okanagan-Revelstoke*): This would be the over-all, and probably the final cut.

Mr. CÔTÉ: There has been consideration of this in various quarters. I know some companies have looked at it, particulaly. The ones who have done most work in detailed planning, of course, have been in another basin, and that is the Peace River Company: they have considered that. So far as the studies in relation to the Columbia are concerned, at the present moment there has not been a considerable amount of planning on that, because we have not come to the detailed planning stage yet.

Mr. FLEMING (*Okanagan-Revelstoke*): It has been taken into account, though?

Mr. CÔTÉ: It has been taken into account and has been considered.

The CHAIRMAN: Gentlemen, you will observe that these items 271 to 274 are covered very fully in the annual report of the Department of Northern Affairs and National Resources. Mr. McFarlane, have you a question?

Mr. McFARLANE: I would like to ask Mr. Robertson one question, Mr. Chairman. The Montreal Engineering Company made a long definite recommendation in their report on the Columbia river. Would it be at all possible to obtain a copy of this report? I understand from the correspondence I have had that there is none available. This report was made quite some time ago, and I understand there are one or two copies that have been made available to certain firms. Has it been tabled?

Mr. ROBERTSON: There have been a number of reports made to give the government the information it needed in evaluating this very complicated matter, and I cannot exaggerate how complicated this is. There have been a number of reports made on this, and the Montreal engineering report is one of several.

The position that has been taken by the government is that these reports cannot be released while negotiations are pending with the United States. I do not know whether Mr. Côté has any information he can add.

Mr. CÔTÉ: I think this is a report which was called for by the then government to provide the Minister of Northern Affairs and National Resources with a comparison of the various types of benefits which might accrue if the Columbia river were developed in one way or developed in another way, more particularly, if the Columbia river were developed under a cooperative arrangement with the United States, or developed as a wholly national development. This was a study which was then made for the government.

It has not been tabled, for the reasons indicated by the deputy minister, Mr. Robertson; but there is a copy available for inspection, if that were desired. It is fairly complicated. But we have not available the number of copies that could be distributed, and the government has not thought it desirable to table this or make this public.

Mr. McFARLANE: I understand copies of this report have been made available to certain companies in the west, and I received a letter from the department this morning stating that, to the knowledge of the minister, there had been no copies made available. But I have definite information that one company in particular has received a copy, and another company has probably received a copy of this report.

Mr. ROBERTSON: All I can say is that we checked on this matter after Mr. McFarlane's letter to the minister was received, and if they have a copy, they did not get it from us.

Mr. McFARLANE: Thank you very much.

The CHAIRMAN: You all can have available, of course, General McNaughton's statement. That is public property. Would you permit us to revert to item 271, gentlemen? Mr. Gundlock—the member for Lethbridge, who is unfortunately absent—submitted a few ideas that he would like to have incorporated in the brief, and I will ask the clerk to distribute them to you.

This was done in conjunction with Mr. Brunsden, M.P., who is also away. Would you like to take a glance over it? I have read it. He would have presented this, had he been present.

Mr. KINDT: Mr. Chairman, this is a very long document and I wonder, if it would not be possible to read it into the record?

The CHAIRMAN: To have it read, Mr. Kindt?

Mr. KINDT: Yes.

The CHAIRMAN: Yes. Would the Clerk read it?

The CLERK: Mr. Chairman—

Under item 271 arises a western Canadian problem in which those making this submission have a deep and abiding interest, namely, water and soil conservation, as these relate to irrigated farms. Those making this submission, both living in irrigated areas of southern Alberta, have had many years of experience and observation in this field; the former as an operating farmer, and municipal officer, and the latter resident in, and formerly general manager of, Canada's largest irrigation area, namely the eastern irrigation district.

Water conservation in this year of 1959, owing to the imminence of development of a large potential irrigation area in the province of Saskatchewan has become of increasingly significant importance.

All who live in areas already using water for the irrigation of farm lands, are seized and concerned with the need for an entirely new approach to the entire problem of the use of water in relation to agriculture.

It is a matter of long standing record that in exceedingly dry summers the availability of water for irrigation to ensure maximum crop yields already has created a stern problem.

This problem is being intensified by the continuous extension of irrigation areas in Alberta, and through the impounding of water on the Eastern slope of the Canadian rockies for the purpose of power development.

In Alberta, impounding of water for power and the peak demand for irrigation in the areas to the east and south of the impoundment too often coincide, and, as a result, shortages of water for irrigation purposes frequently develop.

There is close relationship between the need for study of water conservation and the allied subject of conserving soil.

The correct application of water to irrigated land requires considerable skill, knowledge, and experience. Conversely, the handling of surplus waters, and the removal of same from cropped lands is of the utmost importance. Lack of skill and inexperience in these two operations can result in land spoilage, the truth of which statement is attested by the existence today of thousands of acres in southern Alberta abandoned through alkali conditions.

Unfortunately there is marked antipathy, on the part of governments at the provincial and federal levels, to enter into this field of water, and soil conservation.

The history of irrigation development in Alberta is one of development through corporate enterprise.

The Canadian Pacific Railway was the initiator and constructor of the eastern irrigation district which today is Canada's largest irrigated area, comprising some 170,000 acres, and the company also had much to do with irrigation development in the vicinity of the city of Lethbridge.

Alberta's first irrigationists were members of the Mormon church who pioneered this phase of farm activity in the state of Utah, and who, incidentally, may be regarded as the father of irrigation in Canada.

The position today is that the various irrigation districts in southern Alberta now are largely farmer-owned and operated.

Today these districts are faced with the problem of replacing basic physical structures, many of which are nearing the ends of their usefulness. These districts also are faced with the need of ensuring adequate water supplies in peak seasons, and constantly there is before them the need for the provision of adequate drainage.

These farmer-operated irrigation units are orphans. The Alberta provincial government hesitates to enter into their problems due to the potential heavy capital expenditures involved. The federal Government has no jurisdiction over them beyond that of an international nature.

A vast fund of experience has been accumulated with respect to the application of water to irrigated land and the drainage requirements of the same land for the removal of excess waters. Referring again to the Saskatchewan development, it is highly important that the lessons learned in conservation of water, and the cherishing of the soil in irrigated areas, in southern Alberta should be fully assessed, and that these be made applicable in the practices to be followed during the years ahead in Saskatchewan.

There is need too, for study of the competitive demands for available water between irrigated districts and power development.

Here enters, of course, the fundamental problem of water conservation as it is related to the east slope of the rockies. It is the conviction of those of us who have knowledge of the problems of irrigation of western Canada, that the present and potential situation should be fully recognized, and that steps now be taken to ensure that the futures of those today operating irrigated farms, along with those who will move into this category in the future, be fully safeguarded.

It is respectfully submitted to this committee that this entire question too long has been waved aside by the Alberta and federal governments. Neither government has come to grips with the fundamentals of the problem; it is most important that one agency or the other should undertake the necessary research to fully survey the current issues and develop a progressive program of consolidation and development.

It is the hope of those making this submission that this committee will go on record in favour of a close study of the entire situation of water and soil conservation as these relate to irrigation farms and power development, and, that through these, will develop a policy aimed at safeguarding the irrigated lands of western Canada, and ensuring the maximum efficient use of waters arising in the east slope of the Canadian rockies.

Mr. KINDT: Mr. Chairman, I would like to suggest that that be made part of the official record.

Mr. FLEMING (*Okanagan-Revelstoke*): It has just been read into the record.

Mr. Chairman, may I also ask that on this occasion, at least, the term "western Canada" should also include the province of British Columbia? I happen to come from a part of that province that is wholly dependent on irrigation for farm water, and I feel the problem is similar; and, if recommendations are made, they should include the province of British Columbia as well.

The CHAIRMAN: Are there any other observations?

Mr. MCFARLANE: In considering this, will we not be entering into the provincial field?

The CHAIRMAN: There is very considerable provincial jurisdiction; what concerns our committee is the jurisdiction of the federal government only, and probably the necessity of their co-operation with the provinces. Are we agreed on item 273?

Item 273 agreed to.

The CHAIRMAN: Item 274. Do you wish an explanation on that? That is the dam near Glen Allan, Ontario. That is also fully explained in the annual report. Do you wish a brief statement on that?

Item No. 274. Contribution to the cost of constructing a dam on the Conestogo River near Glen Allan, Ontario, for the purposes of flood control and water conservation, in accordance with the terms of an agreement entered into between Canada and the Province of Ontario .....$ 300,000

Mr. ROBERTSON: There is no prepared statement, Mr. Chairman. Mr. Côté could give an outline of where the matter stands, perhaps, if that would be desirable.

The CHAIRMAN: Yes.

Mr. CÔTÉ: The Conestogo dam work is nearing completion now, and this accounts for the fact that there is a reduction of $200,000 this year. It will be completed this year.

As to the other items shown under item 274, the appropriations not required for 1959-60—there has not been included in this year's main estimates the sum of $95,000 for the Fraser river board. There was an item last year for a fishway on the Yukon river which amounted to $1 million. The Lakes Winnipeg and Manitoba board was completed last year, and that accounts for a $40,000 item.

The CHAIRMAN: Those particulars, gentlemen, are on page 376 of your estimates. Is this item agreed?

Item agreed to.

Mr. COATES: May I have some explanation—or is it incorporated—with regard to the appropriations not required?

The CHAIRMAN: That is on page 376. Mr. Côté just referred to three items, $1 million, $95,000 and $40,000.

Mr. ROBERTSON: Perhaps there is one addendum that should be made, Mr. Chairman. That is, among those figures, one that is shown as not required this year is the Fraser river board federal expenditures. In actual fact, discussions have been under way with the province of British Columbia as to the desirability of extending the work for another three years.

Mr. CÔTÉ: And reconstituting the board.

Mr. ROBERTSON: Yes. If that is agreed to, that item would have to come under a supplementary estimate.

The CHAIRMAN: Just at the adjournment we will call item 275 and we will start tomorrow morning at 9 o'clock—sharp, I hope.

NORTHERN ADMINISTRATION AND LANDS BRANCH

Item No. 275. Branch Administration ..... $ 1,587,128

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 27

WEDNESDAY, MAY 27, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; and Mr. B. G. Sivertz, Director, and Mr. A. B. Connelly, Chief Engineering Division, both of Northern Administration Branch.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21308-2—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

WEDNESDAY, May 27, 1959.
(32)

The Standing Committee on Mines, Forests and Waters met at 9.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Drouin, Fisher, Fleming (*Okanagan-Revelstoke*), Granger, Hardie, McFarlane, McQuillan, Murphy, Nielsen, Payne, Roberge, Robichaud and Simpson. (16)

In attendance, of the Department of Northern Affairs and National Resources: Messrs. R. G. Robertson, Deputy Minister; B. G. Sivertz, Director, and F. A. G. Carter, Assistant Director, Northern Administration Branch; A. B. Connelly, Chief; Engineering Division; W. G. Brown, Chief, Territorial Division; J. V. Jacobson, Chief, Education Division; A. T. Davidson, Chief, Resources Division; D. Snowden, Acting Chief, Industrial Division; C. M. Bolger, Administrator of the Arctic; G. M. Carty, Chief Administrative Officer; and M. A. Currie, and G. H. Montsion, Administrative Officers.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Mr. Robertson produced certain detail regarding oil and gas permits in the Northwest Territories and the Yukon which had earlier been requested. The said detail was ordered to be printed in the record of this day's proceedings.

Continuing on Item 275, Branch Administration, Northern Administration Branch, Mr. Robertson made a statement on the organization and functions of the branch; he and other officials were questioned thereon, in particular regarding the establishment of a new townsite at Inuvik which is largely to replace Aklavik.

At 11.00 o'clock a.m. the Committee adjourned until 9.30 o'clock a.m. on Thursday, May 28, 1959.

Eric H. Jones,
Clerk of the Committee.

21308-2—1½

EVIDENCE

WEDNESDAY, May 27, 1959.
9.00 a.m.

The CHAIRMAN: All right gentlemen, we now have a quorum. At a previous meeting Mr. Hardie asked for some information to be tabled concerning oil and gas permits in the Northwest Territories and the Yukon. The department has prepared this information, giving the number of permits, the acreage, and the percentage. Is it agreed that it be printed in our proceedings?

Agreed.

OIL AND GAS PERMITS NORTHWEST TERRITORIES AND YUKON

I. PRIOR TO JULY 1, 1957

	No. of Permits	Acreage	Percentage
1. AMERICAN COMPANIES			
Honolulu Oil Corporation	2	64,000	
Texaco Exploration Company	3	127,547	
Sun Oil Company	6	375,730	
Pan American Petroleum Corporation	13	584,750	
The California Standard Company	20	895,566	
	44	2,047,593	10.9
2. CANADIAN SUBSIDIARIES			
Shell Oil Company of Canada Limited	85	4,405,745	
Mobil Oil of Canada Ltd.	13	728,826	
Murphy-Canada Oil Co.	10	629,532	
	108	5,764,103	30.7
3. CANADIAN COMPANIES			
Canadian Husky Oil Co. Ltd.	33	1,508,816	
Imperial Oil Limited	1	22,683	
British American Oil Company Ltd.	2	77,182	
Frond Lake Mining Company	7	364,441	
Peel Plateau Exploration Ltd.	8	400,386	
Conwest Explorations Ltd.	16	790,836	
Canada Southern Petroleum Ltd.	26	663,096	
Laburnum Enterprises Ltd.	6	308,394	
Charter Oil Co.	3	148,046	
Central Patricia Gold Mines Ltd.	7	340,510	
Glacier Explorers Limited	13	669,438	
Gas Bay Petroleum Ltd.	1	24,316	
Consolidated Mic Mac Oils Ltd.	2	96,748	
Anuwon Uranium Mines Ltd.	1	48,890	
Guaranty Trust Co. of Canada Ltd.	2	72,776	
Midland Petroleums Ltd.	5	231,285	
	263	5,767,843	30.7
4. AMERICAN CITIZENS			
D. Todd Briggs	36	1,832,449	
Chester B. Ringeisen	27	1,393,902	
	63	3,226,351	17.2

OIL AND GAS PERMITS NORTHWEST TERRITORIES AND YUKON—*Continued*

I. PRIOR TO JULY 1, 1957—*Concluded*

	No. of Permits	Acreage	Percentage
5. JOINT HOLDINGS			
The British American Oil Co. Ltd. and Texaco Exploration Company	6	246,612	1.3
Shell Oil Company of Canada Ltd. The British American Oil Co. Ltd. Texaco Exploration Company Mobil Oil of Canada Ltd.	5	266,587	1.4
Canadian Husky Oil Ltd. Canadian Superior Oil of California Ltd.	32	1,426,182	7.5
Comet Petroleum Ltd. Eagle Plain Exploration Co.	2	49,233	.3
			100%

II—AFTER JULY 1, 1957

1. AMERICAN COMPANIES			
Honolulu Oil Corporation	7	250,301	
The California Standard Co.	101	4,310,325	
Union Oil Company of California	17	937,445	
Texaco Exploration Company	102	4,637,012	
Pan American Petroleum Corp.	100	4,935,097	
Hunt Oil Company	74	2,868,250	
Placid Oil Company	17	642,297	
Champlain Oil and Refining Co.	12	493,487	
The Ohio Oil Company	21	975,889	
Amerada Petroleum Corp.	1	52,982	
	452	20,203,085	33.22
2. CANADIAN SUBSIDIARIES			
Western Interprovincial Petroleum Ltd.	10	496,802	
Rainbow Oil Ltd.	7	297,028	
Redland Oils Ltd.	10	487,180	
Dyson Oils Ltd.	10	493,716	
Elboya Oils Ltd.	7	341,542	
Aden Oils Ltd.	9	450,648	
Murphy-Canada Oil Co.	4	217,075	
Shell Oil Company of Canada Ltd.	221	10,536,222	
Mobil Oil of Canada Ltd.	17	865,503	
Dome Petroleum Ltd.	21	910,634	
Dome Leaseholds Ltd.	12	494,880	
Alberta Bretorada Pet. Corp.	2	149,076	
Alberta Calgarada Pet. Corp.	1	49,920	
Stromo Petroleum Ltd.	10	465,775	
Padol Petroleum Ltd.	9	470,715	
Aquila Petroleum Ltd.	9	476,871	
Palcan Petroleum Ltd.	9	484,507	
Tercol Petroleum Ltd.	9	489,321	
Devan Petroleum Ltd.	2	116,640	
	380	18,294,054	30.06
3. CANADIAN COMPANIES			
Granwick Mines Ltd.	1	52,982	
Laburnum Enterprises	4	97,780	
Scurry-Rainbow Oil Ltd.	18	898,554	
Midland Petroleums Ltd.	2	100,866	
Glacier Explorers Ltd.	13	660,246	
Western Decalta Ltd.	27	1,279,301	
Gorda Investments Ltd.	1	62,890	
The British American Oil Co. Ltd.	75	2,788,904	
Charter Oil Co. Ltd.	14	374,125	
Colville Lake Explorers Ltd.	3	98,554	
Ranworth Exploration Ltd.	7	356,622	
Imperial Oil Limited	82	4,220,603	
Canadian Husky Oil Co. Ltd.	26	1,167,260	
Pompey Oil and Mineral Co. Ltd.	20	877,354	
Canada Southern Petroleum Ltd.	3	92,462	
Banff Oil Ltd.	10	499,100	
Woodley Canadian Oil Co.	11	454,060	
Canadian Homestead Oils Ltd.	18	405,934	
Great Plain Devel. Co. of Canada Ltd.	8	418,448	

OIL AND GAS PERMITS NORTHWEST TERRITORIES AND YUKON—*Continued*

II. AFTER JULY 1, 1957—*Concluded*

	No. of Permits	Acreage	Percentage
3. CANADIAN COMPANIES—*Concluded*			
Canpet Exploration Co. Ltd.	3	151,812	
New Superior Oil of Canada Ltd.	1	6,948	
Texaco Canada Ltd.	63	2,807,608	
Hudson's Bay Oil and Gas Co. Ltd.	2	95,661	
	412	17,918,074	29.32
4. AMERICAN CITIZENS			
D. Todd Briggs	2	94,335	
Thomas J. Rubeo	4	190,048	
Earl M. Cranston	2	83,959	
			.74
5. JOINT HOLDINGS			
Consolidated Mic Mac Oils Ltd. and Mayfair Oil and Gas Ltd.	2	487,699	.6
6. CANADIAN CITIZENS			
I. Shulman	1	52,664	
W. O'Shaughnessy	9	469,614	
Massey Williams	3	153,858	
Joseph Rankin	9	463,610	
James Verne Lyon	1	49,578	
Frank Nasso	5	168,234	
W. R. Newman	1	49,578	
Bryan W. Newkirk	3	150,102	
A. B. Whitelaw	9	427,227	
Charles M. McAvoy	4	245,736	
James Ross	1	49,920	
A.T. Hewitt	3	185,436	
Eileen M. Armstrong	7	401,782	
Paul P. Hewitt	7	444,092	
John G. M. Hooper	8	383,896	
	71	3,670,752	6.06
7. RESERVATIONS			
Peel Plateau Exploration Ltd.	2	3,066,880 each	

III. ACREAGE OF AREAS APPLIED FOR IN ARCTIC ISLANDS

J. D. Bateman	4,066,030
Round Valley Oil Co. Ltd.	2,777,452
W. R. Newman	12,228,219
Texaco Exploration Company	2,992,927
David Rosen	10,421,374
California Standard Company	8,541,625
Talent Oil and Gas Ltd.	3,021,590
Dome Petroleum	1,593,359
C. M. McAvoy	2,846,417
G. Radisics	1,486,233
Charter Oil Co.	1,308,454
Cree Oil	7,388,129
Trans-Western Oils Ltd.	11,420,493
M. C. McLeod and Co. Ltd.	1,729,374
P. C. Nedham	1,047,220
G. A. Clarke	1,418,961
J. W. Powelson	892,672
Terratest Co. Ltd.	1,377,648
Chican Petroleum Ltd.	437,202
Pampas Petroleum Ltd.	838,594
James Ross	812,611
Martin J. Haley	3,436,767
W. Phipps	67,512
F. W. Chubb	4,550,689
Thomas J. Rubeo	1,148,724
Richard C. Cowell	579,320
Murray T. Koven	588,768
	86,517,364

OIL AND GAS PERMITS NORTHWEST TERRITORIES AND YUKON—*Concluded*

IV. IF YOU ADD ON THE APPLICATIONS FOR PERMITS IN THE ARCTIC ISLANDS THEN THE FOLLOWING ARE THE PERCENTAGES

American companies	33,309,613 acres	22.71%
Canadian companies	51,320,638 "	34.89%
Canadian subsidiaries	29,828,606 "	20.29%
Canadian citizens	29,747,767 "	20.23%
British corporations	2,777,452 "	1.82%
	146,984,076 acres	100.00%

Today we have the deputy minister with us, and I suggest we ask him to make a statement, after which questions will be in order on the Northern Administration Branch. We are on item 275 which was called at the close of our last meeting.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, the minister had planned to make an opening statement if he had been here this morning. I think I can touch substantially on the things he would have dealt with had he been here.

Last year and this year have been particularly notable in the Northern Administration Branch as years of very substantial growth and development. One index of course is the estimates that are handled by the branch.

In 1957-58 the total appropriation of the branch was about $20.4 million. Last year it rose roughly to $40 million; and for 1959-60 the total is $45 million, which represents an increase of over 100 per cent in two years.

Now this increase has of course meant tremendous growth which has been difficult to cope with, and it has meant a good deal of reorganization. One of the main things that occurred in the past year has been complete reorganization of the branch itself.

We realized with the growth that was going on it would be quite impossible to carry on with the organization we previously had; so we asked the Organization and Methods Branch of the Civil Service Commission to send over a team to do a study of the operations and, along with us, to work out a new organization.

Prior to the reorganization there was simply a director, and under him six divisions. But following the reorganization which was worked out, and which was largely with some modifications, the recommendation of the Organization and Methods Branch, after consultation with us, the set-up now is one whereby, under a director, there are two assistant directors who have primary responsibility in two main portions of the branch; one assistant director is in charge of what we call plans and policy, for want of better words; and under him in turn there are four divisions.

Of the four divisions the Territorial Division really provides services for the territorial administration to the extent that we require them, and it handles what you might call the quasi-provincial aspects of the administration.

Then there is the Education Division, the operations of which are self explanatory.

Then there is the Industrial Division which is the one which tries to develop in local areas the chief resources and projects which will be helpful to the economy of the community. It also handles things like community planning, the development of new towns, and that sort of thing.

Then, finally, there is the Welfare Division, which is growing and has to grow a good deal more, to handle a number of the welfare problems that are arising with the changes in the north.

Those things are under the assistant director of policy and planning. The other assistant director is in charge of administration, and under him come all the administrative services of the branch—finance, purchasing and shipping,

which are very expensive operations at the range at which we work, and staff matters. Then the second thing that comes under that assistant director is the Engineering Division, which handles construction and contracts.

Finally, outside of the scope of these two assistant directors, there is the Resources Division, which reports to the director himself. It is the one the minister referred to, to some extent, earlier, when the committee work opened. It handles oil, gas, mineral and lands questions throughout the territories, and also administers some federal lands the department is charged with administering in the provinces.

That roughly is the reorganization that was worked out over the past year; and I think that with the amount of trial that we have had we can say, already, it is an extremely good organization; it is working very well. That is the organization in Ottawa.

Then we have to translate our operations into operations in the field. In the Yukon the territorial and federal operations are centred in Whitehorse. The territorial government has its own commissioner and its own small civil service; and virtually all its operations come under Whitehorse.

In the case of the Northwest Territories the administration is really divided into two parts: the Mackenzie valley, the Mackenzie district really, which is not true Arctic, but is a sub-Arctic area. It has quite separate problems from the rest of the Northwest Territories, and it has its own communications within it, pretty well. It is administered at Fort Smith, and the person in charge of administration is called the administrator, Mackenzie district,—Mr. Merrill, who is stationed at Forth Smith. There are area administrators under him at various places, such as Hay River, Yellowknife, Aklavik; and, shortly, there will be one at Fort Simpson.

The rest of the Northwest Territories, the Arctic area, cannot be administered yet from any single centre in the Arctic because of the inadequacy of communications. As a result, the administration of the Arctic, for the moment, is located in Ottawa and operates out of Ottawa. The main centres in the field are Frobisher Bay for the eastern Arctic, and Churchill for the central Arctic. What we visualize locally is one location in the field for the central and eastern Arctic; or, if communications do not develop all the way, perhaps two centres, one for the eastern Arctic and one for the central Arctic. That, roughly, is the organization of the branch in Ottawa, and the organization through which its functions are translated into the field.

The increases in work and the increases in expenditure last year were almost entirely the result of the major construction program undertaken by the government, particularly construction of roads and transportation facilities. In the Yukon these were mainly roads and bridges; in the Northwest Territories the main item has been the extension of the road towards Yellowknife—and then there is the roads-to-resources program in the northern parts of the provinces.

In the forthcoming year, the increase is smaller than last year, of course: it is $5 million on $40 million. The main reasons for increase are two: in the Yukon it is, again, a bit of a step up of the construction program, and most of that is the road to Eagle Plain which has been referred to earlier. In the Northwest Territories most of the increase is on the operations and maintenance side. This is partly a reflection of increased staff. With regard to the increased staff, approximately half of it is related to education; teachers, principals and that sort of thing. Another large group is labourers, who are mostly—or almost entirely—recruited locally for various projects that are undertaken. A further part of the increase in cost is fuel cost, which is a reflection of the building of the last couple of years, and materials and supplies.

Looking at the accomplishments and highlights of the last year or two, certainly the stepping up of the road program has been the highlight, I think, and a major accomplishment, and the school program has been carried forward still further. It was launched substantially in about 1955 and it has been carried on up to this date in the Mackenzie valley, largely with school and hostel development at major centres, and smaller schools at smaller centres. There again, the main emphasis is to swing to the Arctic and the eastern areas where there is not nearly enough done as yet. Even in the Mackenzie valley, as I mentioned earlier, we only have accommodation now for about 70 per cent of the Indian school population, and even this does not provide for education in the senior grades.

Once we get education established on a fairly full basis in the lower grades, we will then have the carrying on of education in the high school grades to take care of. So far as 1959-60 is concerned, I think that one of the main highlights as of now—and I think certainly when we look back on it in future years—is going to be the meeting that took place on Monday last in Ottawa, a meeting of the Eskimo Affairs Committee, which was attended for the first time in history by representatives of the Eskimo people themselves. That meeting was opened by the Prime Minister and the minister of the department. The Prime Minister referred to the historic significance of this meeting at which the Eskimo people, for the first time, were giving views of the policies that affected them and expressing their own needs in the meeting that advised, and has advised the government for a number of years, on Eskimo matters.

When this meeting was planned we had been in some doubt as to how successful it might be. We did not know, for instance, whether the Eskimo representatives would feel over-awed or cowed by this kind of meeting, and whether they perhaps would not be able to speak out. Well, we need not have been concerned; the Eskimo representatives did a superb job, and it went beyond anything we could have hoped. I think one of the outstanding features of the whole meeting was a speech given in the Eskimo language by Mr. Arayuark, from Rankin Inlet—a speech without notes and with translation that lasted nearly an hour. It was a first-class effort; it touched on virtually everything of concern to the Eskimo in his area, and brought out the things that he thought should be considered by the government in administration.

Many things were dealt with at this meeting, but the theme that went through the whole thing—from the Eskimos, not from the whites at the meeting—was that old way of life had changed; the old way of life could no longer provide an adequate living, because of the decline in game sources and the problems of fur. It was said that there had to be a transition, and, as Mr. Arayuark put it in Eskimo, the transition had to be made quickly and it had to be made now.

He said, and every other representative said, in one way or another, that the essential thing was education, and every one of them said there was not enough education; more of it had to be carried on, and it had to be, not just education at a lower level, but—I think it was Mr. Ogpik from Aklavik who said this—education had to go all the way. One of them—I think it was Mr. Arayuark—said the way the white people live is not just the white man's way of life; it is the way of life for everyone, and they want to be able to live that way too. His associate from Rankin Inlet, Mr. Sheeniktook—who is the Eskimo foreman at the mine and also the pilot who handles the vessels in and out of the harbour—also had a complaint about the houses with which they are provided. He said they did not have bathrooms, and they should have bathrooms; the Eskimos should live exactly the way the white man lives.

This was quite astonishing. None of us, I think, was expecting that we would be given this really quite inspiring indication of what it was they wanted, and this comprehension of the problems with which they were faced.

As I say, this came from not just one individual, but from every one of the Eskimo representatives, and I think it was really quite an inspiration to everybody there. This, incidentally, fits in very well with the emphasis that Hon. Mr. Hamilton has been putting on this matter for some time. A great deal of attention has been directed at the resource side and, quite properly, he, in discussing this matter with Treasury Board last December, made the point on more than one occasion that the human side had to be looked at, and he would gladly give up a mile or two of road in order to be sure that we took care of some of the human problems. It is of great interest to note that all the welfare salaries for the entire welfare staff which we have at the present time, for one year, comes to about the same amount as for one mile of road. So this gives some idea of the perspective on the matter.

As far as education is concerned, the Eskimo representatives are right when they say that educational opportuntities have not gone far enough. In the figures I gave a few days ago, I said I thought that roughly 40 per cent of the Eskimos of school age now had educational facilities. On checking, we found that as of February 28 a more accurate figure would be 36 per cent of the Eskimo children of school age have schools available to them.

Mr. SIMPSON: How many is that?

Mr. ROBERTSON: Thirty-six per cent. This varies considerably, according to area. In some of the census districts—which we used just for convenience—the proportion of Eskimo children who have schools available is as low as 2 per cent: the lowest districts are two, six and eight per cent. Other districts are substantially up from that; but on the overall picture, what it amounts to is that we still have 64 per cent of the Eskimo population of school age for whom to provide education. Then, over and above that—in order to meet the requirements to which the Eskimo representatives referred, and with which I completely agree—we have to provide something in the way of higher education, high school education, and something in the way of vocational training over and above what we have now.

Mr. Chairman, summing up the situation, I would say that the nub of it is that we have got—in the last few years, and especially in the last two years—quite a good start on both the material side and the human side; but it is not much more than a start, and we have much further to go than we have yet gone. I think this really, in general terms, is about what the minister would have touched on if he had been here.

The CHAIRMAN: Thank you very much, Mr. Robertson.

Mr. HARDIE: With what did you compare the cost of a mile of road?

Mr. ROBERTSON: The total welfare salaries that we now spend in one year in the north.

Mr. COATES: I gathered from the deputy minister's statement that he laid emphasis on the fact that a tremendous load has been placed on this department in this particular branch, and expenditures have increased a great deal, and that as a result of the recent Eskimo affairs committee meeting, the Eskimos have indicated their desire for higher education, more education, for the northern people, better houses and jobs.

I believe that connected with this, to a large degree, is the department's recent endeavour to relocate Aklavik at Inuvik, and I would like—if the deputy minister is agreeable—to ask some questions with regard to this relocation.

First of all, I have heard a great many figures batted around as to the actual cost of the relocation of this town: they run as high as $30 million. I would like to have a statement from the deputy minister on what the cost to date has been, to the department, for the relocation of this town, and what the department estimates the total cost of the relocation will be. Probably, at the same time—in working this in—I wonder if he could make a statement as to

why—although he did on a previous occasion make statements with regard to permafrost conditions, et cetera—the department considered it necessary to relocate Aklavik.

Mr. ROBERTSON: Yes, I would be glad to do that, Mr. Chairman. Perhaps I ought to start with a statement as to the reasons. Perhaps that would be the most logical way to begin.

The CHAIRMAN: Yes; it is on the record for last year, but we will have it again.

Mr. ROBERTSON: Yes. To put this in personal perspective—I joined the department on November 15, 1953—although I had been interested in northern work before that time, at the time I became deputy minister I also became chairman of the Advisory Committee on Northern Development, which advises the government on northern development questions.

At the first meeting that I chaired—which was in the latter part of November of that year—the main item on the agenda was the problem of Aklavik, as it was called at that time. I mention this simply because I am strongly of the view—despite a lot of criticism that has been heard—that this was a very wise decision. I want to make the point that I had nothing to do with the decision and, therefore, I am not an interested party in saying that it was a wise one. The reasons for the decision to relocate were, basically, that Aklavik —as the chairman knows from his own visit—is located on a sharp bend in one of the channels, the Peel channel, in the Mackenzie river. It is about 12 miles, I would think, from the west side of the delta, in a straight line. Is that right, Mr. Hardie?

Mr. HARDIE: The old townsite?

Mr. ROBERTSON: Yes, the old townsite.

Mr. HARDIE: Yes, it is about that.

Mr. ROBERTSON: It is about 12 miles into the delta from the west side, and it is completely located on a silt bank that has been deposited by the river in the delta. The maximum height of land above the river at Aklavik, I would think, would be something in the vicinity of 20 feet. Mr. Hardie can check that.

Mr. B. G. SIVERTZ (*Director, Northern Administration Branch*): The high water comes over the surface of the land at Aklavik each spring, and the lake from whence the water for Aklavik is drawn is replenished by flood water going over it each year. That gives an idea of maximum levels.

Mr. ROBERTSON: I was thinking in terms of the mean level of the river. It has almost no elevation above the river and—as Mr. Sivertz says—at high water it is flooded. There is no contour within the area; it is just a flat, alluvial deposit.

This was all right as long as Aklavik was simply a trading post, but it became clear about 1953 that if the north was going to develop at all there had to be an administrative centre at the lower end of the Mackenzie. That administrative centre had to be one that would provide educational services, health an hospital services, a place for administration, R.C.M.P.—national defence has an establishment up there—and so forth.

For that kind of growth that was in the offing, it was quite clear that the location on this bank of silt would not do. In the first place, there is no room for expansion. Behind the curving river bank there are marshes and bogs: they are immediately behind it. It would be a desperately costly matter to construct an air field. There have been suggestions that this could have been done. Most of the people who have referred to this do not realize that the closest deposit of gravel is at Arctic Red river, which must be about 75 miles upstream. The cost of gravel, per cubic yard, at Aklavik, is about $25. It would have cost a king's ransom to construct an airfield there.

There is also the question of putting in sewer and water. Because there is no contour, you could not get a gravity flow, and, because also of the height of the water table and the lack of gravity flow, there would have had to be a sump pump and a sump under every house, with the sewage being pumped up into the sewer system and pumped throughout the sewer system. In other words, you could get no gravity flow. These were major problems for any area that was going to be developed.

Finally, there was no satisfactory source of good water. Mr. Sivertz has referred to the fact that the lakes—they are more like bogs—immediately behind Aklavik are replenished each year by flood water from the Mackenzie river itself. The Mackenzie carries an enormous amount of silt: it can only be believed by seeing it. Any water system that depends on the use of the Mackenzie river has a tremendous problem in getting rid of the silt and in settling the silt. We know this from experience at Fort Simpson and other places. There, with a very small settlement of one or two houses, you have a major problem to get rid of the mud that accumulates at a fantastic rate, and filters just do not work because of the amount of silt that goes through. So there was a problem as to the source of water if we visualized the community that was going to grow for administrative purposes. Those were, roughly, the main reasons.

Another reason—although this could have been overcome by engineering works—is that there is constant erosion going on at this place. The erosion goes on up-stream of the bend, silt is carried down-stream and deposited down-stream of the bend, but, because the pressure of ice that comes down in the spring is quite fantastic, it would have been quite doubtful, if not impossible, to have any engineering works that would stay in place.

Finally, the roads within the community—well, you cannot dignity them as roads; they are bogs which are little different from the rest of the bog, because it is all clay and silt. As I said, the closest gravel is at Arctic Red River and costs $25 a cubic yard, so you do not put gravel on roads. We have considered building corduroy roads there, but that is not very satisfactory. Therefore, it is difficult to visualize a community as a growing community for administrative purposes that could operate in that place in the delta.

As a result of all these considerations, the Advisory Committee on Northern Development, having looked into the matter, recommended to the then government that, as there was need for a substantial administrative centre, they could not recommend making any further expenditures at the old site of Aklavik, and a new Aklavik should be established. I think that perhaps we have been at fault in referring to this as a move of Aklavik because, basically, it is not a move of Aklavik. I think Aklavik is going to stay where it is, as a small trading post, because most of the trapping areas—the registered trapping areas and mainly the best caribou hunting—is on the west side—and for the people who live, in a sense, off the land, or off the delta, I think some centre on the west side is probably going to remain; but it will be a small post.

I think Aklavik will stay as a small post, the same as Arctic Red River, Fort Simpson, Fort Good Hope, and a few places like that. Really, what we were recommending was the establishment of a new administrative centre. The reason I make this point is that when one comes to the figures that Mr. Coates is interested in—if one asks, "What is the cost of relocating?"—the cost of relocating is relatively small; that is, the things that are going to be relocated. The substantial costs are the costs of establishing the new facilities which would have taken place either at the old Aklavik or at the new place. For example, the educational facilities at the old place consisted of two very old residential schools. Both those schools, quite frankly, made me shudder every time I looked at them, when considering what would happen if a fire got going in them. They are two structures of wood, and there is no

running water there that could cope with fire. If a fire broke out in those schools, in the depth of an Aklavik winter, I think one would have a loss of life that would be absolutely devastating.

The fire marshall has made representations about the public school at Yellowknife, saying it is a danger. That school at Yellowknife is a miracle of modern construction compared with the old schools at Aklavik. So we could not have contemplated allowing the continuance of these conditions at Aklavik, something new had to be built—and a new hospital and a new 30-room school, with two large residences for school children from outlying locations, are at Inuvik. Another new thing is the whole sewer complex. So this cannot be referred to as a new location; they are new facilities.

Coming down to figures, we have tried—and it is a bit of an artificial exercise—to keep distinct in our own minds what we coud regard as relocation costs and what we could regard as new construction costs. This is pretty hard to do, because—just on the schools—what do you regard as "relocation", when you are pretty sure you would have had to replace the schools anyway? We do not know. But with those apologies for this sort of concept, we consider the relocation cost—as we see it now—is going to be roughly $3.7 million. We consider that the expansion cost, or the new facility cost, is going to be roughly $31.9 million.

I can give a breakdown by categories on the global cost figures, or I can give a breakdown in detail. Perhaps I can give figures first, and then Mr. Coates can consider whether or not he wants more detail.

Perhaps I ought to go back a bit to say how the project was handled. Would you like to hear something in connection with that?

Mr. COATES: Yes.

Mr. ROBERTSON: Once a decision had been taken that a new administration centre should be established—and that decision was taken in December, 1953—the first thing then was to establish a scientific team. The scientific team was headed by Mr. Merrill, who is now our district administrator at Fort Smith. At that time he was a member of the Defence Research Board. He is an engineer and a geologist. Mr. Merrill headed the team. The other members of the team were drawn from Mines and Technical Surveys, the Forest Research Section of the Division of Building Research of the National Research Council, the Department of Public Works, and there may be others; anyway, it was composed of engineering and scientific personnel who could help with this.

They first studied air photography mosaics to try to pick out what seemed likely to be possible locations.

Now, for those possible locations criteria had been laid down. These were in three categories: (*a*) is the essential factors, and under that, item 1 was economic and social suitability. What was meant in part by social suitability was that it had to be close to where the old Aklavik had been, close to the Pinetree line, because we visualized this as a centre that would be used by both Eskimos and Indians; the Indians do not go far outside of the Pinetree line and the Eskimos do not go far inside the Pinetree line. The second item was good ground for utilities, building foundations and roads. The third item was access to a navigable river channel. Item 4, a suitable site for an airfield. Item 5, adequate and safe water supply. These were the essential factors.

Then under (*b*) we have set out the highly desirable factors. Item 1 was suitability for adequate sewage disposal. There had to be some place for the sewage to go. Item 2 was the availability of gravel and sand for building. Item 3 was the possibility of development as a transshipment site from river barges to coasters.

The desirable factors are under (*c*). Item 1 is the availability of wood supply. Item 2 was the availability of coal supply. Item 3 was a hydro-electric power site.

I can rule (c) out by saying none of these factors was available at any of the sites. From a study of the air mosaics the team selected seven possible locations. Four were on the west side of the delta and three on the east side. We had hoped a site could be found on the west side because, as I mentioned before, most of the registered trapping areas and the caribou hunting is on the west side. This would be more useful than on the east side.

The team went up to the area and were there from about March, 1954 to about November, 1954.

When I went up there with Mr. Lesage in August the team reported to us at Aklavik that they could not find any suitable site on the west side; for one reason or another every site was unsuitable. Of the three sites on the east side, two were reasonably suitable. One was not too good for certain reasons which I have now forgotten. The other one, which had been designated "East-3" at that time was recommended as filling almost every category of desirability that had been mentioned. We were somewhat upset by the idea of not having a site on the west side. However, we went and personally looked at all the sites on the west side and we had to accept the view of the team.

We then went and looked at the ground at the East-3 site on the east side, and it was quite clear that it was a good site. It has a sloping area from the river, which has a navigable channel. There is quite a good tree cover, which is desirable from the standpoint of aesthetics and also for protection against winds in the winter. There is a good lake immediately at the edge of the channel which would make a good anchorage and there are two lakes at the top of a rise which are a good source of water supply. Sand and gravel were available and all that had to be done was uncover it. Also, there was ample room for growth.

So, as a result of that team investigation and the report, the Advisory Committee on Northern Development recommended to the cabinet that East-3 should be selected. The cabinet approved that decision.

The Foundation of Canada Engineering Company in Montreal was then retained. They were asked to begin the engineering planning and to give us a plan of the townsite, to recommend how the water and sewage services should be handled, to recommend methods of construction, the handling of roads, and all that sort of thing. The Foundation Company did that and an interdepartmental committee was established to coordinate with the company. As a result of that report, it was changed somewhat, but basically the plans for the town and the methods remained pretty much as recommended by Foundation Company.

The Department of Public Works then was designated as the agency to handle the actual contracting and so forth, although the Department of Northern Affairs and National Resources was given the over-all responsibility for watching the entire operation. It was on that basis that it was handled. Contracts were called for the various parts of the operation, and the thing has gone forward.

Now, gentlemen, with that background I can give the main categories of cost and break them down into what might be called site development. The estimated cost to completion as of the present time is $4.8 million. That includes the preliminary expenses to which I have referred, the fees of the consultants, equipment, base camp buildings, the basic roads that were required, wharf and approaches from the wharf warehouses, and that sort of thing.

Mr. COATES: Is the $4.8 million part of the $31.9 million?

Mr. ROBERTSON: Oh, yes, this makes up the $31.9 million plus the $3.7 million.

Mr. AIKEN: Just at this point, would this item be ultimately expendable in other words, a non-recoverable expenditure; or will some of these items still be of value?

Mr. ROBERTSON: Oh, yes. Of course, the engineering fees are not recoverable. The equipment will be worn out through construction work, but it will be there. One of the things we will have left is a very good gravel crushing plant; it will stay there. The wharf is there.

Mr. SIMPSON: You were talking about some of the desirable features and you said you could rule out (c). Was that included when you were talking about the wharf? What that set up for transshipment from barges to coasters, or is it ruled out?

Mr. ROBERTSON: No. It is subject to the draft. If there is a six-foot draft you can trans-ship. For greater draft, Tuktoyaktuk is the point; it goes to fourteen feet.

Mr. HARDIE: You are still on the channel.

Mr. ROBERTSON: As I mentioned, the site development was $4.8 million.

Administration is next; the figure there is $3.8 million. That includes the federal building, which is the building to house our own administration, National Health and Welfare, Mines and Technical Surveys, the R.C.M.P. detachment, the housing for the federal staff that will be at Inuvik, and so on.

The amount for education, health and other facilities is $9.7 million. That includes a 25-room school, two hostels, each of which will house 250 pupils, a hospital containing 120 beds and a rehabilitation centre containing 50 beds. It also includes a fire hall, a laundry and dry cleaning plant. That is for the hospital, the hostels and the community; it is all centralized. There is also a walk-in freezer.

The next is public utilities; the amount is $7.8 million. That includes the power plant and electrical distribution, central heating and the distribution of heat to the whole community except for one unserviced area which will be heated centrally.

Mr. SIMPSON: What type of power plant is used?

Mr. ROBERTSON: It is a thermal type and burns bunker C oil from Norman Wells.

That figure also includes the water and sewage system and the structure which distributes the heat and the water throughout the community.

The airport is the next item, and the figure there is $7 million. That includes equipment. The contract for the runway alone was $5.5 million. Then there is the terminal building and the airport lighting and ancillary buildings.

Mr. HARDIE: Is that for the first 4,000 feet?

Mr. ROBERTSON: The whole thing. This will take it to 6,000 feet.

National Defence expenditures are in the amount of $900,000.

Then there is the compensation payments to people at Aklavik who have to move or are moving and as a result have to give up facilities that they had at the old town. The amount there is $1.6 million.

Mr. HARDIE: On this point, Mr. Robertson, do those who have been compensated and moved to Inuvik give up their rights to operate in the old townsite?

Mr. ROBERTSON: They give up their facilities. For instance, take Mr. Peffer who operates the power system. He has a hotel in old Aklavik. He is giving up the operation of that hotel and building a new one at Inuvik. He gets his compensation based on the assessed value of the hotel he is leaving behind, plus the 15 per cent dislocation cost. This is the same basis as was used by the Ontario Hydro in connection with the St. Lawrence Seaway scheme; and that is why we adopted this formula. If they get compensation for a facility they give it up at the old place and it passes to the title of the federal government.

Mr. HARDIE: Would the same apply to an operator operating a trading post?

Mr. ROBERTSON: If he gives up his old post he loses it, but that does not mean he cannot carry on there. However, he would have to build something new. It is a physical compensation.

Mr. COATES: What is the reason for the government doing this if, as you say, their present thinking is that they still feel that old Aklavik will continue to remain as a trading post?

Mr. ROBERTSON: It will remain, but on a different scale. There will be no possibility of a hotel there.

Mr. SIMPSON: Do you know how old this hotel is?

Mr. ROBERTSON: I am not sure; perhaps Mr. Hardie would know.

Mr. HARDIE: It is plenty old and plenty rickety.

Mr. ROBERTSON: I would think it is 20 odd years old, but things age more rapidly up there. It was a frame structure.

Mr. SIMPSON: Is it a large structure?

Mr. ROBERTSON: It has two storeys.

Mr. COATES: How many people are there in old Aklavik?

Mr. ROBERTSON: It has a moving population; do you mean as of the present time?

Mr. COATES: Well, prior to the decision of the department.

Mr. ROBERTSON: The permanent population all year round would have been approximately—perhaps you could answer this question, Mr. Sivertz.

Mr. SIVERTZ: The population was somewhere in the neighbourhood of 700, when we considered the move.

Mr. ROBERTSON: But then in the summer or at different seasons of the year the population would go up to something over 1,000.

Mr. PAYNE: Was this takeover of land done almost on a voluntary basis, then?

Mr. ROBERTSON: Oh, yes. It is not really a takeover. What it amounts to is this: on April 1, 1954 notice was served of the decision that had been taken to establish the new town, and the people were told that compensation would be paid for any people moving who had to give up facilities in the old place to move to the new one. However, they were served that notice, and if they built anything beyond that point they would get no compensation. There was a cut-off date. But then there is nothing compulsory about it if they decide to remain on at old Aklavik and no question of compensation would arise. But when Mr. Peffer, who operates a hotel and who knows he cannot continue to run one in Aklavik, decides he is going to move to Inuvik and build a new one, he gets compensation under the agreed system.

Mr. PAYNE: How was this agreed system established? You mentioned that these values were made by assessment. How was the assessment arrived at?

Mr. SIVERTZ: The team that went to value these buildings consisted of officers of this department and the Department of Public Works. They made an estimate of the replacement cost of these buildings and discussed these matters with the owners. They arrived at a figure which would be the compensation paid for surrendering the buildings to the Department of Northern Affairs, if the owner wanted to do that. At the same time this carries with it the right for him to have placed at his disposal a suitable lot in the new location. He might then build on it; but the arrangements for building and the financing of his new building would be up to him.

Mr. PAYNE: He did not buy the lot; it was allocated to him.

Mr. ROBERTSON: No, so far as the land was concerned, the way it was arranged was that people who gave up land, or were going to in the old place, had a claim to a more or less equivalent area in the new site, and they had a priority in the allocation of the land.

Mr. SIMPSON: Was there anything moved?

Mr. ROBERTSON: No, nothing was moved. There is nothing there that is worth moving.

Mr. PAYNE: They were entitled to continue operating at the current site until the new one was ready.

Mr. ROBERTSON: Yes.

Mr. SIMPSON: What is the distance between old Aklavik and new Inuvik?

Mr. ROBERTSON: Thirty-five miles in a straight line, but through the delta it was about 70 miles.

Mr. AIKEN: To take this one particular case of the hotel, would you have the amount of compensation that was paid?

Mr. ROBERTSON: It has not been paid and I have not got it. However, we can get that for you.

Mr. AIKEN: And presumably the building was never moved and will stay in that location?

Mr. ROBERTSON: Yes, and if you are wondering what will happen to it—

Mr. AIKEN: I am more or less wondering what the government got for whatever it is paying.

Mr. ROBERTSON: It got nothing for this. It was similar to the St. Lawrence Seaway. It was not, if you want, physically dispossessing people; it was removing their economic livelihood, because in the case of the hotel it could not carry on in Aklavik, because the economic basis on which he worked his hotel was being taken away by government action.

Mr. AIKEN: This would be pretty much a new concept in compensation?

Mr. ROBERTSON: No, I do not think so.

Mr. AIKEN: Well, it would be different. For example, if the Department of Highways relocate a road it considers it is under no obligation to compensate people who may be located on the old highway.

Mr. ROBERTSON: That is quite true, but in part it is a policy decision of the highways department. I may say we have recently had representations from operators in the national parks about this very point, the fact that, for instance, at Jasper we were going to reroute the main road through there and have a cut-off south of the town. This is going to take the traffic miles away from some of the motel operators, and as a result, they have made representations to Hon. Mr. Hamilton that some kind of compensation should be paid. Now, whether or not there will be, I do not know; but it is not quite the same thing. By driving out of his way a mile or two the driver can get to the motels, but in the case of Aklavik, that hotel was going to have nothing.

Mr. AIKEN: Then, to some degree, it was an incentive for these people to move to the new site?

Mr. ROBERTSON: I do not think it was a real incentive, because it was simply an attempt to give them a fair payment for what they were going to lose.

Mr. AIKEN: That is what concerns me at the moment. I think they were entitled to some compensation. I am interested in knowing what the nature of the compensation was in dollars.

Mr. ROBERTSON: I will be glad to get the information on this. As I say, it was worked out after talking to the Ontario Hydro, because we thought they had had a great deal of experience on compensation matters in connection with the St. Lawrence development. We got the benefit of their experience and we took their basis. We discussed it with Treasury Board and it was approved by them as a fair basis for compensation. I will get the details for you.

Mr. SIMPSON: Was this hotel established there for some time?

Mr. ROBERTSON: Quite some time.

Mr. SIMPSON: Would not your decision be based to quite a degree on the fact that some of these people in these areas are providing goods and services to the people and they would not be there if it was not for government establishments?

Mr. ROBERTSON: Some of them, certainly. Certainly the hotel would not be there. It would not have established there if Aklavik had not been the main administration centre up until the present time; and once it ceased to be the main administration centre, most of the through business that keeps a hotel going vanishes. Now, mind you, if the new oil developments go ahead as successfully as we hope they will, it is not impossible that there will be other centres where there will be a population that would sustain a hotel; but Aklavik will not be one, I can guarantee that. The possibilities will be at Inuvik and Fort McPherson.

Mr. PAYNE: In connection with this subject, surely we are into an entirely different concept in this situation than in the case of the St. Lawrence Seaway. I raise this point at this time because it could have every long range implications. The relocation and the changes in the economic situation at Aklavik are factors that have existed elsewhere in Canada, whether in connection with the St. Lawrence Seaway development or other hydro developments, where we have by virtue of government action physically dispossessed and made it impossible for people to continue. In those cases there is a responsibility, but in northern development, while I go along with Mr. Aiken that if it is an incentive for the development of the north and that is policy, we have a reason; but if it is on the basis of the government developing a new area for one of many reasons and saying: here now, we have created an economic difficulty for people living elsewhere. We are opening—on that basic principle—a most tragic and dangerous concept of government responsibility in the future, and I think it is one that should be looked at.

Mr. ROBERTSON: I suppose that is a matter of judgment, Mr. Payne. It was thought that in this case it was really a direct action which was going to totally remove livelihood for at least a lot of these operators. I would agree that if this went very far, you would get into some pretty dangerous ground. But in this particular case I do think we would have been doing a very great injustice to some people who have pioneered development up there if, in effect, we pulled the rug out from under them and gave them nothing at all.

Mr. PAYNE: I am not quarrelling with what was done; I am quarrelling very severely with the principle on which the evidence indicates it was based. If it was for the furtherance of northern development, you have one situation; but if it is compensation for injury done by government development in an area, this could carry over to most fields in Canada, and we are on very dangerous ground.

Mr. AIKEN: Mr. Chairman, may I follow that up by asking if the department has any idea how many of the people who will be given compensation are actually going to be relocated?

Mr. ROBERTSON: They will not get compensation unless they do, because that will be the only reason for compensation.

Mr. AIKEN: So they must relocate on the new site before they get compensation?

Mr. ROBERTSON: Yes. Some indication of what we estimate as to the size that Aklavik is going to be in the future is given by the fact that we have not added to our two-room school. We think the community will be the size that will fill a two-room school.

Mr. AIKEN: Would it be fair to say that most of those people will incur additional expense, substantial additional expense, in relocating?

Mr. ROBERTSON: Yes, very substantial.

Mr. AIKEN: Then compensation will cover maybe only a percentage of their additional expense?

Mr. ROBERTSON: Yes.

Mr. PAYNE: I suppose this question is ill put, with the minister not being here; but I think it is important that we have in evidence something respecting policy in the future. In that regard I would like to have a statement as to your future policy with a similar undertaking elsewhere in the north, or in national parks. Surely we are into a very cardinal principle that is going to affect government operations extensively in the future?

Mr. ROBERTSON: May I discuss this with the minister and ask him, perhaps, to say something?

Mr. PAYNE: Yes.

Mr. SIMPSON: You mentioned an hotel in Aklavik. Are there any other private enterprise merchants, or anything, who would be involved?

Mr. ROBERTSON: Yes, merchants: there would be about four or five traders who have posts and who are going to relocate. The Hudson's Bay Company is the largest of them.

Mr. SIMPSON: They figure on relocating?

Mr. ROBERTSON: Yes; they have already started construction. They probably are not getting compensation; they are probably not relocating, but are just establishing a new post.

Mr. HARDIE: The same with Semmler; he is simply establishing one.

Mr. ROBERTSON: If they are simply establishing a new post, they will not get compensation for the old one.

Mr. ROBERGE: They can keep the two posts?

Mr. ROBERTSON: Yes. In addition to that, there is a private charter airway service there which has buildings. It is going to be relocated at the new place.

Mr. SIMPSON: How about private individuals, people who may be living in the area, if they move over to the new townsite?

Mr. ROBERTSON: They would get compensation for what they left behind. If you were to see the houses, you would realize the compensation will not be high.

Mr. COATES: What do you expect the population of Inuvik to be?

Mr. ROBERTSON: It is very hard to say. We have planned it on the possible maximum of 5,000.

Mr. SIMPSON: What about your schools—do you plan to have any residential schools?

Mr. ROBERTSON: Not residential schools. The sytem that has been devised is to construct hostels, and then the children attend the day school. This sounds like a distinction without a difference, but there is a very important difference. The reason is, that if you have residential schools, the residential facilities are, for the most part, for either Eskimo or Indian children, and if

they stay in that residential school they are educated in isolation; whereas if you have them go to a day school, then they are mixed with the people of the community, the children, the whites, and all the rest of it.

Mr. SIMPSON: In relation to the planned possible population of Inuvik of 5,000, in your development of sewer and water facilities, would that be taken into consideration—building lots, or housing lots, or anything?

Mr. ROBERTSON: Do you mean, do we have—

Mr. SIMPSON: Will facilities be provided? Will you be looking forward to providing facilities for additional, new houses?

Mr. ROBERTSON: Yes. Both the physical plan of the townsite, and also the capacity of the sewer-water-power facilities, are such that they can take care of a community of that size. In fact, they can be expanded beyond that. But, basically, there is the structure there for that.

Mr. COATES: How long do you think it might be before the town would have a population of 5,000?

Mr. ROBERTSON: It is very hard to know; but the map Mr. Hamilton showed the other day demonstrated—you will have noticed—that the permit areas that have been taken up for oil exploration completely blanket the entire delta. They go both sides of the delta and beyond the delta to the water, and they go upstream from it. If oil and gas development goes ahead at a reasonably rapid rate, this area could be up to 5,000 and beyond 5,000. We cannot know; that is our trouble.

Mr. COATES: Why was the decision made to relocate, or to build a new town—shall we say—at Inuvik at the present time?

Mr. ROBERTSON: Well, as I mentioned—

Mr. COATES: You mentioned a number of things: but why did the department consider it necessary to take the step at this specific time?

Mr. ROBERTSON: Because considerable expansion was going to come. We had plans for more development and building there; the Department of Transport wanted an increase in facilities, the navy wanted an increase in their facilities, and it was clear that in the next few years there was going to be substantial construction. It would either be at the old place or it would be somewhere else. It was decided that, if a change was to be made, that was the time it would be cheapest to do it.

Mr. COATES: In this regard, are there any other towns within a fair distance from Aklavik that might have been expanded, rather than the department taking that responsibility of building a brand new townsite?

Mr. ROBERTSON: No; the closest place is Fort McPherson, which is on the Peel river, 70 or 80 miles away. But at Fort McPherson there is no gravel; it is on an alluvial deposit as well. It is a better location than Aklavik, by a long shot, because it is on a height; but there is no gravel at Fort McPherson.

Mr. COATES: How far did you say it is?

Mr. ROBERTSON: Seventy miles.

Mr. HARDIE: It is possibly 50 or 60, by air.

Mr. ROBERTSON: About 60, by air.

Mr. COATES: And this one is 30?

Mr. ROBERTSON: This one is 35.

Mr. COATES: So it is a matter of going another 25 miles?

Mr. ROBERTSON: But Fort McPherson would have been precious little better than Aklavik. Fort McPherson is on higher ground—Mr. Nielsen has been there—but there is no gravel at Fort McPherson, none at all. It is not on a channel which would be en route to the western coast; it is not a place

that Eskimos use at all. There would have been nothing to recommend it, and it would have cost at least as much—and, I think, a great deal more—to relocate there. There is nothing there to expand upon. Finally, there is no source of water that would be adequate.

Mr. SIMPSON: In your plans at the present time, have you planned anything in relation to an Eskimo establishment there—Eskimo housing?

Mr. ROBERTSON: We hope there is going to be no dividing line, except the dividing line that economics bring in. The town is planned on the basis of a serviced area and an unserviced area. This is simply recognition of the economic facts of life, that some people will not be able to pay the costs that are involved in the serviced areas. But if they can, our hope and our objective is that Eskimos, Indians, whites and mixed blood will be living cheek by jowl in each of them, and they will be working substantially, we hope, at the same kind of jobs.

Mr. SIMPSON: What I meant was: have you planned any Eskimo housing, such as the establishment they have at Churchill?

Mr. ROBERTSON: No. What has been done, though, is this: when plans were being made for the construction phase there had to be provision for construction camps, housing facilities for the construction workers. These could have been provided in the normal way, as purely temporary construction facilities, but it was decided that a much better thing, taking the long view, would be to build "512's". These are small houses of a permanent category; they contain 512 square feet; they are 16′ x 32′ in dimensions. These were going to be very little more costly than the provision of ordinary camp facilities.

We thought we could amortize a considerable part of the cost over the construction use. Then, at the end of the work, we would have soundly built, well insulated, smaller houses that would be available for sale at a depreciated price. This means we are going to have good, low-cost housing available for Eskimos, Indians and people who do not have the kind of income that will enable them to afford larger houses.

Mr. HARDIE: What kind of price do you think you will be putting on those houses after the construction is over?

Mr. SIVERTZ: We have a depreciated value, since the houses have been used for several years.

Mr. HARDIE: Do the contractors pay anything now for rental of these houses?

Mr. SIVERTZ: Yes.

Mr. HARDIE: That will be applied?

Mr. SIVERTZ: That will be applied. But the houses will have to be renovated before they are in a fit condition to live in, because they have been used for several years as bunkhouses.

Mr. ROBERTSON: It will require a superficial renovation, rather than a basic renovation.

Mr. HARDIE: What would the depreciated cost be, with the rental taken into consideration that has been paid by the operator, plus the renovation?

Mr. ROBERTSON: I think the expectation is that it will be something in the vicinity of $2,500; but this will depend, in individual circumstances, on how long a house has been used and, therefore, how long depreciation can be applied against the construction use.

Mr. NIELSEN: Will the government be losing any money, at that price?

Mr. ROBERTSON: No; the idea is to have an amortized cost that is covered by construction use.

The CHAIRMAN: Does that include the lot?

Mr. ROBERTSON: No, that does not cover the lot.

Mr. HARDIE: Is there any charge for the lot?

Mr. ROBERTSON: No, the lot has no charge, if the person has come off a lot.

Mr. COATES: Mr. Chairman, the deputy minister appears to indicate that one of the main reasons the present site was chosen is because of the availability of materials necessary for construction of the buildings.

Mr. ROBERTSON: That is correct.

Mr. COATES: Would he tell me what have been the construction costs of the different buildings which have been undertaken, in comparison with construction costs in this part of Canada?

Mr. ROBERTSON: I cannot immediately give you a comparison. I can give you what the costs are for the contracts placed. Tenders were called for the airport runway, but in actual fact only one tender was received. That tender was by a new company.

Mr. COATES: Only one tender was received?

Mr. ROBERTSON: Only one tender was received: that tender was by a company that was newly incorporated by the Dutton people, Standard Gravel, and so on, Calgary. It is called Aklavik Constructors. The tender was $9,953,265. That contract was far in excess of the estimate at the time, and what was done was to work out a contract with the Aklavik Constructors under which they did it at a target price, with an incentive 10 per cent for savings.

Mr. COATES: In other words, agreed price, cost plus?

Mr. ROBERTSON: Cost plus, or cost minus.

Mr. COATES: One of the two?

Mr. ROBERTSON: The incentive operated to keep the cost down.

Mr. NIELSEN: What was the target price you set?

Mr. ROBERTSON: $5,500,000.

Mr. NIELSEN: And what was the airport built for?

Mr. ROBERTSON: $5,500,000.

Mr. NIELSEN: What was his percentage of profit?

Mr. ROBERTSON: I will have to check; I have not got that. With regard to the airport runway, instead of 5,000 feet at the target price, it will be roughly 6,000 feet at the target price.

Mr. SIMPSON: That was for the runway. Did that include the terminal building?

Mr. ROBERTSON: No.

Mr. SIMPSON: Has that a hard surface?

Mr. ROBERTSON: No, it is gravel. The airport lighting is a subcontract. Do you want that? It is only $20 odd thousand. I can give it to you, if you want it.

Mr. SIMPSON: No.

Mr. ROBERTSON: It went to the lowest tender, Schumacher, MacKenzie of Edmonton—$23,282.

Mr. NIELSEN: Have you information there as to the highest tender?

Mr. ROBERTSON: Yes, Stevenson and Treadway Limited, of Edmonton—$36,360.

The CHAIRMAN: Gentlemen do you want a copy of the agreement with Aklavik Constructors?

Mr. COATES: I would like more information with regard to—

Mr. HARDIE: Before we go any further, Mr. Chairman—on a point of order—this committee, since we started to sit this year to go over the estimates of the Department of Mines and Technical Surveys, has wandered 'way beyond our terms of reference. I have no objection to questions on the relocation of Aklavik, because it is still going on; but to take up the time of the committee with these questions is, I think, unnecessary. I am sure that these answers could have been given through the order paper in the House, rather than asking the department now for answers.

If they were tabled, it would save a great deal of time in our questioning, because I am sure that if and when they are tabled they will provoke, other questions. It would save the time of the committee, if you want to get through with this committee before the end of July. I think a different procedure could be used.

Mr. NIELSEN: If I may accede to Mr. Hardie's suggestion, I would be agreeable to having the department table a list of the contracts which have been undertaken at Inuvik and/or Aklavik, showing the lowest tender and the highest tender in each individual instance. Then perhaps the members of the committee could study it before asking questions at the next sitting.

Mr. ROBERTSON: I can do that, or we can give all the tenders, if you would like them.

Mr. NIELSEN: That would be even better, if those details are handy.

Mr. SIMPSON: Before we get away from the relocation question, I would like to ask this question, Mr Chairman: you are talking about these people moving, and with regard to any person who had a lot at Aklavik, you will provide a new lot on the new townsite. Was Aklavik a surveyed town? Did the people there own property, or was it leased?

Mr. ROBERTSON: They owned property.

The CHAIRMAN: Gentlemen, what is your pleasure regarding the point raised by Messrs. Hardie, Coates and Nielsen?

Mr. NIELSEN: Would Mr. Hardie be agreeable to my suggestion?

Mr. HARDIE: Yes; I think it would save a great deal of the committee's time.

Mr. COATES: On the specific question I was asking with regard to this matter, it would be of any assistance if this came forth, because I wanted to question the minister further on the contract awarded to the Aklavik Constructors.

Mr. HARDIE: Go ahead.

Mr. ROBERTSON: We will get the actual terms of the contract, if you wish to have them. I do not have the details with me at the moment.

Mr. COATES: I was more interested in the procedure you followed. In view of the fact that your department received only one tender, I was wondering whether further efforts were made to see if it was possible to get more than one tender from construction companies in Canada. It seems strange to me that of all the construction companies only one would be interested.

Mr. ROBERTSON: It was not strange at that time. However, the situation, very happily, has changed a lot. At that time we experienced a good deal of difficulty in getting contractors interested in northern construction. Construction was proceeding at a pretty high rate in the rest of Canada and most of them were not in any need to reach out far afield; they had enough close to home. At that stage, northern development was still regarded as a pretty hazardous sort of business and one in which a man could lose his shirt as easily as he could make a profit. We had difficulty in getting competition.

That was in 1956. However, by contrast, when we came to the school and hostels, we got three tenders and the Aklavik Constructors had very good competition. They thought they were in on the ground and had an advantage and were going to do the work. But a real competition developed and we got a good set of tenders. Then a year later we received seven tenders in connection with the main body of other buildings. Competition has increased certainly since 1956, but back in that year it was very difficult to get competition.

Mr. COATES: Were construction companies in general aware of the fact that there was a construction program in progress of the magnitude of this one?

Mr. ROBERTSON: Yes. If they were not, it was only because they had not read the newspapers and read the tender calls. We were giving it publicity in the hope of getting competition.

Mr. COATES: Have many construction companies who have taken federal contracts in the north become bankrupt?

Mr. ROBERTSON: I do not think so. Usually, what happened in the period when it was difficult to get competition was that they added on a sufficient contingency amount and they hoped this would take care of anything that went wrong in their northern work. The tenders were pretty high in the early stages; we receive better tenders now.

Mr. HARDIE: Did the Department of Northern Affairs call for all of these tenders?

Mr. ROBERTSON: No, the Department of Transport called for the airport tender but it was discussed with us because, as I mentioned earlier, Northern Affairs had a sort of an over-all view on the thing. All the airport tenders have been called by the Department of Transport and the tenders for the other ones, with the exception of sewer, water and utilities, have been called by the Department of Public Works. Sewer, water and utilities were called by Northern Canada Power.

Mr. HARDIE: Well, in that case I think the place to question the tenders or the contracts is under Transport or Public Works. It is not in our terms of reference.

Mr. ROBERTSON: If that is what is wanted, we can get all that information and return it to you.

Mr. COATES: With the present interest of the construction industry in northern development, do you think, if this program were undertaken today rather than when it was, that the costs would be somewhat less than what they will be? I am referring to the relocation of Aklavik.

Mr. ROBERTSON: I doubt it. The airport work was the major one among the early tenders and that was put, as I say, on a different basis to remove this contingency inflation, and we got it for the target price.

Mr. NIELSEN: Would not competition itself have lowered the price? You have given an example in the pool contract that you mentioned.

Mr. ROBERTSON: I do not think it would on the airport because it was done on the basis of cost with a fee that operated as an incentive. I do not see that it would have affected that.

Mr. COATES: What construction took place before the airport development?

Mr. ROBERTSON: Most of that was on a day-labour basis. It was a matter of getting the land cleared, putting in the basic roads, getting the warehouses and the wharf constructed. We did the roads, the wharf and that sort of thing, and the warehouses were done by the Department of Public Works.

Mr. NIELSEN: Following along the line of Mr. Coates' question, you say the contract for the runway was awarded in 1956 and you received only one tender. Since that time more companies have become interested in northern

construction and, therefore, as I understand it, Mr. Coates' point is that today you most likely would receive more contracts than you had received for the runway in 1956; therefore, with the competition you would have most likely got a lower price.

Mr. ROBERTSON: But my point is that the tender was not given for the airport on the basis in which the submission was made. There is a further point I would like to mention, and it is this. The lower prices are a product of two things. They are in part a product of increased competition and in part a product of the fact that the construction work that has gone on before has given a lot of experience on the phases of construction and the contractors now are not as worried about the unknowns as they were earlier. The early phase had to be overcome by someone.

Mr. NIELSEN: Do you not agree that Mr. Coates has a cogent point here? I think you missed the point I was making and it is this: if that contract were called today, most likely you would have three or more tenders?

Mr. ROBERTSON: Yes.

Mr. NIELSEN: Therefore, that element of competition would be there which would probably result in lower cost.

Mr. ROBERTSON: The element of competition would be there, yes. I was thinking that costs in general had gone up and there are offsetting factors and so on.

Mr. COATES: This is part of the reason why I asked an earlier question with regard to the time element in the relocation of Aklavik. It would appear to me that not enough publicity was given and that actually and in fact the only publicity that the northland has received to any degree has been the result of two election campaigns, in which the Prime Minister pointed out—

Mr. ROBERTSON: I do not want to get into the political aspects of this.

Mr. HARDIE: What a laugh!

Mr. AIKEN: I know Mr. Hardie resents the intrusion of politics.

Mr. HARDIE: I do not resent it; I love it.

Mr. AIKEN: But will you not admit that what Mr. Coates said was true? It did become an issue and it did focus attention on the northland. He did not say it was the program of one party or another, but the results of two elections and in these campaigns northern development was a very essential issue. It did focus more attention on the north.

Mr. HARDIE: Maybe it did, but if you look at the estimates of northern construction you will see that once the relocation of Aklavik is completed and once the roads that the former administration started are finished, you fellows will not know where you are going.

Mr. NIELSEN: Could I get back to the point, Mr. Chairman?

Mr. ROBERTSON: If you do not mind, Mr. Chairman, I would rather not get involved in this.

Mr. NIELSEN: I have a question for the deputy minister. Do you feet that outside contractors have the idea, because the construction is in the north and because these are government projects, that this is an area in which they can make a fast buck and, therefore, we have created an atmosphere among the contractors in Canada where they bid over and above a figure at which they can build such a project, with a reasonable margin of profit?

The CHAIRMAN: Are you asking him to give an opinion of the contractors?

Mr. NIELSEN: In his experience has he found this to be so?

Mr. ROBERTSON: I would say that with my knowledge—and I am not going to say how this is arrived at—that as there is a good deal of construction activity and so on in the north there is now a good deal of interest shown

on the part of contractors and with varying degrees, depending on location. There is pretty active competition. Now, in that regard there may have been thoughts that contracts could be padded for the kind of reasons to which Mr. Nielsen refers, but it is pretty well offset by the fact that they know there is going to be competition. There are some exceptions and I am thinking of remote locations such as Igloolik where you do not get competition or that sort of thing. We generally hold that type of thing in reserve and regard it on a day-labour basis to make sure we are not completely exposed to the possibility we will not get competition.

Mr. HARDIE: In the case of the proposed Dawson City—Peel Plateau road, tenders were called this year and I am wondering if the lowest bids came from people in business in the Yukon.

Mr. NIELSEN: This contract was let by the Department of Public Works. I do not want to give evidence, but my friend can rest assured that the lowest tender was accepted in all cases.

Mr. HARDIE: But was it a local contractor?

Mr. NIELSEN: The Department of Public Works would be the only people who could answer that. My answer would be, yes.

Mr. HARDIE: If they are going to answer this, they are going to answer all the other questions, and the Department of Transport are going to answer for their contracts. The Department of Northern Affairs are paying for this road and if you want us to question Public Works, you are going to ask Public Works and all the rest of them.

The CHAIRMAN: The information can be obtained from the Department of Public Works or the Department of Transport. Gentlemen, you are dealing with the estimates of Northern Affairs.

Mr. HARDIE: And this is an estimate of Northern Affairs for that road.

The CHAIRMAN: The deputy minister can obtain the information for the committee.

Mr. ROBERTSON: We can get the information.

Mr. NIELSEN: Could we call a witness from the Department of Public Works?

The CHAIRMAN: Yes, if we find it necessary to do so.

Mr. AIKEN: Let us not get diverted from the subject of the relocation of Aklavik.

The CHAIRMAN: I think that the department can obtain the information and if you feel later you want to call a witness from the Department of Public Works, we can consider it. The question of calling witnesses is a matter which will have to be taken up by the steering committee, if necessary.

Mr. AIKEN: If I may, Mr. Chairman, I would like to suggest that we try to complete this one subject and move on to another one; otherwise, we are going to be wandering around.

Mr. COATES: Will there be included in the contracts you will give us information in connection with "512" houses and Eskimo houses?

Mr. ROBERTSON: These were done on a day-labour basis. I mentioned the day-labour work that was done up there in the early phases. We can get costs but they are not contracts.

Mr. COATES: Would this day-labour be Eskimo labour to a large degree?

Mr. ROBERTSON: Largely. There were two reasons we wanted to use day-labour at an early point there. One reason was that we thought the work could be done better at the initial stage by people who were directly involved in the planning of the whole thing, and the other reason was that we felt in that way

we could initiate local people into these projects. We wanted to get them to work. The contractor does not necessarily want to get them to work; he wants to get his contract completed as economically as he can. We felt if we had a couple of years in which we could employ these people and give them training, it would help in getting them employment with contractors. It has worked out that way. I might add that courses were given in carpentry and that sort of thing. We did this so we could tell the contractors, when the time came, that there is trained or semi-trained labour available locally and we want you to use them as much as possible. As a result of this I think we are going to have at the end of this construction phase a good number of people there who are pretty well trained in heavy equipment operation, carpentry and various construction trades, which will be extremely useful for them.

Mr. COATES: Was the department planning on selling these types of houses which they built to the people in the area?

Mr. ROBERTSON: Yes. That is the depreciated house to which I am referring.

Mr. COATES: Unless you could ascertain somehow what a contractor would build a house for and what the actual cost was, allowing, for instance, the fact that the government of Canada was getting some benefit by building these houses on a day-labour basis, it would be probably more expensive on a day-labour basis than if you let them by contract.

Mr. ROBERTSON: It would be very difficult to answer that question. I heard Mr. Connelly pass some remark; perhaps he would like to make a statement on this.

Mr. A. B. CONNELLY (*Chief, Engineering Division, Northern Affairs Branch*): The cost of building 512 houses is $2,000 more by contract than by day-labour.

Mr. COATES: Then there have been contracts called for the north?

Mr. ROBERTSON: Yes, but not at Aklavik. There have been other places.

Mr. COATES: I think you said they would cost more the other way.

Mr. HARDIE: Was one of the chief reasons for doing it by day-labour at that particular time due to the fur prices that were paid in the delta area? I am sure the committee members know that all these people lived entirely on fur up until that time; the fur prices were down and it gave the government an opportunity to do something about employing these people in some other line, which would give them something besides the $400 a year that they were receiving from fur.

Mr. COATES: I have no argument at all with the judgment in connection with their policy of employment; all I was trying to do was to determine what the cost of these were compared to what a contractor would charge.

Mr. ROBERTSON: As Mr. Connelly has said, our experience has been that we can get them at a lower cost on a day-labour basis. They are too small a product, even when you build a group of them, to interest contractors to any degree.

Mr. COATES: Could I have the square foot cost of building these?

Mr. ROBERTSON: It depends on the location. It is around $10 a square foot at Aklavik.

Mr. NIELSEN: And that is not usual.

Mr. ROBERTSON: It depends on the location.

Mr. NIELSEN: That is not the usual square foot cost of construction. I do not think the committee should have that misapprehension.

Mr. ROBERTSON: It is lower at Aklavik than it would be in most places.

Mr. COATES: $10 a square foot is probably lower than most of the contractors would do it.

Mr. SIVERTZ: I should point out that this is a simple building design; it did not include plumbing or heating of an expensive character. That was a rock bottom price and we were well satisfied with the cost of these particular buildings.

Mr. COATES: And because of this you were able to give the people there a great deal of training.

Mr. ROBERTSON: I think the training came later, but the contractors have been pretty well satisfied with the labour that came out of it. We regard that as an important by-product because the life of the delta has been hunting and trapping. The average cost of muskrat skins last winter was around 70 cents; a few years ago it was $2.

Mr. COATES: As indicated to the Eskimo Affairs Committee, it was their desire to forget about the fur trade because of the fact the prices are rock bottom, and be trained in construction.

Mr. ROBERTSON: Yes.

Mr. SIVERTZ: I do not want to leave the committee with the idea that permanent buildings, with mechanical services, were obtained for anything like $10 a square foot.

The CHAIRMAN: We will adjourn now until 9 a.m. tomorrow morning.

Mr. COATES: Mr. Chairman, I think 9.30 a.m. would be better.

The CHAIRMAN: Yes, it has proved rather difficult to obtain a quorum for 9 a.m. Our next meeting will be at 9.30 a.m. tomorrow morning.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 28

THURSDAY, MAY 28, 1959

Estimates 1959-60 of the Department of
Northern Affairs and National Resources

WITNESSES:

Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; Mr. B. G. Sivertz, Director, Northern Administration Branch; and Mr. A. B. Connelly, Chief Engineering Division.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21316-5—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, May 28, 1959.
(33)

The Standing Committee on Mines, Forests and Waters met at 9.30 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Coates, Doucett, Hardie, Korchinski, McFarlane, McGregor, McQuillan, Murphy, Nielsen, Payne, Roberge, Stearns and Woolliams.—(14)

In attendance, of the Department of Northern Affairs and National Resources: Messrs. R. G. Robertson, Deputy Minister; B. G. Sivertz, Director, and F. A. G. Carter, Assistant Director, Northern Administration Branch; A. B. Connelly, Chief, Engineering Division; G. M. Carty, Chief Administrative Officer; M. A. Currie, and G. H. Montsion, Administrative Officers; E. R. Stimpson, Northern Administration Branch; and D. W. Bartlett, Executive Officer.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Continuing on Item 275, Branch Administration, Northern Administration Branch, Mr. Robertson answered certain questions which had previously been asked. Mr. Robertson and other officials were further questioned on matters concerning the establishment of the new townsite of Inuvik which is largely to replace Aklavik.

At 11.05 o'clock a.m. the Committee adjourned until 11.00 o'clock a.m. on Monday, June 1, 1959.

Eric H. Jones,
Clerk of the Committee.

21316-5—1½

EVIDENCE

THURSDAY, May 28, 1959.
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. We are on item 275 of Northern Administration Branch.

Mr. MCFARLANE: Mr. Chairman, are we ready to proceed?

The CHAIRMAN: Yes. The deputy minister has some information which was requested. If you wish, he is prepared to table that information this morning.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Yesterday we were asked for details on the airport contract at Inuvik. I have that information and, because it is quite lengthy, perhaps I could table it instead of reading it to you.

The CHAIRMAN: It is the same information which he gave orally yesterday.

Mr. ROBERTSON: This gives the details.

Mr. MCGREGOR: Have you copies available for the committee?

Mr. ROBERTSON: I only have the one copy. I will read it, if you wish.

Mr. HARDIE: I think you should read it. Let us finish up this subject matter which we are on and then proceed to another section; otherwise, we are going to be all over the place.

Mr. COATES: I agree with you.

Mr. ROBERTSON: Shall I read it?

The CHAIRMAN: Yes.

Mr. ROBERTSON: Gentlemen, I mentioned yesterday that we called for tenders for the airfield at Inuvik and that there was only one tender submitted. That original bid was for $9,953,265 for a strip 5,600 feet in length. Now, I mentioned that because there had been only the one tender and because it was considered much too high, that a new arrangement had been negotiated. Perhaps I could simply read the details about the renegotiation.

On June 25, 1956, Treasury Board authorized the Department of Transport to negotiate a contract with Aklavik Constructors Limited to build a length of runway of 4,000 feet instead of 5,600 feet for the target estimate of $5 million, plus a fixed fee of 10 per cent. The contract was negotiated on this basis on October 31, 1956, with the provision that any saving on the $5 million estimate would be shared between the contractor and the government on the basis of 30 per cent to the contractor and 70 per cent to the government. This was an incentive clause to get the price down.

If there was any saving, the Department of Transport was authorized to negotiate a contract with Aklavik Constructors Limited to increase the length of the runway, that is within the target price. Since the Department of Transport had enough data on which to base costs from the first contract—that is after it had been under way—they decided to terminate this contract and negotiate a new contract on the unit price basis to increase the length of the runway to 5,000 feet, plus two 300-foot over-shoots.

When further information became available on inventory and repair costs, the department decided that their unit prices were too high and they renegotiated with the same company for the unit prices as follows: crusher run material at $2.28 per ton; crushed stone at $3.52 per ton.

With these renegotiated prices it was considered possible to increase the effective length of the runway to 6,000 feet and still have a total cost under the $5,500,000 originally estimated. The Department of Transport's application to Treasury Board to construct this further extension was approved by Treasury Board on April 7, 1959.

To sum it all up, the result is that whereas the original bid was $9.9 million for a runway of 5,600 feet, the end result is going to be a runway of 6,000 feet, which is 400 feet more than the original requirement for the target price of $5,500,000. That is the end result of the whole operation.

Mr. McGREGOR: How wide was the runway?

Mr. ROBERTSON: It was 6,000 feet.

Mr. McGREGOR: I did not ask how long; I asked how wide it was.

Mr. ROBERTSON: I do not know the width, but we could find that out for you.

Mr. McGREGOR: Now, surely, Mr. Robertson— we have figures of $5,500,000 and although you know the length, you do not know the width.

Mr. ROBERTSON: I can find out the width for you, Mr. McGregor.

Mr. McGREGOR: Sure you could, but you should have the figure right here. Why is it that you have not the figure right here?

The CHAIRMAN: He was not asked for that figure yesterday, Mr. McGregor. It can be obtained.

Mr. HARDIE: Could one of the officials behind you tell us the width?

Mr. ROBERTSON: This is a Department of Transport specification and contract. I can find the information and let you know.

Mr. McGREGOR: How could you arrive at whether it is a fair cost? You know it is 6,000 feet long but it may be a mile or 100 feet wide.

The CHAIRMAN: I agree that we should have asked yesterday and if we had done so Mr. Robertson would have had the figure in connection with the width this morning.

Mr. ROBERTSON: Perhaps we could get the information by telephone.

The CHAIRMAN: Yes, we may be able to obtain it in a few minutes.

Mr. COATES: Mr. Chairman, Mr. McGregor was not here yesterday and he might not realize that the Department of Transport and not the Department of Northern Affairs built the airport.

Mr. ROBERTSON: We can get a full description of the technical aspects that is wanted.

The CHAIRMAN: You asked yesterday to have particulars of other contracts. Mr. Robertson has those for tabling, and we will table this information.

Mr. ROBERTSON: Do you want me to read this, Mr. Chairman?

The CHAIRMAN: It might be as well.

Mr. ROBERTSON: These are the details on the tenders for the various contracts that were asked for yesterday.

For the school and hostel at Inuvik there were three tenders:

(a)	Poole Construction Co. Ltd., Edmonton, Alberta	$5,415,350
(b)	Aklavik Contractors, Edmonton, Alberta	5,830,000
(c)	McNamara Construction Co. Ltd., Leaside, Ontario	8,973,000

The Department of Public Works estimate was $6,842,000. The contract was awarded to Poole Construction Company Limited on April 26, 1957. Completion date is August 1959.

(2) Frame buildings: there was one contract called for a large number of frame buildings. I will list the frame buildings. They are the hospital, nurses' residence, male staff residence and garage, the R.C.M.P. quarters, R.C.M.P. garage, two hourses for the R.C.M.P., fire hall, laundry building, federal building, single staff quarters and 122 residences.

Tenders were received as follows:

(a) Bird Construction Co. Ltd., Edmonton, Alberta $5,261,066
(b) Poole Construction Co. Ltd., Edmonton, Alberta 5,555,000
(c) Aklavik Contractors, Edmonton, Alberta 5,873,000
(d) McNamara Construction Co. Ltd., Leaside, Ontario 6,019,320
(e) Dawson & Hall Limited, Vancouver, B.C. 6,126,995
(f) Bennett & White (Alberta) Ltd., Edmonton, Alberta 6,480,549
(g) Rush & Tompkins (Canada) Ltd., Edmonton, Alberta 6,995,000

The Department of Public Works estimate was $7,530,200. In other words, the lowest tender was $2.3 million below the original planning estimate, and the contract was awarded to Bird Construction, the lowest tenderer, on June 30, 1958.

I also have information on the status, degree of construction and so forth, if that is required.

The CHAIRMAN: That can be taken in.

Mr. ROBERTSON:

The breakdown of Bird Construction Company Limited contract is as follows:

Project	Contract Price	Completion Date
1. Hospital	$ 1,389,476.00	August 31, 1960
Nurses Residence	301,050.00	August 31, 1960
Male Staff and Garage	102,886.00	August 31, 1960
	$ 1,793,412.00	
2. R.C.M.P. Quarters	$ 203,000.00	August 31, 1959
Garage	80,111.00	August 31, 1959
2 Houses	40,270.00	August 31, 1959
	$ 323,381.00	
3. Fire Hall	$ 93,267.00	August 31, 1959
4. Laundry	$ 415,722.00	August 31, 1959
5. Federal Bldg.	$ 213,868.00	August 31, 1959
6. Single Staff Quarters	311,711.00	August 31, 1959
7. 122 Residences	$ 2,109,705.00	64 Units—Aug. 31/59 58 Units—Aug. 31/59
Grand Total	$ 5,261,066.00	

3. *Progress*

(a) *Schools & Hostels*

Contract awarded on April 26, 1957 to Poole Construction Company Limited in the amount of $5,415,350.00.

33% completed on December, 1957.

89% completed on December, 1958

Estimated completion date is August, 1959.

(b) *Hospital Buildings*

30% completed on December, 1958

Estimated completion date is August 31, 1960.

(c) *R.C.M.P. Buildings*

26% completed on December, 1958

Estimated completion date is August 31, 1959.

(d) *Laundry & Fire Hall*

35% completed on December, 1958

Estimated completion date is August 31, 1959.

(e) *Housing, Office Accommodation*

26% completed on December, 1958

Estimated completion date is August, 1959 with exception of 58 housing units which are scheduled for completion in August, 1960.

Contract for items (b) to (e) inclusive were awarded to Bird Construction Company, Limited on June 30, 1958 in the amount of $5,261,066.00.

Mr. COATES: The Department of Public Works estimate was higher than even the highest bid, was it not?

Mr. ROBERTSON: That is right.

Mr. AIKEN: Mr. Robertson, was there any particular advantage in lumping these all together so that there was actually only one company out of these seven that went ahead on the construction work?

Mr. B. G. SIVERTZ (*Director, Northern Administration Branch*): In the opinion of the Department of Public Works this was an advantage, and it was their advice to lump them in this way because of the lowness of price.

Mr. ROBERTSON: I think, Mr. Aiken, it was thought by Public Works that by having a large lump like this it meant a greater incentive to get a low price on the total rather than chop it all into bits.

Mr. AIKEN: One company, I presume, would be able to move all of its equipment into the country and in that way do it much cheaper?

Mr. ROBERTSON: Yes, and spread their overhead and so on, rather than having it chopped into little pieces. The tabled information includes a certain amount of information on progress and it might be useful.

Mr. MCGREGOR: Do you not think when a statement like that is made there should be enough copies to go around for the members of the committee?

Mr. ROBERTSON: That could certainly be done, Mr. Chairman.

Mr. MCGREGOR: Why was it not done on this one?

The CHAIRMAN: The committee asked yesterday for this information to be brought in this morning by the deputy minister and no one asked that the deputy minister furnish copies for each member. I agree that maybe we should have done that, but it was not done.

Mr. ROBERTSON: We will do that from now on, if that is wanted.

The CHAIRMAN: Here is a copy if you wish to look at it. It is the tabled copy.

Mr. MCGREGOR: We should know what is going on.

Mr. HARDIE: Mr. Chairman, at the meeting the day before yesterday I think Mr. McGregor turned in some questions that he wanted answered. The committee does not know what the questions are. He handed them in on a sheet of paper. I am wondering if they concerned this same subject matter we are on.

The CHAIRMAN: Yes, they do.

Mr. HARDIE: If they do I think we should have the answers to those.

Mr. MCGREGOR: I think the whole committee should have the questions I asked, not just me.

The CHAIRMAN: I thought that there were several members who had questions and that it would save time by just handing it to the deputy minister and his staff to have them answered later.

Mr. ROBERTSON: The answers to Mr. McGregor's questions are not ready yet. They are being prepared.

Mr. MCGREGOR: Well, when they are, make a copy for everybody.

Mr. ROBERTSON: Yes, we will do that.

Mr. HARDIE: Are they all on this same subject?

Mr. ROBERTSON: Some of them are and some were answered yesterday. One of Mr. McGregor's questions was, "Who advised the building of the community at Aklavik?" I went into that in a good deal of detail yesterday. I think it is all in yesterday's record.

What was the purpose of this program?

I think that also was answered yesterday and is on record.

Has the objective been realized?

In think the answer to that is definitely, yes. The location is an excellent location, the project is going ahead, of course, according to plan, and I think definitely the objective of having an administrative centre at a suitable location capable of expansion in the future has been realized.

Mr. MCGREGOR: And everybody whom you thought were going to go to that location are there?

Mr. ROBERTSON: They are not there now. There is no private move to the location yet. We have discouraged it, because during the construction phase we wanted to keep it on a purely construction basis. Once you get families over there, more than just for the construction people, you have problems of garbage disposal, sewage disposal, schools and so on, which cannot be coped with in the construction phase.

Mr. MCGREGOR: It is still in the construction phase?

Mr. ROBERTSON: Yes. The next question was:

How many families have moved into Inuvik from Aklavik?

The answer is, it is still in the construction stage.

Mr. MCGREGOR: There are no families there?

Mr. ROBERTSON: There are a few families who have moved in—people engaged in construction work.

Mr. MCGREGOR: That is exactly what I asked.

Mr. HARDIE: You were told they are preparing the answers to your questions.

Mr. MCGREGOR: Well, I would say unless you have the answer to the question do not read it.

Mr. HARDIE: In my view, if a member is going to ask questions through this committee, Mr. Chairman, and have answers, I think the committee are entitled to hear the questions.

Mr. MCGREGOR: Let him answer the questions.

Mr. HARDIE: We are entitled to hear what the questions are.

Mr. MCGREGOR: Certainly you are, and you are entitled to hear the answers.

Mr. HARDIE: And he said you were going to get the answers.

Mr. MCGREGOR: I asked him how many families have moved in, and there was no answer. There are families that have moved in.

Mr. HARDIE: I do not believe that was the question—

Mr. WOOLLIAMS: Mr. Chairman, I think all the remarks should be addressed through the Chair.

The CHAIRMAN: Let us start off on this basis. Unfortunately Mr. McGregor was not here yesterday and, as I said a moment ago, I think the questions should have been read into the record. I will ask the deputy minister to read the rest of the questions of Mr. McGregor so they will be on the record. A great deal of the information you have asked for, Mr. McGregor, was given yesterday. The rest of the answers that are not available today are being prepared and will likely be available on Monday.

Mr. MCGREGOR: That is the very point. I was at the Public Accounts Committee meeting yesterday; I could not be at both places. If the questions answered were put in such a manner that everybody would have them, we would know today what those answers were.

The CHAIRMAN: Well, in future we will not just pass the questions to the deputy minister. We will have them read.

Mr. ROBERTSON: I read the first four. No. 5 is:

> Is it planned to move all the people from Aklavik to Inuvik?

I think that was answered yesterday, Mr. McGregor. That will be found on the record.

Mr. MCGREGOR: What was the answer?

Mr. ROBERTSON: The answer is that there is no compulsion in the move at all. It is for each person to decide whether he will move or not. Some are moving, some are not.

The next question was:

> If not, why?

That is on the record.

> What is the total cost to date at Aklavik?

I dealt with that yesterday, it is on the record.

> Who supplied piles for the Inuvik site and where were the piles obtained?

We will get that information.

> What was the total cost of piles?

We will get that information.

> Were piles available in the Inuvik area?

The answer is, to some extent. We will get that information in detail.

The other questions by Mr. McGregor are not on Inuvik. They are as follows:

> 1. What percentage of Eskimo children are being provided with formal education?

I answered that question yesterday, Mr. McGregor. At the present time it is about 36 per cent.

2. What has been the rate of progress in the establishment of schools over the last eight to ten years?

We will get figures on that.

3. What projects, industrial, educational and welfare have been suspended or abandoned within the last five years?

We will try to get some information on that.

4. If so, why?

5. What was the total cost involved in each project?

6. Which division of northern administration was responsible (a) for inception, (b) for suspension or abandonment?

7. What information is available regarding the Keewatin project?

I take it, Mr. McGregor, that is the Keewatin re-establishment project?

Mr. McGREGOR: Yes.

Mr. ROBERTSON: We will get that information.

The CHAIRMAN: Those are the questions, gentlemen.

Mr. ROBERTSON: Could I just finish? We have now the information Mr. McGregor asked for on the runway at Aklavik. The effective width is 150 feet, two shoulders at 75 feet each, making another 150 feet. In addition to the length of 6,000 feet there are two overshoots of 300 feet, so that in effect it has a total length of 6,600 feet, and a total width of 300 feet.

Mr. NIELSEN: Those overshoots would not be paved, would they?

The CHAIRMAN: Nothing is paved. The entire runway is gravel.

Mr. McGREGOR: You talk about material at $2.28 a ton for one lot, and $3.52 for another. Can you tell us what kind of material that was?

Mr. ROBERTSON: I cannot, but I can get the details on this. Mr. Connelly, who is the chief of the engineering division of Northern Affairs, is here and can give it to you.

Mr. A. B. CONNELLY (*Chief, Engineering Division*): The crusher run material was 6 inches and down. The finer material was for surfacing.

Mr. McGREGOR: What was the size of that?

Mr. CONNELLY: I would presume ¾ inch, I do not know.

Mr. ROBERTSON: We would have to get that from the Department of Transport. We could get that.

Mr. McGREGOR: One was $2.28 and the other $3.52?

Mr. CONNELLY: Yes.

Mr. McGREGOR: And where was the material? You say the material was right on the job. How far did they have to haul it?

Mr. SIVERTZ: About half a mile.

Mr. McGREGOR: They had to haul the material half a mile?

Mr. SIVERTZ: I say about half a mile from where their camp was situated, but the runway was 6,000 feet long.

Mr. McGREGOR: Where was the material from the runway?

Mr. SIVERTZ: The quarry is about half a mile from the end of the runway.

Mr. McGREGOR: And what material was the runway built on: gravel, muskeg, rock or what?

Mr. SIVERTZ: I am afraid we would have to get that. I do not know what the ground, where the runway was built, consisted of.

Mr. ROBERTSON: Mr. McGregor, I think the best thing would be, if we got a complete report from Transport on this, and we will do that.

Mr. MCGREGOR: Thank you.

The CHAIRMAN: All right.

Mr. MCFARLANE: Mr. Chairman, yesterday Mr. Robertson mentioned a new industrial division being set up in the department. Could you elaborate on that, Mr. Robertson? Is that an industrial division only for the northern development or all of Canada?

Mr. ROBERTSON: No, Mr. McFarlane, it is only for the north, and I mentioned yesterday that in many respects it is not a good name for the division. In the Northern Administration Branch there is one division that is called the Resources Division. That Resources Division is the one that handles all the oil, gas, minerals and lands—things of that sort and northern resources are really in that Resources Division.

The Industrial Division is poorly named, but we did not know quite what to call it. It is a division that is designed to try to survey particular areas, say, the Ungava Bay area, where there are a number of Eskimos living, to see what small scale industries could be developed there that would help the economy of the Eskimos in that area who are in a very distressed condition, and it does the same thing, say, at the western Arctic—Tuktoyaktuk, and so on. The same thing is going to be done on the west coast of Hudson Bay. It is a little more than being designed for the local area development; it will help the people who are trying to make a living on the land to a better life.

The CHAIRMAN: That question was not related to Inuvik. I wonder if we could confine our remarks to the Inuvik-Aklavik project.

Mr. COATES: It might be difficult to do that, Mr. Chairman, until we have the answers to the questions.

The CHAIRMAN: But there is no use bringing it up again if we can finish it this morning. I think that apart from the airport we can obtain all the information we want on Aklavik and Inuvik.

Mr. AIKEN: Mr. Chairman, I would like to follow up the discussion on compensation that we started yesterday—and we got off onto other projects. I would like to ask the deputy minister if all the compensation has been fixed for locations at the old site of Aklavik.

Mr. ROBERTSON: I do not think complete agreement has been reached.

Mr. SIVERTZ: Not all, but substantially it is complete.

Mr. HARDIE: Was there an assessment of all the buildings in the old colony?

Mr. SIVERTZ: An assessment has been made of all.

Mr. ROBERTSON: But in all cases there has not been agreement with the owners.

Mr. SIVERTZ: And indeed we do not know whether the owners wish to come to an agreement with the government and accept compensation at all in some cases.

Mr. AIKEN: Those that do not want to come to an agreement with the government are entitled to stay where they are?

Mr. ROBERTSON: Perfectly entitled.

Mr. AIKEN: But what advantage would there be in staying there if the town-site is being moved?

Mr. ROBERTSON: Well, one case, Mr. Aiken, where we are pretty sure the private owner will want to stay is the Hudson's Bay Company. They will

want to have a post at old Aklavik and they are building a new post—it is not a post; it is really a store—at Inuvik. There is one case where they probably will not seek compensation.

Mr. AIKEN: Do I understand that all the assessment has been completed, even on the Hudson's Bay post, for example?

Mr. ROBERTSON: That is right.

Mr. AIKEN: And that the department is engaged in coming to agreements with people who want to accept compensation?

Mr. SIVERTZ: Yes, that is right.

Mr. AIKEN: And then I understood yesterday a condition of compensation was that the owner moved to the new town-site?

Mr. ROBERTSON: On that, it is a matter of the physical structure rather than in a sense the owner. Take the case of the Catholic church in Aklavik. It has a number of facilities there. It has a residential school; it has an old hospital, and so forth. It will get compensation for some of those buildings because their function is being transferred, but it will certainly retain a church and it will certainly retain a residence of some kind.

Mr. HARDIE: Would the same be true of the Anglicans?

Mr. ROBERTSON: The same would be true for the Anglicans. The owner gets compensation for the facility that is taken out of use as a result of the move, but if he has another structure that is not being taken out of use he will not get compensation for that.

Mr. AIKEN: Well, the basis of compensation as I understand it yesterday, was that the property was valued by valuators and, in addition to that valuation, there was a dislocation allowance of 15 per cent?

Mr. ROBERTSON: That is correct.

Mr. AIKEN: Would it be the case that some people are going to make a benefit or profit on the compensation payment or do you think everyone will lose to some extent?

Mr. ROBERTSON: Well, they will get a 15 per cent dislocation payment if you regard that as a profit. It is the basis on which Ontario Hydro approached the same problem in the St. Lawrence Seaway operation. They apparently considered it was equitable and when we went into it and took it up with the Treasury Board it seemed equitable to us and to the board. That is the only way I can see that it could be regarded as a profit.

Mr. AIKEN: Then, if the dislocation payment is 15 per cent, I find it difficult to understand what the basic payment is for. I can understand they are being paid on account of dislocation.

Mr. ROBERTSON: It is for the capital value.

Mr. AIKEN: Some of these people do not want to move so they do not get anything; someone else does want to move and he then gets the price of his old building, which he sells.

Mr. ROBERTSON: Not the price, he gets the current value.

Mr. SIVERTZ: Less depreciation.

Mr. ROBERTSON: Yes, less depreciation, and so on.

Mr. AIKEN: There was a question—I do not know whether you have the answer for one particular hotel—that I asked about yesterday.

Mr. ROBERTSON: Mr. Sivertz has the answer.

Mr. AIKEN: Do you have other figures as well, Mr. Sivertz?

Mr. SIVERTZ: Yes, we have.

Mr. AIKEN: I would be very interested in getting some idea of the amount of compensation paid and the type of building that it was paid for.

The CHAIRMAN: You are speaking of the hotel first?

Mr. AIKEN: Yes.

Mr. ROBERTSON: Mr. Sivertz can give these but I believe these are values rather than in all cases an agreed compensation.

Mr. SIVERTZ: I think an agreement has been reached with all these owners. However, approval of Treasury Board to pay these amounts has not been obtained.

Mr. AIKEN: That is not what I am concerned with. It is more the basis of value.

The CHAIRMAN: Do you want the value that was placed on the building, the hotel?

Mr. AIKEN: Yes, I would like the hotel first.

Mr. SIVERTZ: The value is $30,000.

Mr. AIKEN: Have you any particulars on what size of hotel and how many rooms?

Mr. SIVERTZ: I am sorry, I do not have them here. I can get these for you. We have all the details of these.

The CHAIRMAN: In addition to the $30,000 they would be receiving $4,500 —15 per cent?

Mr. ROBERTSON: That $30,000 includes the 15 per cent.

Mr. SIVERTZ: I have the basis of the evaluation arrived at for the hotel. It was $1.35 per cubic foot less depreciation and I do not have the depreciation on that hotel; I do not have the particulars of that. It depends on its age, and I do not have that here with these papers.

Mr. AIKEN: Have you got the figures on, let us say, a private building, if you have one? I only want one for purposes of comparison.

Mr. SIVERTZ: For the first one in this list—

Mr. AIKEN: That will be fine.

Mr. SIVERTZ: —it is a dwelling owned by Thomas Airy, valuation $840, dislocation allowance, $126, total $966.

Mr. AIKEN: It must have been a dandy building!

Mr. ROBERTSON: That is the way most of them are.

Mr. AIKEN: This person with compensation of $966, on that basis would not have enough money to buy a house out of his compensation.

Mr. ROBERTSON: No. We have tried to work out a scheme for time payments for this, and we have. The people can signify if they want to buy one on a time payment basis. What would be done is this: he would make a down payment of the total amount of his compensation or whatever is the down payment required, and the rest on time payment, or he could pay cash. However, this man almost certainly has no cash.

Mr. AIKEN: Will there be a substantial number of individual buildings available that these people could buy?

Mr. ROBERTSON: At the old Aklavik?

Mr. AIKEN: No, at the new site?

Mr. ROBERTSON: Oh, yes. I have forgotten how many we have.

Mr. SIVERTZ: I cannot be certain of that but I believe that it is over 100 now. It was 90 at the outset but I believe there are something like 100 now.

Mr. AIKEN: Would it be fair then to assume a lot of these people will merely receive their compensation with one hand and turn around and give it back for the purchase of another building?

Mr. ROBERTSON: Correct.

Mr. AIKEN: What will happen if Treasury Board does not approve these compensation payments? Will it be a case of a new—

Mr. ROBERTSON: We would have to renegotiate with the owners, or something of that kind. Every now and then Treasury Board does turn something down.

Mr. NIELSEN: Are there no agreements signed with any of these owners?

Mr. ROBERTSON: There has been an agreement with the Roman Catholic church. I am not sure if there has been an agreement with the Anglican church.

Mr. NIELSEN: Has Treasury Board approved of this case?

Mr. ROBERTSON: I believe it approved of the one concerning the Roman Catholic church and I believe part of the payment has been made.

Mr. AIKEN: Is there any other type of building included in the list you have there for comparison purposes? I have got the regarding this hotel and a dwelling.

Mr. HARDIE: What is the other hotel?

Mr. SIVERTZ: Are you thinking now of Norris' hotel?

Mr. HARDIE: No; Bill Strong's.

Mr. SIVERTZ: Valuation $24,440, dislocation $3,666, total $28,106.

Mr. HARDIE: How about Mr. Norris'?

Mr. SIVERTZ: Mrs. Cristina Norris, valuation $14,623, dislocation $2,193, total $16,816.

The CHAIRMAN: Have any of these people moved into the new town-site yet?

Mr. ROBERTSON: None has moved in on any permanent basis, Mr. Chairman, because we have been trying to keep it as a construction camp, so far. Some go over in the summer for employment, and there are some who stay there all year in the camping area.

The CHAIRMAN: Is there a new hotel in the new area?

Mr. ROBERTSON: It is going to be built. I think they are putting the piles in this summer. The plan is drawn and it will go ahead this year and next year.

Mr. AIKEN: One more question on this subject concerning the basis of compensation. I threw this question at Mr. Robertson rather quickly yesterday and, from what I have received now, it does seem to me there is a certain amount of incentive to move involved in these compensation payments rather than purely an evaluation basis.

Mr. ROBERTSON: I suppose—

Mr. HARDIE: Well, 15 per cent actually.

Mr. AIKEN: Would it not be true that the 15 per cent you call a dislocation grant would be eaten up by the additional replacement cost of the building?

Mr. ROBERTSON: Well, I don't know. I think one of the main incentives, as I see it, is the possibility of getting one of these depreciated "512's". As you will have gathered from these figures, and as anyone would recognize on seeing them, most of the buildings are ramshackle in the extreme. If I were the owner of one of them and saw a chance of getting rid of one and getting a depreciated but well-constructed building, I would be inclined to think of that as an incentive. I do not know whether that is the point you are getting at, Mr. Aiken.

Mr. AIKEN: No, knowing that the contruction costs there are considerably greater than they are anywhere else in Canada, most of these valuations seem to be reasonable. I do not know what the hotel is like and I am working in the dark.

Mr. ROBERTSON: Pretty run down.

Mr. AIKEN: What I am getting at is the basic concept of giving compensation in the case of this move. I cited one instance yesterday of highways. They might change a main artery and go over 500 feet and cut off $5 million worth of good motels and so on. They feel no obligation to pay those people who have been dislocated. This compensation idea seems to be a new one because the government is undertaking the building of the new location and they are considering, as I see it, some obligation to compensate the people at the old site.

Mr. ROBERTSON: I mentioned yesterday—and I think Mr. Payne also brought this up—I was a little concerned about the possibility that a dangerous precedent would be established by this. I mentioned that I would talk to Hon. Mr. Hamilton and see if he would wish to make a statement about this.

As a matter of information, since our meeting of yesterday, I got in touch with Ontario Hydro to see if there was any situation in their case where they had paid compensation despite the fact that the present property was not physically obliterated or removed. There have been cases there, too, where they have felt that they are following a somewhat similar principle. I have not the details on this but I plan to talk to Hon. Mr. Hamilton about it and he may wish to say something about it.

Mr. AIKEN: I do not want to press it as a matter of policy, but I do want to point out that, whereas consideration should be given to the expressed basis or reason for giving compensation in this particular case, and in the future, I rather think your answer to my question yesterday was rather an off-hand one. I wondered if, upon reflection, there might be something quite different as to a basis of dislocation.

Mr. ROBERTSON: I would have to reflect on it a bit, Mr. Chairman, because I did not fully understand at that point what Mr. Aiken was getting at.

The CHAIRMAN: I think the statement should be made by the minister.

Mr. AIKEN: I do not want to go into the future policy, but I wanted to make that point.

The CHAIRMAN: Mr. Robertson, I think the committee would be interested to know what you anticipate the additional cost to be to set up this new village. How much more money is the government going to spend? You have spent now, what—$38 million?

Mr. ROBERTSON: No, the figures I gave yesterday were figures to completion, including the amount that has been spent so far and what it is estimated will be required to finish the job. I can also get the figures on what has been spent so far.

The CHAIRMAN: I asked that question because I saw an article in this morning's paper that the project might cost $100 million.

Mr. ROBERTSON: That is completely fanciful, Mr. Chairman.

The CHAIRMAN: That is the reason I want it on the record.

Mr. COATES: In this regard, are there any other major tenders to be called with regard to construction?

Mr. ROBERTSON: No, all the major ones have been called and all the major contracts placed.

Mr. COATES: Further on this line, you say there is no possibility of this project costing $100 million. I did not see the article the chairman referred to so I do not know anything about it, but in that regard you said yesterday that this village might very well come to have a population of 5,000 people. I do not imagine that you are presently building a town-site that will be able to take 5,000 people in that village are you?

Mr. ROBERTSON: No, but I would not want to say that, if Inuvik blossoms and grows into an industrial site, at some time there will not be $100 million of investment there; there may be.

Mr. HARDIE: Not government investment?

Mr. ROBERTSON: What I do mean, as far as the actual operation is concerned, is that we are practically at the end of it, and all the contracts have been placed, and the total price is approximately $35 million, as I mentioned yesterday.

The CHAIRMAN: Will the R.C.M.P. have two locations, one at the old and one at the new?

Mr. ROBERTSON: Yes, they will have, I think.

Mr. COATES: In this regard you have not yet estimated how many people or what the population of Inuvik will be when it is completed, as far as government expenditures are concerned?

The CHAIRMAN: You mean this year or next year?

Mr. COATES: Yes, how many people are you going to have there when your job is done?

Mr. ROBERTSON: Do you mean just government personnel, or altogether?

Mr. COATES: You are trying to get people from Aklavik.

Mr. ROBERTSON: It is a little bit hard to judge. We are just discussing here what would be a reasonable estimate. We think around 1,500 for, say, 1961 but we may be a long way out on that.

Mr. COATES: Can we go back to the beginning of the department's decision to build Inuvik and get around to the relocation costs that I asked a question on earlier? Do you have any information on that?

Mr. ROBERTSON: I mentioned, Mr. Coates, that we had tried to keep a relatively academic exercise for conceptual purposes, what could be regarded as relocation and what could be regarded as re-investment. I gave you the total figure on that. I do not know whether you want a breakdown of that sort of thing.

Mr. COATES: Well, what I would like more than a breakdown would be if you can just give me an idea of what you are relocating.

Mr. ROBERTSON: I will give you an idea of what we have included in the relocation costs.

Mr. COATES: That is $3.7 million?

Mr. ROBERTSON: $3,789,000. We have included preliminary expenses, 100 per cent of those, $40,000. I give this in round thousands. Equipment, 10 per cent of the equipment we include as relocation equipment, the rest is for new construction, $55,000. Base camp and buildings, etcetera, we have put 10 per cent of that as a relocation amount, $133,000; camp operation, maintenance, etcetera, and operating costs of the camp, 10 per cent again.

Wharf and approaches, we put 50 per cent of the wharf and approaches to the wharf as relocation cost because there was a pretty inadequate wharf at the old place, so we put 50 per cent as relocation, 50 per cent as expansion, $43,000.

On the federal building we charged 15 per cent as replacement, 85 per cent as new expansion; R.C.M.P. detachment, 25 per cent as replacement, 75 per cent expansion; federal housing, 15 per cent replacement, 85 per cent expansion. The R.C.N.—the naval facilities—100 per cent for relocation, because those were reasonably good where they were. The Royal Canadian Corps of Signals, 100 per cent on the relocation part; compensation, 100 per

cent on the relocation part. These are the sort of items, along with other smaller ones, which make up the relocation figure of $3,789,000 that I gave you yesterday.

Mr. COATES: But in actual fact, nothing is to be relocated. All you are doing is saying that in the future you would have had to do something at Aklavik with this, that, or the other, and as a result of that you are going—because you are building new buildings at Inuvik—to charge a certain portion of this?

Mr. ROBERTSON: That is right. For example, at Aklavik our school is a two-room school but there are another seven rooms there in use for school purposes. Instead of building an addition to the school, as the community grew, we have made rooms in odds and ends of buildings; we have seven other rooms in seven different places to take the expanded school population.

At the new town we are building a school with 30 rooms. You can see the expansion factor is the main factor on the school question. This is the main thing in each case.

Mr. COATES: You say you are building a new school with 30 rooms at Inuvik?

Mr. ROBERTSON: That is right. It has 25 at the moment, with a possibility of expansion.

Mr. COATES: How many of these 25 rooms do you feel you will use in 1961, when you estimate the maximum population?

Mr. ROBERTSON: All of them. This is the minimum requirement.

Mr. MCGREGOR: Could you tell us the cost per room of building those schools?

Mr. ROBERTSON: We could work that out, Mr. McGregor. Could I answer a question the chairman just asked? The chairman asked if any of the rooms in the school were for vocational or technical purposes. The answer is, yes. The school will have rooms, not for what you would regard as total vocational training, but for industrial arts—I think that is the technical term that is applied to it.

Mr. COATES: Could I go now to the purchase of equipment?

The CHAIRMAN: Go ahead.

Mr. COATES: I notice you purchased a fair amount of heavy equipment. Could you tell the committee what part you played in the construction of Inuvik, as a department?

Mr. ROBERTSON: What part we played?

Mr. COATES: Yes, in the construction of Inuvik. What I want to know is: why did you buy all this heavy equipment?

Mr. ROBERTSON: I mentioned yesterday that during the initial two years all of the work was done on a day-labour basis. In other words, we provided the equipment—

Mr. COATES: For the roads and things like that?

Mr. ROBERTSON: For the roads, and the clearing of the area, the construction of the wharf, the approaches from the wharf to the town, and the construction of storehouses and warehouses which would be required for the construction phase. Also, I think, the construction of the tank farm, which was required for the fuel during the construction phase, and construction of the road out to the airport site, which I think is about 7 miles.

Mr. COATES: Your department did that?

Mr. ROBERTSON: Yes, either we or Public Works. In some cases, the way it was done was that we provided the funds and probably the equipment

that Public Works considered to be necessary, and Public Works handled the job on the ground. It was a division of function between the two.

Mr. COATES: What will you do with the equipment when the job is completed?

Mr. ROBERTSON: A lot of it will be completely worn out when the job is completed; I would think a very large part of it will be.

Mr. CONNELLY: We intend to use any equipment that is available for maintenance of those roads, stump clearing, and that sort of thing.

Mr. HARDIE: Some could be used by shipping it up river for some work on other locations too, could it not?

Mr. ROBERTSON: It could be used on other locations.

Mr. CONNELLY: We were particularly concerned with making a track into the reindeer station.

Mr. HARDIE: Some of the equipment that is on the job now is suitable?

Mr. CONNELLY: Yes.

Mr. MCGREGOR: In what year was that equipment bought?

Mr. COATES: There was some in 1954, and 1955?

Mr. ROBERTSON: Yes, I am pretty sure there was. I can remember buying some that summer before the decision was taken, and shipping it up by water. There was virtually some every year.

Mr. MCGREGOR: From what date on?

Mr. ROBERTSON: From 1954 on.

Mr. MCGREGOR: That would be bulldozers and that sort of equipment?

Mr. ROBERTSON: That is right, and trucks.

Mr. MCGREGOR: You say they are worn out?

Mr. ROBERTSON: Some of them may be worn out. We could find out.

Mr. MCGREGOR: They should not be, in that length of time.

Mr. ROBERTSON: I am not saying they are; I do not know.

Mr. COATES: Could you give me the principle on which you purchased the equipment: was it by tender?

Mr. ROBERTSON: Normally it is by tender. I could find out whether, in this particular case, that was done.

The CHAIRMAN: Did you put the amount on the record, Mr. Coates? Did you ask for the amount?

Mr. COATES: Yes, I have asked for the amount.

Mr. ROBERTSON: We will find out whether it was by tender.

Mr. COATES: Mr. McGregor has asked for the number of square feet in the school, has he not?

Mr. ROBERTSON: He asked for the cost per room.

Mr. COATES: That is the same thing. Perhaps we should get the square feet involved as well.

Mr. HARDIE: This $5,415,350 for the school, is that just the 25 class rooms?

Mr. ROBERTSON: No.

Mr. HARDIE: The hostel is included?

Mr. ROBERTSON: Yes; that is the 25-room school and two hostels, each one for 250 pupils and staff.

Mr. MCGREGOR: Are those two in a lump sum?

Mr. ROBERTSON: The whole three are in a lump sum; one school, two hostels.

Mr. McGREGOR: Would you just give us the figures?

The CHAIRMAN: Do you want the size of the hostels?

Mr. COATES: Yes, I would like the size and the cost per room of the hostels, as well as the school.

Mr. ROBERTSON: The cost per room probably would not indicate anything, because most of the accommodation is dormitory accommodation. But we could give you the square footage.

The CHAIRMAN: That would be better.

Mr. COATES: I do not know whether I am clear on the use of these hostels. Are these hostels used to house the students attending the schools, and are the people living in the hostels either Eskimos or Indians?

Mr. ROBERTSON: Yes. The hostels are designed to provide accommodation for children from remote areas, where the settlement is so small where they live that a school cannot be established, or where their parents may follow a hunting, trapping way of life, so they are Nomadic or semi-Nomadic and they are never in one place long enough for children to go to a school and are not living in anything that could be called a permanent home.

This is a condition over a large part of the Eskimo area; it is also a condition over a large part of the Indian area. So the hostels are places to which children of that type can come and live while they go to school.

The CHAIRMAN: I think the committee would like to know this: how long are these children in school, and do they return to their trap lines, or to their parents' little villages, or areas, between school sessions?

Mr. SIVERTZ: Yes.

The CHAIRMAN: I think the committee would like to know, from your experience, thus far, your impression of their education: are some of them now coming out into areas where they can take higher responsibilities, because of their education, or do many of them go back to the way of life of their parents?

Mr. ROBERTSON: My impression, Mr. Chairman, is that thus far there have not been very many of the Eskimo or Indian children who have had their education carried far enough to go on very successfully to new ways of life—as a proportion of the total. There have been a number who have done so quite successfully. But the main point that was made by the Eskimo representatives the other day was that the education had to be carried further. I think it was Mr. Ogpik who put it this way, that it had to go all the way; and with that we would have a very different picture.

The CHAIRMAN: From your experience thus far, do some of these children come back year after year?

Mr. ROBERTSON: Yes. I think Mr. Sivertz might answer that.

Mr. SIVERTZ: As Mr. Robertson said, our experience is of short duration in respect to the Eskimo, the Indian and the Metis people; they have not been very long in the senior grades in school. They are, however, very much interested, and they are under the extreme compulsion now of the diminishing livelihood from the hitherto method of earning a living, which has been by hunting and trapping, and which is getting less reliable and less adequate each year as a support.

Those who have gone through the education that has been available to them have done quite well with the opportunities so gained, to enter wage employment in the north and, in some cases, outside. The Eskimo visitors to Ottawa, of whom Mr. Robertson has spoken, found there were Eskimos and Indians here in southern Canada—of whom we did not know—who came from the north; young men entering the army, the navy and the air force, and otherwise taking part in the opportunities that exist.

The CHAIRMAN: Mr. Robertson and Mr. Sivertz could probably tell the committee this—I think it is important, because we are dealing with northern affairs and the humanities are important: is there any indication of these Indians or Eskimos coming into, say, the mining area and excelling the white man?

Mr. ROBERTSON: The most really heartening demonstration of what is possible in this regard has been at Rankin Inlet, on the west coast of Hudson Bay. There have been a lot of mines in the north, but this is the first mine there has ever been in what we regard as the Arctic; that is, outside the tree line. This is in purely Eskimo territory, for the first time in our history. The Soviet Union may have a precedent of this kind, but Canada has never had one.

The mine management there has been most enlightened, and I really would like to pay tribute to the mine management; they have done a first-class job in trying to see if they could fit Eskimos into the operation. The result has been very successful indeed. One of the representatives who was down here on Monday, Mr. Sheeniktook, is the pilot who brings all ships into the harbour there, and I gather it is a very tricky and difficult harbour. He is also the foreman in charge of the underground Eskimo operations.

Mr. SIVERTZ: He is foreman for all the Eskimo labour force there, I think.

Mr ROBERTSON: And the labour force is both above ground and underground. Mr. Sivertz could probably give more detail on this.

Mr. SIVERTZ: The labour force of approximately 100—I believe at the moment there are about 110 employees there—is 80 per cent Eskimo.

Mr. HARDIE: Do they work full-time?

Mr. SIVERTZ: For the most part, they work full-time. I believe a mine of this kind does need some casual employment and does offer such casual employment to some of the Eskimos who are in the vicinity and who, in fact, welcome that, because it provides them with an opportunity for going off hunting in the way they have been used to doing.

Elsewhere there is an increasing number of young men and women of these hitherto primitive peoples who have entered the activities that civilization—for want of a better word—brings into their country. There is an increasing number of them interested in, and capable of going into the employ of the mines, at Yellowknife, for example, and into the employ of the Northern Canada Power Commission. The new establishment that the Northern Canada Power Commission has set up at Fort Simpson has been placed in charge of a young Indian, who has been trained in the Fort Smith power plant, where there are another half dozen or so young men who have developed a competence in this kind of operation.

The CHAIRMAN: These are Eskimos, or Indians?

Mr. SIVERTZ: These are Indians.

Mr. HARDIE: This man who is in charge of the station at Fort Simpson, where did he get his education?

Mr. ROBERTSON: At Fort Smith, I believe.

Mr. SIVERTZ: His training was at Fort Smith, and I believe his education was at Fort Smith; but I am not certain.

Mr. HARDIE: At what type of school?

Mr. SIVERTZ: I cannot tell you about his school.

Mr. HARDIE: Was it a mission school, or a government school?

Mr. SIVERTZ: I cannot tell you.

Mr. ROBERTSON: It would probably have been a mission school at Fort Smith, because there was no government school established there until about 1946 or 1947.

Mr. SIVERTZ: Although he is a resident of Fort Smith, I am not too sure that he had his early schooling at Fort Smith. In any case, he had very little schooling.

Mr. ROBERTSON: With regard to the question you asked Mr. Chairman, and which Mr. Sivertz has largely answered, there are already indications that a number of Eskimos take up quite responsible jobs. Mr. Sivertz has referred to Rankin Inlet. At Churchill, as well, there are a number now who have been in employment in various types of jobs—from labour foreman, tinsmith, and so on, down to unskilled labour—for a number of years.

I suppose the high-water mark was reached, in one respect, when last year an Eskimo—I think it was—bought himself a DeSoto car and paid for it. They are beginning to fit in. Also, there are two Eskimo girls working as stewardesses on an airline now. These people are gradually fitting in.

The CHAIRMAN: This manpower in the north, which has hitherto been a wasted resource, is now being developed; is that not about it?

Mr. ROBERTSON: It is certainly now being developed, and I think for future development in the north we have here manpower—to look at it on that basis—of high intelligence, adapted to living in the north, and liking living in the north. This is a tremendous asset, I think, if we handle it properly.

The CHAIRMAN: And if that is appreciated by industry?

Mr. ROBERTSON: That is correct.

Mr. HARDIE: Could the deputy minister, or Mr. Sivertz, tell me the position with regard to the Rankin Inlet nickel mine?

Mr. ROBERTSON: We cannot answer that. They are doing a good deal of development work, and they do think that part of the ore body lies under water out in the bay. They have not undertaken the development of that as yet, but they do think that is the major direction in which the ore lies.

Mr. HARDIE: What will be the prospects with regard to the mine in future?

Mr. ROBERTSON: They do not know at the present time. As with most mines, they have to look a number of years ahead—I think they have five years proving ahead, and then it is a matter of carrying on development work to keep ahead of their actual use.

We were talking to Mr. Eastern just the other day. He came down to the Eskimo Affairs Committee. Mr. Eastern is manager of Rankin Inlet mine. The reason we talked about it was that Mr. Sheeniktook raised the question, which I think was quite an erudite question for an Eskimo to raise, and Mr. Eastern gave more or less the answer I have given you now.

Mr. HARDIE: Five years from now?

Mr. ROBERTSON: Five years from now, and development work going on.

Mr. COATES: Getting back to education—or are you through yet, Mr. Hardie?

Mr. HARDIE: Go ahead. We will have lots of time on education, I think, when the witnesses on education are here.

Mr. COATES: I wonder if the deputy minister, or one of his officials, could give us some idea of the number of Eskimo and Indian children of school age. I asked some time ago, when the committee first started on this department's estimates, if they had the figures of the number of Eskimos and Indians of school age.

Mr. ROBERTSON: This is being got together, but it so happens that after Mr. Coates asked his question I came across a table that was prepared for the education subcommittee and the Eskimo Affairs Committee, which gives the figures of Eskimo children. I can give you that now, if that would be of assistance.

Mr. COATES: That is fine.

Mr. ROBERTSON: The number of Eskimo children of school age, in the group from age 5 up to 14, is 2,949. That is the figure as of February 28, 1959. In the group from 15 to 19 there are another 937.

Mr. COATES: These are the figures with regard to Eskimo children: you are endeavouring to get the figures in relation to Indian children?

Mr. ROBERTSON: We will try and get the figures for Indian children also.

Mr. COATES: Would it be possible to obtain information as to the amount of money expended by the government—exclusive of grants—to Anglican and Roman Catholic missions?

Mr. ROBERTSON: I think we put that in the other day. I do not think it has been printed yet, but I believe that was among the figures put in the other day. I believe you asked that at an earlier point.

Mr. MCGREGOR: That is a total of 3,488?

Mr. ROBERTSON: Pardon me?

Mr. MCGREGOR: That is a total of 3,488, in the two classes?

Mr. ROBERTSON: It is 3,800 odd.

Mr. COATES: Yes, 3,898.

Mr. ROBERTSON: 3,886, or something like that.

Mr. MCGREGOR: What territory does that cover?

Mr. ROBERTSON: That covers—this is just Eskimos—the Northwest Territories, and the Eskimos in the Ungava area of northern Quebec.

Mr. MCGREGOR: That is all Eskimos—no Indians?

Mr. ROBERTSON: No Indians.

Mr. MCGREGOR: What is the school day, what hours do they teach, and do they get their holidays at the same time as we do?

Mr. ROBERTSON: It is pretty well a normal day such as we have here; but we could get this information from the education officials when they are here.

Mr. MCGREGOR: When do they take their holidays?

Mr. ROBERTSON: It is a ten-month year, the same as our year down here.

Mr. MCGREGOR: They have their holidays at the same time as we do?

Mr. SIVERTZ: Yes, with the exception of certain cases, such as the tent hostel at Coppermine, which runs through the summer.

Mr. COATES: You say 36 per cent of the children—I presume Eskimo and Indian children—are being educated?

Mr. ROBERTSON: Thirty-six per cent is just Eskimo children.

Mr. COATES: May I also have a breakdown of the number of children that the federal government will be responsible for teaching, and the number of children that are being taught by the Roman Catholic and Anglican missions?

Mr. ROBERTSON: As soon as the hostels at Inuvik and Fort Simpson go into operation—and at Inuvik they will go into operation this coming September; in Fort Simpson they will go into operation in September, 1960—all the full-time schools will be either federal schools or school districts. The only school districts are in Yellowknife. But after that there will be no church schools. There will be a few cases where missionaries will give some part-time teaching in their houses at some places. That will apply at some small settlements, like Gjoa Haven, up at King William Island, where there will not be a school and missionaries may give some part-time instruction. But there will be no schools.

Mr. NIELSEN: There may be a misunderstanding taken from your remarks, Mr. Deputy Minister, when you say there will be no church schools. I would

like it to be made quite clear that this does not in any way abrogate the rights that now reside in the minority religious groups to establish separate schools.

Mr. ROBERTSON: Certainly not; in fact, in Yellowknife there are two school districts. School district No. 1 of the Northwest Territories is a public school district, and school district No. 2 is a separate school district. That right exists in both the Northwest Territories and the Yukon.

Mr. NIELSEN: It is an inviolable right?

Mr. ROBERTSON: That is right.

Mr. MCGREGOR: Could you tell us what percentage of these 3,800 are going to school?

Mr. ROBERTSON: At the present, approximately 36 per cent.

The CHAIRMAN: Mr. McGregor, you will have an opportunity later, when the director of education, or officials of that department, are here. They will answer all questions regarding education. I am going to break in here to say that this department has so much responsibility and so many problems as you already know—that I think, having visited the area myself, that it would be advisable—and I have already taken it up with the minister—to have some members of the committee visit the area this year so that you could get a better idea of the problems and the potential of that vast area.

Mr. COATES: In connection with that, Mr. Chairman, I can only say that it is very difficult for members of this committee to really comment and criticize the work being carried out in the north unless they have some appreciation of what is in the north; and there is no way of obtaining that appreciation unless we do see it.

The CHAIRMAN: I am glad you say that, Mr. Coates, because I really think it is so important. Northern Affairs has come to the front so fast that I think some members of parliament should make a personal visit to the area.

Mr. NIELSEN: When we were sitting last year, the same subject came up, and you will recall the committee concluded its work so the necessary moneys could not be voted for the purpose of accomplishing a committee trip up there.

I wonder if any sort of motion is required now to ensure that the necessary funds are allotted for this purpose?

The CHAIRMAN: As you know, last year I think we had wound up our committee—we were no longer in existence—and the trip could not be made; we were no longer a committee.

Mr. NIELSEN: That was the difficulty last year.

The CHAIRMAN: That is right, but the money was available.

Mr. NIELSEN: Is not the same thing going to happen this year, unless we have some sort of a motion on record now that can be acted upon, so that the funds are set aside to achieve this purpose?

The CHAIRMAN: I do not think there will be any difficulty. Mr. Robertson, the deputy minister, last year worked out an itinerary, starting at Churchill, or in that area, and through to Little Lake, up to Yellowknife, Whitehorse, Dawson, and maybe to three or four other places.

I know the minister and others are anxious that some members of this committee get better acquainted with the problems and the potentials of the north, and we are now working on an itinerary. When it gets into a little better shape we will bring it before the committee for your ideas, and then we will work on the other problem.

Mr. HARDIE: Maybe the federal M.P. for the area will get an invitation this time to travel the area!

The CHAIRMAN: It depends on what your expenses are, Mr. Hardie, of course!

Mr. COATES: There was a contract awarded to the Tower company for work to be carried out at old Aklavik, work that was cut off?

Mr. ROBERTSON: Mr. Coates has a number of questions, for which we are still obtaining information, but I would mention that we will try to get all of that information by Monday morning.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. NIELSEN: I have a question that needs some preparation, but perhaps I could put it on the record and the departmental officials could have the information by Monday or Tuesday. I would like to have tabled before the committee a copy of any contract existing between Polar Construction and the government.

Mr. ROBERTSON: I think Mr. Coates has already asked for that.

Mr. HARDIE: I asked for that one.

Mr. ROBERTSON: We will get it anyway.

Mr. NIELSEN: I would like, also, to have information tabled showing the bid price submitted by each contractor who bid on each individual item of equipment for which bids were called—I believe there are 21 or 22 items—and when the tenders were called for. I would like to know—

Mr. ROBERTSON: Is this under the Polar contract?

Mr. NIELSEN: Yes. I would like to know the lowest bidder, if he was awarded the contract for that item, and the number of pieces which were contracted for. I would like to know if Polar Construction have assigned their interest in any contract which may have been signed between that organization and the government. If it has been assigned, to whom has it been assigned; do the provisions of the contract allow assignment; if so, upon what terms?

Mr. STEARNS: Before you adjourn, Mr. Chairman, if I could revert to forestry for just a minute, I would like to make a statement.

As a member of the Advisory Committee of Industry on Forest Products Research, I attended the annual meeting at the Forest Products Laboratory yesterday, where we met several people who appeared before this committee during the past couple of weeks. It is the feeling of these gentlemen that this Standing Committee on Mines, Forests and Waters is a very going concern, under the able chairman we have. In fact, they used the expression that it appeared to be rejuvenated. They also felt that those of us who were fortunate enough to visit their laboratory on May 25 realized how important it is to industry to see that the staff at the laboratory is increased at the earliest opportunity. The witnesses who were here were impressed with the reception they got, and said they felt they were at home and that this committee was tremendously interested in their problems.

The CHAIRMAN: Thank you, Mr. Stearns. I rather think the committee has done an excellent job and has shouldered the responsibility which they are expected to shoulder.

Mr. HARDIE: Following Mr. Nielsen's question, this contract for the Dawson City-Peel Plateau road, was that awarded to a company called Polar Construction Company? Was the whole of the contract awarded to them?

Mr. CONNELLY: No; the Peel Plateau road has been undertaken on a series of equipment rental contracts, and I think there are five or six contractors who are contributing equipment, after having bid on 22 separate pieces.

Mr. HARDIE: Polar Construction Company is just one of them?

Mr. CONNELLY: Polar Construction Company is just one of them.

Mr. NIELSEN: We would like to have any contracts, I am sure, that exist between Polar Construction Company and the government. That is what I want, anyway.

The CHAIRMAN: You will have them.

Mr. MCGREGOR: If there is more than one contract, let us ask for all contracts to be tabled, so that we can see exactly what they are and who is who.

Mr. NIELSEN: All right.

The CHAIRMAN: Gentlemen, we still have half an hour, and there is no use in wasting the time. If you would like to take up some particular item, you can do so. You could go on to item 277 (S), if you want to. That is an item for $462,000. It is at the bottom of the page.

Mr. NIELSEN: On what page is that?

The CHAIRMAN: On page 55, at the bottom of the page, "(S)". No, that is statutory; we are not required to consider it.

I do not know if there is much in the other items under this division for which you could actually get satisfactory answers until you have the minister here. Perhaps it might be just as well to adjourn, if you have not any further questions.

Mr. NIELSEN: How about the National Museum?

The CHAIRMAN: We will adjourn until Monday morning when we will have the minister here. At that time we will revert to the territorial oil and gas regulations. There is no occasion to have a meeting tomorrow, so we will adjourn until 1 a.m. on Monday next.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 29

RECEIVED
JUN 10 1959

MONDAY, JUNE 1, 1959

Estimates 1959-60 of the Department of
Northern Affairs and National Resources

WITNESSES:

The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources; Mr. R. G. Robertson, Deputy Minister; Mr. F. J. G. Cunningham, Assistant Deputy Minister; Mr. B. G. Sivertz, Chief, Northern Administration Branch; Mr. A. B. Connelly, Chief, Engineering Division; Mr. A. T. Davidson, Chief, and Mr. K. J. Christie, Assistant Chief, Resources Division; and Mr. G. B. Williams, Chief Engineer, Development Engineering Branch, Department of Public Works.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21326-4—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.

Vice-Chairman: Erik Nielsen, Esq.

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric, H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, June 1, 1959.
(34)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Cadieu, Coates, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, Hardie, Korchinski, Kindt, MacRae, McFarlane, McQuillan, Muir (*Cape Breton North and Victoria*), Murphy, Payne, Simpson and Slogan. (18)

In attendance, of the Department of Northern Affairs and National Resources: The Honourable Alvin Hamilton, Minister; Messrs. R. G. Robertson, Deputy Minister; F. J. G. Cunningham, Assistant Deputy Minister; B. G. Sivertz, Chief, and E. R. Stimpson, of Northern Affairs Branch; A. T. Davidson, Chief, K. J. Christie, Assistant Chief, and J. C. Palmer, of Resources Division; A. B. Connelly, Chief, Engineering Division; G. M. Carty, Chief Administrative Officer; D. W. Bartlett, Executive Officer; and M. A. Currie and G. H. Montsion, Administrative Officers: *and of the Department of Public Works*: Mr. G. B. Williams, Chief Engineer, Development Engineering Branch.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

The Chairman tabled a document entitled *The Effect of Property Taxes on the Management of Timberlands, being excerpts from Forest Tenures and Taxes in Canada, a comprehensive analysis of the economic effects of the taxation of the forest industries, published by the Canadian Tax Foundation (Tax Paper No. 11) in 1957.* It was ordered that the said document be printed in this day's proceedings.

Mr. Robertson produced six sets of answers to questions which had been asked at recent meetings during the consideration of the estimates relating to the Northern Administration Branch. Copies of the questions and answers were distributed to the Committee and were ordered to be printed in the record of this day's proceedings. Mr. Robertson also produced a chart concerning equipment rental agreements in regard to the Flat Creek North Grading; this also was ordered to be printed in the record of this day's proceedings.

The Committee reverted to Item 261, Departmental Administration, which had, on May 11, 1959, been deferred for further consideration.

The Minister made a statement relating to the Territorial Oil and Gas Regulations; he was questioned on the said regulations and matters arising therefrom.

Item 261 was approved.

The Committee resumed its consideration of Item 275, Branch Administration, Northern Administration Branch. Questions were asked of the Minister on matters arising therefrom.

At 12.45 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m. or as soon thereafter as routine proceedings in the House are finished.

21326-4—1½

AFTERNOON SITTING

MONDAY, June 1, 1959.
(35)

At 3.45 o'clock p.m. this day the Standing Committee on Mines, Forests and Waters resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, and continued on Item 275.

Members present: Messrs. Aiken, Coates, Doucett, Fleming (*Okanagan-Revelstoke*), Granger, Hardie, Korchinski, Martel, McFarlane, Mitchell, Murphy, Nielsen, Payne, Simpson and Slogan. (15)

In attendance, of the Department of Northern Affairs and National Resources: The same as at the morning sitting except Messrs. Davidson, Christie and Palmer: *of the Department of Public Works*: Mr. G. B. Williams, Chief Engineer, Development Engineering Branch: *and of the Department of Transport*: Mr. D. A. Lane, Assistant Chief Engineer, Airport Development Division.

Messrs. Williams and Cunningham were questioned in regard to tenders on equipment rentals on the Flat Creek-Eagle Plain road project, and on the general subject of tendering on roads and the alternative routings thereof in that area.

The Minister made a statement in regard to road construction in the said area; he was questioned thereon.

The Committee agreed to hear an official of the Department of Transport on the costs of certain airports in northern Canada.

Reversing its decision at the morning sitting this day, due to the difficulties of reproducing the chart and the photostatic copies of several rental contracts relating to the Flat Creek North Grading, the Committee agreed that the said documents be not printed in the record of this day's proceedings but that they be held available with the Clerk of the Committee for examination by members.

Departmental officials were questioned on the procedure, etc., on bridges and other roads other than the above-mentioned.

Mr. Lane, of the Department of Transport, having been called, was questioned on the costs of construction of airfields in northern Canada.

The Minister made a statement regarding the policy under which certain compensation is to be paid, under specified circumstances, to owners of property in Aklavik who move to the new townsite in Inuvik; he was questioned thereon.

At 5.30 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Tuesday, June 2, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

MONDAY June 1, 1959
11:00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. You have had a brief memo distributed to each of you this morning. The Effect of the Income Tax on the Management of Timberlands. This is—as you see—excerpts from forest tenures and taxes in Canada, a comprehensive analysis of the economic effects of the taxation of the forest industries, published by the Canadian Tax Foundation. If it is agreed, we could have this incorporated in our proceedings, without reading it.

Mr. MCFARLANE: I so move.

Agreed.

THE EFFECT OF THE INCOME TAX ON THE MANAGEMENT OF TIMBERLANDS

Excerpts from *Forest Tenures and Taxes in Canada,* a comprehensive analysis of the economic effects of the taxation of the forest industries, published by the Canadian Tax Foundation (Tax Paper No. 11) in 1957.

Foreward

This is the first comprehensive Canadian study of the charges of all kinds paid to the three levels of government by our largest national industry—forestry and its products—and of their effects on that industry. These charges include all the usual taxes levied on businesses, and in addition include other levies that are peculiar to a natural resource industry.

This is by far the most ambitious project of its kind ever attempted for a natural resource industry in Canada and represents the culmination of over two years' intensive research. Even in the United States nothing similar has been attempted in recent years; indeed the only comparable study of any vintage would appear to be the so-called "Fairchild" report prepared in 1935 for the forestry taxation inquiry, Forest Service, Department of Agriculture, and this was devoted largely to property taxes. The present study was carried on mainly by Mr. A. Milton Moore, who was during the period research associate on the staff of the foundation. The intensive analysis of the fundamental principles at issue in each of the main spheres and the proposals for new systems of taxation or tenure bear his distinctive influence, and are a unique contribution to thought not only in the realm of forestry but for other natural resources as well. In the compilation of data and the preparation of the many tables which appear both in the text and the appendices Mr. Roger Carswell, the foundation's statistician, also played an extremely important role.

The method followed in conducting this study unfortunately makes it impossible to give individual acknowledgements to the many persons who gave assistance. So relatively untouched was this whole area of study that without the help of a host of people, including company executives, government officials, forestry experts, members of university faculties and royal commissions and the staffs of the various associations in the industry, it would not have been possible to carry it through on its present scale. Again, the field work carried on through discussions by two or more members of the staff in almost every important forestry centre from Nanaimo, B.C. to St. John's, Newfoundland has heavily indebted us to more than one hundred people who were interviewed.

It need hardly be said that, like all other Foundation studies and reports, the present one is issued solely in the interest of advancing objective analysis of a tax matter of public concern, and not as a brief on behalf of any particular industry or economic interest. It is intended to be the first of a series of studies of the taxation of the natural resource industries.

J. HARVEY PERRY
Director

July 1957

The Income Tax

There is a substantial tax advantage accruing to the realization of profit from timberlands as capital gain, no matter whether the profit is attributable to the growth of the trees, to the rise in the market value of timber or to the increase in site value which has occurred while the tract was held. The tax advantage results from the combination of the realization of tax-free capital gain won by the vendor by selling a timber stand en bloc, with the allowance of cost depletion to the purchaser. Neither tax provision alone would be sufficient. If the purchaser were not permitted depletion equal to the amount paid for the timber stand, he would reduce his bid by the tax he would have to pay on the disallowed portion of his cost.

There is consequently a tax advantage accruing to the growing of even-aged timber stands to be sold for capital gain in lieu of operating a timber property to produce taxable income. This is by far the most important indictment made against the income tax as it now operates and it is examined in detail later.

A substantial tax advantage also accrues to a pulp, lumber or logging company from switching freehold timber limits before beginning logging operations. Arm's length transfers raise the depletion base. Where a tract has been logged a fair amount, however, the depletion recapture provision takes much of the edge off the attraction of this type of transaction. Ordinarily too, disruption of the company's operating programme would preclude a tax-induced transfer and there is always the danger that the profit from the transaction may be taxed. The last restriction also stands in the way of a company speculating in timber properties as an adjunct to its main operations.

There is similarly an inducement to hold timber properties to realize the appreciation and growth of timber as capital gain rather than to take out the accrued return and place it in uses producing taxable income. Granted, this is only one of the variety of ways of taking profit as capital gain, and therefore only one instance of the advantages available under the Income Tax Act which cause individuals to prefer capital gain uses of funds over income earning uses. However, there are few other activities in which all of the return can be realized as capital gain; even shares of most growth companies pay some taxable dividends whereas all of the return from holding timberlands can be realized tax-free. It is a reasonable conclusion that the pursuit by individuals of the highest rate of return after tax tends to push the after-tax earnings of alternative uses of investment funds toward equality. Inter alia the effect of the tax therefore is to induce owners to hold mature limits longer than they otherwise would and to attract more funds into this type of investment. In the absence of tax considerations, the owner should hold his timber until the expected appreciation equals the rate of return he can earn elsewhere; taking income tax into account he should hold his timber property until the expected capital appreciation equals the best alternative return after tax. (Pp. 230-231).

It therefore seems reasonable to conclude that the effect of the combination of cost depletion and capital gain upon the management of large and medium sized woodlands is serious, and that conservation groups and forestry societies

are justified in claiming it to be a major obstacle to the continued good management of well-established plantations. Trees may not be replaced if there is no natural regeneration, and where natural regeneration occurs it is sometimes greatly inferior to that which would be fostered if logging operations were conducted over a longer period and the land were not stripped of all its trees. (P. 233).

To summarize, the objections that can be levelled against the present income tax treatment of profits accruing to the ownership and management of timberlands are as follows:

(1) The tax advantage resulting from the outright sale of woodlands, in comparison to the sale of cutting rights only, increases the probability that their productive capacity will be impaired.

(2) Tax induced sales may disrupt the long-term management programs of timberlands owned by operating companies.

(3) The realization of capital appreciation free of tax adds to the inducements offered small companies to sell out to large corporations when the companies' assets are comprised largely of freehold timber limits with a low historic cost or of old long-term rights to crown timber stands.

(4) There is a reduction of the returns, net of tax, accruing to the improvement of certain timber properties proportionately more than the reduction of returns to other investment projects.

(5) No incentive is offered to afforestation, although this activity yields benefits to the community in excess of the profits accruing to the owner.

It is unfortunately not possible to estimate how important these effects are upon the behaviour of owners of forestlands. Depending upon that evaluation, three courses of action may be favoured.

First, matters might be left as they are except that some form of averaging of income might well be provided for persons whose income from a plantation is concentrated in a single year or two and bears taxation at the graduated rates of the personal income tax.

Second, owners of timberlands could be granted one of a variety of forms of favourable treatment which would narrow the gap between the net return offered by a sale of land and trees and a sale of cutting rights only.

Third, it might be contended that the fault lies with the use of historic cost depletion for timber and that the defect should be attacked at the root. (Pp. 235-236).

The CHAIRMAN: Gentlemen, we have the minister with us this morning. We have not quite finished with item 261, Departmental Administration, and just before we go into that there have been several questions asked by members which were to be answered by the department. They were lengthy questions. The deputy minister has the information here this morning with copies to be distributed to each member and to be incorporated in our proceedings.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, would you like me to detail what I am returning?

The CHAIRMAN: Yes.

Mr. ROBERTSON: The first is a list of answers to a number of questions asked by Mr. Coates, tabled herewith. These answers are incomplete in respect to questions (5) and (7) by Mr. Coates.

We have not been able to get the full information on those two questions as yet, but we will have it quite shortly. Question (5) requests details of the contract with Tower Company at Aklavik which was not carried through to completion. We have the details of the tender calls, but not of the wind-up.

The other is question (7), relating to preliminary expenses. We will have that material later. The second item, Mr. Chairman, is a list of questions asked by Mr. McGregor; third, another series of questions asked by Mr. McGregor; relating to Inuvik; fourth, a series of questions by Mr. Hardie, and then further questions by Mr. Nielsen. A series of questions were asked relating to the square footage and square foot costs of the hostel and school at Inuvik.

Further, there is a question by Mr. Coates relating to details on the purchase of property for the hostel at Fort Simpson. With regard to the questions by Mr. McGregor concerning the technical details of the Inuvik runway, this information has to come from the Department of Transport. The Department of Transport is preparing the material, but it is not ready at the moment. That is all I have, Mr. Chairman.

The CHAIRMAN: Thank you, Mr. Robertson. This information will be passed around to each of the members, and I hope that between now and Christmas you will have an opportunity of studying it! Is it the wish of the committee that these answers be incorporated in our proceedings?

Mr. HARDIE: Have you copies of all these answers?

The CHAIRMAN: Yes.

Mr. HARDIE: I see; they are coming?

The CHAIRMAN: Yes. Is that agreed?

Agreed.

QUESTIONS BY MR. R. C. COATES, M.P., MINES, FORESTS AND WATERS COMMITTEE

Question (2)—What are the details of the contract awarded to the Tower Company for the construction of the chief warden's residence at Fort Simpson in 1952-53? How many tenders were submitted and what were their amounts?

Answer—Details of the contract awarded to Tower Company Limited, Montreal, for the supply and erection of 3 single storey prefabricated buildings, one of which was to house the chief warden at Fort Simpson, are not readily available as the files have been transferred to the Public Archives. Tenders were called by public tender call. However, the details of the other bidders and the amounts of their bids will be obtained as soon as possible.

Question (3)—A contract was awarded to Campbell's Limited in 1952-53 for concrete foundations under two houses in an amount approximating $18,400 (item 406). What are the details of this?

Answer—A contract was awarded to Campbell's Limited, 1952, as a result of a public tender call for the placing of concrete foundations under 2 Pan-American houses (4 units of family accommodation) and the interior decoration of 3 Pan-American duplex houses (6 units of family accommodation). The Pan-American houses which were obtained from the U.S. army at the end of the war were small and the foundations had deteriorated. Additional space was obtained through the provision of basements and, as a result of renovations, the buildings are still occupied. Work was completed in 1953 for a total cost of $18,650.

Question (4)—What are the details of the contracts for maintenance of sections of the Mackenzie highway since 1952-53 awarded to B. G. Linton? How did Mr. Linton obtain the work and how much was paid him each year?

Answer—Each year public tenders are advertised for the maintenance of the section of the Mackenzie highway within the Northwest Territories. B. G. Linton Construction Company, Hay River, N.W.T., has been the successful bidder since the highway was opened with the exception of the fiscal year 1958-59. Mr. Linton was awarded these contracts on the basis of submitting the lowest bid. Figures are not readily available for the years 1952-53 and 1953-54. The following is a list of payments from 1954 onwards:

1954-55	$56,129.06
1955-56	53,762.00
1956-57	70,957.00
1957-58	60,305.00

As the contract is awarded on the basis of rental and operation of certain specified equipment, payments, each year vary in accordance with the amount of maintenance required on the roads.

Question (6)—How many buildings have been constructed at the old site of Aklavik by the department since the decision was made to move the site to Inuvik?

Answer—Since the decision was made to move the departmental establishment from Aklavik to Inuvik there has been no permanent buildings constructed at Aklavik. Additional school and teacher accommodation has been provided through the erection of 512 buildings which will be hauled to Inuvik for sale to local residents when they are no longer required at Aklavik.

Question (9)—What are the details of the contract with O. I. Johnson Company at Fort Rae in 1954-55?

Answer—A contract was awarded to O. I. Johnson Construction Limited as a result of a public tender call for the construction of a 2-bedroom warden's residence with full plumbing and water supply at Fort Rae. Two bids were received, of which O. I. Johnson Construction Limited submitted the lower bid. The cost of this project is set out in Public Acounts at $26,766.

Question (10)—What are the details of the contract with John A. MacIsaac Construction for $14,500 covering landscaping at Upper Whitehorse (items 328 and 698—1954-55)?

Answer—The honourable member must be under some misapprehension as the contract with Zohn A. MacIsaac Construction Company in the amount of $14,500 covered extension to water and sewer mains in the Upper Whitehorse residential area. These extensions were required in connection with additional housing which was being provided that year. The reference to landscaping new residences was stated in Public Accounts as paid to the government of the Yukon Territory for the hauling of fill, the grading of lots, the hauling and placing of top soil through the Upper Whitehorse residential area. This work was undertaken on a day labour basis using territorial government equipment.

Question (11)—What are the details of the contract with John A. MacIsaac Construction covering the construction of a bridge at Mayo?

Answer—Public tenders were called late Summer of 1956 for the above and were opened on September 5, 1956. The following are the results:

John A. MacIsaac Construction Co. Ltd., Whitehorse	$197,496.50
Dawson & Hall Limited, Vancouver	215,124.00

The Department of Public Works estimate was $155,672.00.

Question (12)—What are the details of the contract with Tower Construction for the two-classroom school at Cambridge Bay?

Answer—The 2-classroom school at Cambridge Bay was constructed by the Department of Public Works on a day labour basis. Tower Company Limited was not employed in any capacity. The building is approximately 106 feet x 38 feet and includes two classrooms, two special instruction rooms, a principal's office, a furnace room and a small storage.

Question (13)—What are the details concerning Pan-Abode 1951 Limited at Churchill, Manitoba, in 1955-56?

Answer—Nine pre-cut cedar log houses were purchased from Pan-Abode (1951) Limited to house the northern service officer and 8 Eskimos employed full time at Fort Churchill. The purchase was approved by Treasury Board minute T.B. 491316 dated September 23, 1955. No tenders were called as Pan-Abode Company were the only manufacturers of this type of building which was strongly recommended by mining operators in the Yukon Territory. The building is economical, demountable, has an attractive appearance and the maintenance is reasonable. Due to the late delivery of materials, the buildings were not erected until 1956.

Question (14)—What are the details of the contract with Tower Construction at Frobisher Bay in 1955-56 (items 316 and 698)?

Answer—The contract with the Tower Company in 1955-56 covered the construction of a maintenance garage, a 2-classroom school including the principal's office and two special instruction rooms in addition to the two classrooms, and a small powerhouse. In answer to a public tender call, the only bid received was that of Tower Company Limited of Montreal in the amount of $183,000. After the contract had been awarded, negotiations were carried out with the contractor for the construction of a nursing station for the Department of National Health and Welfare in the amount of $51,975.

QUESTIONS BY MR. R. C. COATES, M.P., MINES, FORESTS AND WATERS COMMITTEE

1955-56
Items 318 and 699

Question—Cost and reason for basement under warden's residence at Fort Simpson.

Answer—The basement was placed under the warden's residence at Fort Simpson as the building was extremely small and no storage space was available for the warden's belongings and food supplies. In addition to a basement this amount covered a porch addition to the building to permit access from the first floor to the basement. The work was completed by Department of Public Works by day labour at a cost of $6,994.

Item 320

Question—Contract to Campbell's Ltd.

Answer—There is some confusion in the manner in which Public Accounts are printed. Campbell's Limited contract in the amount of $110,233 covered the erection of two semi-detached houses with basements and heating systems (4 units of family accommodation), extensions to the water and sewer mains to service these houses and the erection of 3 double garages. Tenders were called by public advertisement and Campbell's Limited, Whitehorse, submitted the lowest bid.

1956-57
Item 309

Question—Reconstruction of Mayo-Whitehorse bridge—detail with regard to contract.

Answer—Public tenders were called late summer of 1956 for the above and were opened in September, 1956. The following are the results:

John A. MacIsaac Construction Co. Ltd., Whitehorse ..	$197,496.50
Dawson and Hall Limited, Vancouver	215,124.00

The Department of Public Works estimate was $155,672.00.

Items 311, 668 and 850

Question—Relocation of Aklavik with regard to Eskimo houses, roads and warehouses.

Answer—The question concerning relocation of Aklavik with regard to Eskimo houses, roads and warehouses was answered by the Deputy Minister, Mr. Robertson, during his remarks at the morning session of the Committee, May 27, 1959.

Question—Costs of construction of three-bedroom houses, offices and storage warehouses at Cape Dorset and Cambridge Bay.

Answer—Cape Dorset—Tenders were called by public advertisement for the construction of a 3-bedroom residence with office and storage space and one 512 cabin for Cape Dorset. The only bid received was that of Tower Company Limited, Montreal, as follows:

3-bedroom residence, etc.	$48,370	
512 cabin	10,000	59,100

Construction was completed under direction of the Department of Public Works. Cambridge Bay—Construction of the 3-bedroom house with office and storage space for the Northern Service Officer at Cambridge Bay, NWT., was carried out by the Department of Public Works as a portion of a day labour program. For accounting purposes, this building was lumped with a 3-bedroom residence for the school principal. The total cost of both buildings amounted to $54,280.62. It is estimated that the NSO house cost 60% of this amount or approximately $33,000.

Question—Full details on hostel at Fort McPherson.

Answer—The school and hostel at Fort McPherson, N.W.T., were designed by the Department of Public Works and construction carried out on a day labour basis by that department with contracts being called for the sub-trades. The project consisted of a 100 pupil hostel and a four-room addition to the existing school. The total cost amounted to $1,269,851 for these buildings. Contract prices for the sub-trades as they pertain to these two buildings are difficult to segregate as the department constructed six other buildings and converted three camp buildings at the same time and the sub-contractors worked on all of these buildings. With minor exceptions, the sub-contracts were completed in the amounts set out on page R-21 of the Public Accounts 1957-58.

Question—Addition of one-bedroom to residence at Fort Rae.

Answer—The addition of one-bedroom to the warden's house at Fort Rae included the construction of a full basement under the entire building. This basement was required to give additional living space to the warden as the house was quite small. The work was carried out by the Department of Public Works on a day labour basis for a total cost of $10,000.

Question—Details of one-classroom school and bachelor quarters at Fort Rae.

Answer—The one-classroom school with attached living quarters at Fort Rae, N.W.T., was constructed by the Department of Public Works on a day labour basis for a total cost of $57,271. The building consists of one-classroom with adjacent special instruction space and an apartment consisting of a one-bedroom, living-dining room and kitchen. The entire building sits on a concrete foundation. The basement is used for storage purposes.

Question—Final cost and details of contract for hostel at Fort Smith.

Answer—Tenders were called by public advertisement for the construction of a school, hostel and hostel administration building at Fort Smith, N.W.T. The following bids were received:

Dawson and Hall Limited	$1,710,548
Poole Construction Company	1,757,375
Bennett & White	1,860,530
Burns & Dutton Concreting & Construction Ltd.	1,966,078

The contract was awarded to Dawson and Hall Limited on July 4, 1956 by the Department of Public Works who supervised the erection. Total expenditures amounted to—

Hostel & hostel Administration Bldg.	$1,094,708
School	831,909

Question—Details of contract to Tower Co. at Frobisher Bay.

Answer—Tenders were called by public advertisement for the construction of 1) Fire hall, 2) three-bedroom residence with office and storage, 3) four 4-bedroom residences, 4) Eskimo cabins. The folliwing bids were received:

Tower Company Limited	$336,000
Teriault & Beland Enr.	409,000

On the basis of the bids received, the department reviewed the tenders and decided to delete the four 4-bedroom residences and substitute 4 Eskimo type cabins. The lower bidder was requested to submit a revised quotation on the above basis and submitted a revised bid of $200,800. This quotation was accepted and a contract awarded to Tower Company Limited. Supervision was given by Department of Public Works.

Question—Details of contract to Shoquist Construction Ltd. at Hay Camp.

Answer—There is an error in Public Accounts in that the contract with Shoquist Construction Limited covered the addition to a school, a 3-apartment teacherage and a warden's office-warehouse at Hay River. Tenders were called by advertisement and the following bids for the 3 buildings were received:

Shoquist Construction Ltd.	$217,700
Yukon Construction Co.	219,875

The contract was awarded on November 18, 1955, and construction supervised by the Department of Public Works.

1957-58—Item 315, 632 and 718

Question—Details of contract to Poole Construction Co.

Answer—Tenders were called by public advertisement for the construction of the Croked Creek bridge on the Whitehorse-Keno Highway in the Yukon Territory in the Spring of 1957. The following bids were received:

Poole Construction Company Ltd.	$233,318.50
Dawson and Hall Ltd.	237,628.00

Department of Public Works estimate was $139,876. Due to the wide variance between the estimate and the price, negotiations were carried out with Poole Construction Company Limited on the basis of eliminating excavation and rock filled crib abutments. On this basis, Poole Construction Company Limited reduced their bid to $144,493.60. The balance of the work was carried out through service contract for a total cost of $171,437. Construction was supervised by Department of Public Works.

Question—Details of contract to John A. MacIsaac Co. Ltd.

Answer—See answer to previous "Reconstruction of Mayo-Whitehorse bridge 1956-57 item 309.

Item 317

Question—Details of contract to Poole Construction Co.

Answer—Tenders were invited by public advertisement for the school and two hostels at Inuvik and the following bids were received:

Poole Construction Company Ltd.	$5,415,350
Aklavik Constructors	5,830,000
McNamara Construction Co. Ltd.	8,973,000

The contract was entered into with Poole Construction Company Ltd. on April 26, 1957; the completion date is August, 1959.

Question—Details of construction costs of school and hostel at Fort McPherson.

Answer—See answer to previous "Full Details on hostel at Fort McPherson", 1956-57, items 311, 668, 580.

Question—Details of contract to Dawson & Hall Ltd. and Yukon Construction.

Answer—(*a*) For details of contract with Dawson and Hall see answer to "Final cost and details of contract for hostel at Fort Smith".

(*b*) It is difficult to isolate the exact expenditures to Yukon Construction Company for housing at Fort Smith during the fiscal year mentioned as this company was working under a series of contracts which either ended or commenced in the fiscal year 1957-58. As a consequence, information is given on all contracts. In 1956 tenders were called for the following buildings by public advertisement—6-apartment teacherage, 3 semi-detached houses (6 living units), one 3-bedroom principal's residence. The following bids were received:

Yukon Construction Co. Ltd.	$220,400
Dawson and Hall Ltd.	292,118

The contract was awarded on September 20, 1956, to Yukon Construction Co. Ltd., and supervision was undertaken by the Department of Public Works. In the fiscal year 1956-57 three semi-detached houses (6 living units) were added to an existing contract awarded by the Department of Transport to Yukon Construction Co. Ltd. as a result of a public tender call. Details of the bids and bidders will be obtained from Department of Transport if required. In the fiscal year 1957-58 tenders were called by public advertisement for 6 semi-detached houses (12 living units) to be occupied by staff of this department, as well as buildings for other departments. Bids received as they refer to occupancy by this department are as follows:

Yukon Construction Co. Ltd.	$184,800
Dawson and Hall Ltd.	193,584
Burns and Dutton Concreting & Construction Ltd.	254,290

The contract was awarded to Yukon Construction Company on August 29, 1957, and supervision was carried out by the Department of Public Works. The average cost per single living unit consisting of 3 bedrooms, living-dining room and kitchen, bathroom and basement amounted to $20,947.68 during the period.

Question—Details of Fraser-Brace contract with regard to relocation of Eskimo type houses.

Answer—A contract was arranged through Defence Construction Ltd. with Fraser-Brace Engineering Company Limited for the construction of 6 Eskimo type houses at Great Whale River on the basis of cost plus a fixed fee of $2,000. The contractor was on the site which is one of the mid-Canada line stations and it was considered that he would be in the best position to do the work most economically with the least disruption to the work being carried on for the Department of National Defence at this site. The work was supervised by engineers of Defence Construction Ltd.

Question—Details of contract to Universal Plumbing and Heating.

Answer—The Department of National Defence had loaned this department a number of g.p. huts which had been used for the work camp at the Great Whale River site on the Mid-Canada Line. Temporary lines were available for heating these buildings centrally and supplying the buildings with water. However, the National Defence establishment was not able to supply the departmental needs for heat and it was necessary for the Department to establish a boiler house to heat its establishment and to isolate that portion of the distribution system to serve our own needs only. In addition the temporary water line was being removed and it was necessary to connect that portion required by this department to the permanent water line of the National Defence establishment. Defence Construction Limited wished Fraser-Brace to concentrate their forces on the completion of the National Defence contract and, on the advice of officials of that department, negotiations were carried out with Universal Plumbing and Heating who were working on an adjacent section of the mid-Canada line. Due to their knowledge of local conditions, their proximity to the site of the work and the need for immediate commencement on the project, otherwise a year's delay would be incurred, authority was sought to award a contract to Universal Plumbing and Heating on the basis of cost plus a fixed fee of $7,000. This authority was received on September 19, 1957. As the work proceeded, it became apparent that the National Defence establishment would not be in a position to supply electric power and it was necessary to include generating equipment and isolate the electrical distribution system. The site originally chosen for the oil storage tanks for the boiler house was not acceptable to the fire marshal and this necessitated the installation of an additional 1300 feet of fuel line between the installation of the tanks and the boiler house. The firm asked a fixed fee of 10% on this additional work and authority was obtained to complete the additional work on this basis. Details of the contract, therefore, are—

Cost plus fixed fee of $7,000 on the first $35,000 worth of work.
Cost plus 10 per cent for the balance of the work.

Question—Size of "512" houses.

Answer—512 houses or Eskimo type houses are 16 feet x 34 feet although a few have been built to 16 feet x 32 feet to permit prefabrication.

Question—Details of contract to Burns & Dutton Concrete.

Answer—Tenders were called by public advertisement for the construction of a vocational school and associated hostel at Yellowknife, NWT. The following bids were received:

Burns & Dutton Concreting & Construction.....	$1,884,550
Poole Construction Company Ltd.	1,979,000

The contract was awarded to Burns & Dutton on May 1, 1957. Supervision was carried out by the Department of Public Works.

Question—Details of contracts at Lake Claire.

Answer—The contracts mentioned in Public Accounts with Hillas Electric Company of Edmonton and H. Kelly Company Limited, Edmonton, were awarded by the district office of Public Works. Information concerning these contracts is being obtained from the Department of Public Works. However, we are aware that competitive bids were obtained for the work and the work generally consisted of installing the generating equipment, all electrical work in connection with the erection of the abattoir and associated buildings, and also the necessary plumbing and heating installations for the same buildings. Further information will be provided as soon as it is obtained from Department of Public Works.

QUESTION ASKED BY MR. R. C. COATES, M.P.

Question—

In 1954-55, what equipment was purchased for the relocation of Aklavik? By what method was this equipment acquired?

Answer—

1—65 H.P. Diesel Crawler Tractor and Parts .....$	18,153
2—130 H.P. Diesel Crawler Tractor and Parts	65,053
2 Cement Mixers	5,576
Air Compressor, Jack Hammers and Parts	12,024
2—½ ton pick-up trucks	3,605
1—4 yd. shovel on 5 ton truck and parts	26,215
5—5 yd. Dump Trucks	33,244
1—¾ yd. Diesel Crawler Tractor and parts	41,235
1 Motor Grader and parts	21,547
Diesel Power Plant	3,323
Portable Steam Boiler	1,634
Snowmobile	5,229
21′ Cabin Cruiser	3,900
Fire Fighting Pump	2,525
Fire Fighting Hose	1,511
Radio Telephone	1,008
Miscellaneous equipment	10,044
	$ 255,826

This equipment obtained, following issuance of tenders.

QUESTION ASKED BY MR. R. C. COATES, M.P.

Question—

What are the details of the purchase of further equipment for the relocation of Aklavik in 1955-56?

Answer—

Scaffolding Towers	$ 2,764
6 — 15 ton trucks (Autocar) and parts	181,821
1 — 2½ cu. yd. rock shovel and parts	116,615
3 — 30 ton trucks (Letournean) and parts	119,130
Crawler Diesel Tractor and parts	42,096
Motor Grader and parts	21,648
Crushing Plant and parts	188,903
2 Compressors and parts	5,992
Miscellaneous equipment	22,929
	$ 701,898

QUESTION ASKED BY MR. R. C. COATES, M.P.

Question—

What are the equipment purchases with regard to relocation of Aklavik settlement?

Answer—

Fire Fighting Truck	$ 15,939
Water Tank Truck	9,098
9 — Construction Trucks — 5 cu. yd.	61,794
2 — Trucks for Loading, Stacking and Short Hauls	10,800
Hystaway Tractor	14,865
Drag Line Attachments	1,685
Motor Truck, Cess Pool Emptier	9,136
Farm Tractor (Light)	1,865
2 Pick-up trucks, ¾ ton	4,110
2 Diesel Engine Compressors	44,570
Electric Generating Plants and Heating Equipment	17,229
5 Ton Walk-In-Freezer	1,400
Furniture	12,000
Septic Tank	1,854
Miscellaneous Equipment	14,418
Shipping Charges	44,459
	$ 265,222

QUESTION ASKED BY MR. R. C. COATES, M.P.

Question—

Mr. Coates wishes to be supplied with figures showing the total expenditures by year for furnishing homes for employees in the North since 1952-53.

Answer—

1952-53	$ 27,621
1953-54	63,297
1954-55	42,676
1955-56	77,137
1956-57	66,620
1957-58	201,054
1958-59	235,842

QUESTIONS BY R. H. McGREGOR, M.P.

1. Q. What percentage of Eskimo children are being provided with formal education?—A. 39.5%

2. Q. What has been the rate of progress in the establishment of schools for Eskimos over the last 8-10 years?—A. Ninety-five classrooms have been completed or will be completed in 1959 for use by Eskimos. Many of these are also used by Indians and Whites. On basis of proportion of Eskimos using these classrooms it would be more fair to say that 73 rooms have been built or will be completed between 1949 and 1959. Of these, 8 were completed in 1958, and 36 will be completed in 1959.

3. Q. What projects, industrial, educational and welfare, have been suspended or abandoned within the last 5 years?

A. (*a*) Suspended—Experimental raising of sheep and poultry at Fort Chimo.

(*b*) Abandoned—Raising of hogs at Great Whale River.

4. Q. If so, why?

A. (*a*) Sheep and poultry raising at Fort Chimo was suspended when the Department of Agriculture established a similar program at False River. It was deemed uneconomical to duplicate the experiment.

(*b*) Hog raising at Great Whale River was abandoned because the problem of feeding was too expensive to permit large scale hog raising on a practical basis.

5. Q. What was the total cost involved in each project?

A. (*a*) Sheep and poultry raising at Fort Chimo cost approximately $5,400,00.

(*b*) Cost of the hog raising experiment at Great Whale River was approximately $530.00.

6. Q. Which division of northern administration was responsible (*a*) for inception? (*b*) for suspension or abandonment?

A. (*a*) Industrial Division, formerly arctic division, was responsible for the inception and suspension of the Fort Chimo experiment.

(*b*) The industrial division was responsible for the inception and abandonment of the hog raising experiment at Great Whale River.

7. Q. What information is available regarding the Keewatin project? Report in daily press not sufficient to evaluate.—A. As became completely clear during the investigations subsequent to the occurrence of starvation in the Keewatin area, it was necessary to take immediate action last spring and summer to ensure that such tragedies might not be repeated. The Keewatin Eskimos, no longer able to pursue their old life due to the shortage of caribou, would have to be provided with an apportunity to earn a living under more secure circumstances.

Consequently, it was decided to provide a community at some coastal point on Hudson bay, to accommodate those unable to or unwilling to pursue the old way of life and to guide them into the "transition stage". The location tentatively decided upon was the Tavani-Wilson river area, although there were many sound arguments in favour of locating the community adjacent to Rankin Inlet. Owing to certain difficulties in transporting and off-loading the materials hurriedly gathered to create the physical basis for the community, it was decided finally that the location would be Rankin Inlet, and the materials were accordingly off-loaded there.

During the winter of 1958-59, some 120 individuals came to the community from various Keewatin points. They became engaged in house building (most now being housed in 20 low-cost dwellings), maintaining a small store and, latterly, doing such hunting and trapping as the limited dogs on hand allowed. A cottage industry program was started which will be a factor in their ability to become economically self-sufficient. As the community develops, attention will be paid to harvesting of the natural resources of the area including seal, fish and fur, and to ensuring that those with aptitudes and inclinations toward wage employment are given sufficient training that, when opportunity presents, they will be competent to accept employment.

QUESTIONS BY R. H. McGREGOR, M.P.

1. Q. Who advised building of the community of "Inuvik"?—A. Answered during committee proceedings of May 27th.

2. Q. What was the purpose of this program?—A. Answered during committee proceedings of May 27th.

3. Q. Has the objective been realized?—A. Answered during committee proceedings of May 28th.

4. Q. How many families have moved into accommodation from Aklavik?—A. As of April, 1959, there were seven families from Aklavik occupying government housing at Inuvik on a rental basis. In addition two families from Aklavik were living at Inuvik in housing provided by themselves.

5. Q. Is it planned to move all the people from Aklavik to Inuvik?—A. Answered during committee proceedings of May 27th and 28th.

6. Q. If not, why?—A. Answered during committee proceedings of May 27th and 28th.

7. Q. What is the total cost to date at Inuvik?—A. Approximately $20,800,000.00.

8. Q. Who supplied piles for Inuvik site? Where were piles obtained?—A. 200 Logs, 20 ft. long, supplied by James Jackson & Morris Catchilly, Fort Good Hope.

Cutting logs for use as piles, Fort Good Hope by the hour—

Joe Masagumi	$ 310.00
Thomas Manual	390.65
Hyacinth Kochon	237.15
Geo. Vaudrank	249.55
Luke St. John	97.65
Chas. Bruno	232.50
Joe Masagumi	136.40
Gabriel Kochon	310.00
Jack Charmy & Gabriel Kochon	352.20
Joe Masagumi	179.25
Chas. Bruno	161.00
Jim Jackson Morris Catchilly	470.25

81 Wooden piles, Paul Bonnetplume, Aklavik.
88 Logs, Fred Morris, Aklavik
420 Lineal feet log piles, Fred Morris
1,000 Pilings 30 feet long, Slave Lumber Co., Fort Resolution
15,450 ft. spruce piling, Swansons Lumber Co., Edmonton (Camp 3 Wood Buffalo)
7,550 ft. spruce piling, Swansons Lumber Co., Edmonton (Camp 3 Wood Buffalo.)

9. Q. What was the total cost of piles?—A. Total cost—$5,060.00.

10. Q. Were piles available in Inuvik area?—A. Yes. All available piles were purchased in the Inuvik area before additional piling was sought elsewhere.

NOTE: The answers given in 8, 9 and 10 above pertain to the piles purchased by Northern Affairs only. Since that time, piles have been purchased by the Department of Public Works and that department has been asked to supply information concerning their purchases as quickly as possible.

QUESTION BY MR. HARDIE, M.P.

MINES, FORESTS AND WATERS COMMITTEE

Question—In connection with the road from Dawson City to Peel Plateau, why was this on a rental basis? Was the survey not completed sufficiently to call for tenders on a unit price basis? What are the details of the contract—who bid—what were the quotations, etc?

Answer—To have let this contract on a lump sum or unit price basis would have required precise details of the government plan to be prepared early enough in 1958 to permit contractors to examine the work site before the snow came.

The terrain over which the proposed road was to pass was over permafrost and the construction of a foundation could have been very difficult. The equipment rental type of contract would permit the government engineers to carry out a certain amount of experimentation before they established a standard.

The equipment rental basis would enable a number of contractors to gain experience on the ground for one season so that a large part of the gambling might be taken out of their bidding on the main contract and competition might be more keen.

It gave them an opportunity cost data on which to work for the major portion of the work.

It enabled the smaller local contractors to participate in the work.

Copies of a chart showing all quotations have been tabled.

Copies of all the rental agreements are tabled.

QUESTIONS BY MR. E. NIELSEN, M.P.

MINES, FORESTS AND WATERS COMMITTEE

Question—1. Did the low bidder in each item obtain the contract?

Answer—Reference is made to tabled chart.

Agreements have been signed with the low bidders at the rates indicated on all items except items 3, 7, 15, 18, 21 and 22.

With regard to item 15, negotiations are now underway to establish a uniform unit price based on the capacity of the equipment offered. It was obvious that the original quotations were not on a uniform basis.

It was also obvious that quotations for the ½-ton and ¾-ton pickups (Items 17 and 18) were not on the same basis. Consequently, revised tenders were called for these items of equipment.

The rate of $1,500 for the rooter (Item 21) appeared excessive and, as a result of negotiations, the rate quoted by John MacIsaac was reduced to $950.

Question—2. Does the contract with Polar Construction allow assignment? If so, upon what terms.

Answer—The conditions printed on the back of the rental form make no specific mention of assignment.

The Department of Public Works contract is with the corporation signing the contract and payments could not be made to any other. Department of Public Works have nothing to show that Polar Engineering and Construction Limited has assigned its contract.

INUVIK—HOSTELS AND SCHOOL

The following questions were asked regarding the Anglican Hostel, the R.C. Hostel and the Federal School at Inuvik, N.W.T.:

What was the area?

What was the cost?

What was the cost per square foot?

Answers—

1. *Anglican Hostel*
   Area: 70,270 sq. ft.
   Cost: $1,842,000
   Cost per sq. ft.: $26.20
   Designed occupancy: 250 children.
2. *R.C. Hostel*
   Area: 70,270 sq. ft.
   Cost: $1,847,600
   Cost per sq. ft.: $26.30
   Designed occupancy: 250 children.

3. *Federal School*

Area: 65,540 sq. ft.
Cost: $1,725,750
Cost per sq. ft.: $26.40
Designed capacity of the school: 24 classrooms.
In addition, there is the following accommodation:

Auditorium (gymnasium)—the seating capacity is 698 on the main floor and 254 in the balcony. Domestic science laboratory, social studies room, science laboratory, workshops, library, teachers' rooms, shower and locker rooms, washrooms.

The cost per classroom, average size 24′ x 30′, on a square foot basis is $19,000.

On an overall basis, the cost per classroom is $72,000.

QUESTION BY R.C. COATES, M.P.

Q. "1956-57—Item 311, 668 and 580, details on purchase of property for hostel at Fort Simpson".

A. After the decision to construct a school and two hostels at Fort Simpson, property was required. All available crown land was unsuitable for school and hostel purposes. The best land for these purposes was comprised of lots 16 and 17, owned by the Anglican Church and the Roman Catholic Church respectively. They were centrally located in the community and could easily be serviced. After discussions with the Church authorities, these lots were bought by the Department. The Anglican Church was paid $1,260 for lot 16 which was the smaller and uncleared lot. The R. C. Church was paid $15,200 for lot 17 which was about 3 acres larger and cleared. The main part of the difference in the prices paid for the lots rests in the clearing work that had been done on lot 17. The two lots totalled about 44 acres.

Mr. ROBERTSON: I believe Mr. Hardie also asked for details of the bids on the road from Flat Creek northward to the Eagle Plain. It is a very complicated chart on which to show the details. It could be returned for inclusion in the proceedings. It would be very difficult to reproduce in quantity for circulation. Would it be adequate to return that for inclusion?

Mr. HARDIE: Agreed.

The CHAIRMAN: I do not think it is necessary to have a copy for each member. Those who wish it, can see it. It could be incorporated in the proceedings, and if you want to see a copy, it is available. Is that agreed?

Agreed.

At the afternoon sitting this day, the Committee decided that, due to obvious difficulties of reproduction, the said chart be not printed in the record of this day's proceedings.

The CHAIRMAN: The minister is absent for just a few moments. Are there any questions you would like to ask the deputy minister, in the absence of the minister?

Mr. AIKEN: May I ask a question further to the answer regarding tender calls at Cape Dorset. I see here that a 512 square feet cabin was constructed at a cost of $10,000. Is that considerably in excess of what they cost at other locations?

Mr. ROBERTSON: I think Mr. Connelly is in the best position to give a reply on this. It does vary considerably from place to place, depending on freight charges and that kind of thing.

Mr. AIKEN: At the last meeting we discussed these 512 square feet cabins, and it was my understanding that they could be sold for something in the neighbourhood of $2,500.

Mr. ROBERTSON: Yes.

Mr. AIKEN: At Aklavik or Inuvik. I notice this one is $10,000, and I wondered if there was an explanation.

Mr. ROBERTSON: Prior to Mr. Connelly saying anything, there would be two important considerations that one sees right off the bat. At Inuvik they were being built in large numbers; there were several of them. Costs come down when you are doing that. On the other hand, at Cape Dorset I assume they are only building one or two.

The other consideration is, that at Inuvik—which is at the end of the Mackenzie River transportation system—freight rates are probably lower than they are at Cape Dorset, although I would not be sure about that. Perhaps Mr. Connelly could deal with the question.

The CHAIRMAN: Mr. Aiken, the figure you quoted for the 512's is after they had been used by the construction crew?

Mr. ROBERTSON: That is the depreciated price. The new price at Inuvik is between $5,000 and $6,000, I am told.

Mr. A. B. CONNELLY (*Chief, Engineering Division*): The costs of those 512 square feet houses have varied from $6,000 up to $12,000, depending on location and depending also on the contract. But Cape Dorset, of course, is very difficult to reach and the freight is consequently high.

Mr. AIKEN: The specifications are the same otherwise, though, are they?

Mr. CONNELLY: Yes.

Mr. AIKEN: It is just an increase in the cost of material and labour?

Mr. CONNELLY: Yes; and freight.

Mr. ROBERTSON: Freight rates vary enormously. At a place like Spence Bay I think freight is $137 a ton, and at other places along the Mackenzie River it goes down to, say, $50 or $60 a ton. It makes quite a difference.

Mr. AIKEN: Thank you.

The CHAIRMAN: We could still continue on this until the minister gets back, if you like.

Mr. AIKEN: I suppose that would apply also to the three-bedroom residences at $48,000, which seems to be a very high figure. I suppose the same thing would apply there?

Mr. ROBERTSON: Could you direct my attention to where it is?

Mr. AIKEN: At Cape Dorset.

Mr. ROBERTSON: I have not had a chance to read these answers, I am afraid.

Mr. AIKEN: It is at Cape Dorset, a three-bedroom residence at $48,000; and there is a 512 square feet cabin. I was using the cabin as a guide, because we have discussed it before. I wonder if the same answer would apply to the three bedroom residence at $48,000?

Mr. CONNELLY: The prices on three-bedroom residences also vary considerably. Cape Dorset would be high because, as I say, it is a place that is very difficult to reach, and freight is very high.

Mr. ROBERTSON: Cape Dorset is one of the more inaccessible and costly places. I think Spence Bay is the worst, probably.

Mr. AIKEN: Thank you.

The CHAIRMAN: Are there any other questions, gentlemen?

Mr. HARDIE: We are confining our questions to Inuvik now, are we?

The CHAIRMAN: If you can finish it, all well and good. We are rambling this morning because of the minister's absence.

Mr. HARDIE: Let us get some order to this, so that when we clean up one item, we are through with it.

The CHAIRMAN: Has anyone any other questions regarding Inuvik? I think Mr. McGregor will probably want to concern himself, Mr. Hardie, about the air field. He is not here this morning.

Mr. HARDIE: He can come this morning.

Mr. COATES: We have just got the answers to the questions we asked, Mr. Chairman, pertaining to Aklavik and Inuvik. It would not be right for us to try and continue now without first giving the proper attention to the answers to the questions.

The CHAIRMAN: That is quite right. The minister is here now, in any event. Will you proceed with item 261, page 54 in the estimates. The oil and gas come under this item, gentlemen. We will carry on from where we left off previously. The minister is here, gentlemen; have you any questions? We will proceed on the oil and gas regulations.

Hon. ALVIN G. HAMILTON (*Minister of Northern Affairs and National Resources*): To get it absolutely clear—this is addressed to the member for Mackenzie river—you asked for a statement regarding Arctic islands exploratory licences. Could you define what they are?

Mr. HARDIE: I do not remember it, but I know what they are, and I think that possibly the answers to the questions I got last week explained it thoroughly. They do now. They did not, in your opening speech. But if you would like to explain—with regard to the Arctic islands—to the committee, that no one has an exploratory licence, or whether there may be five or six, perhaps it would clear up something in the public's mind.

Mr. HAMILTON (*Qu'Appelle*): I will start this way. If you are satisfied that you have a clear understanding of what these exploratory licences consist of, then I can leave that out.

Mr. HARDIE: I think you should explain it, for the consideration of the public.

Mr. HAMILTON (*Qu'Appelle*): I am going to read this statement regarding the Arctic islands exploratory licences, so the situation will be absolutely clear.

At an earlier meeting Mr. Hardie asked about information available regarding exploration plans of oil companies in the Arctic islands this year.

I would like to make a short statement on this, since there may be some understandable confusion regarding the facts in this question.

I made an earlier statement in the house in which I said that no exploration permits will be issued under our oil policy until companies had provided the following requirements:

(*a*) Proof of financial ability to carry out the necessary exploratory work on the area applied for;

(*b*) The latest audited financial statement of the company or individual;

(*c*) The exploration program the applicant intends to carry out during the first half of the term of the exploration permit.

An exploration permit gives the right not only to all kinds of exploration on specific areas, but also may lead to eventual lease and production rights if

discoveries are made. A permit runs for a certain period and requires fixed expenditures. Such an exploration permit conveys a substantial right and will only be granted when the above criteria are met.

However, no permits have been issued for the Arctic islands. The revised regulations which will allow us to do so are not yet passed. The 28 interested companies and individuals simply hold priorities to obtain permits on certain areas when the regulations are passed. This is the only right they have—the right to their place in line. They are not required to supply us with further information until we are ready to issue permits and they apply for them.

Anyone may obtain an exploratory licence to do geological reconnaissance work anywhere in the Territories. This licence gives no rights other than the simple rights to explore. Five of the companies who hold priorities have taken out exploratory licences for the sole purpose of carrying out such broad geological reconnaissance this summer in the Arctic islands. They are not required to give us information on their programs in order to obtain a simple exploratory licence, but the following summarizes what they have told us informally—and I am going to say "company A", "company B", and so on, and give the story in each case.

The first, company A proposes to have one or more geologists do a general geological reconnaissance with a contractor arranging fuel supplies; two, company B expects one or two people to do a general geological reconnaissance in 1959 preparatory to a more detailed program in 1960; three, company C plans to send geological crew about the middle of June for a general reconnaissance; four, company D intends to send reconnaissance parties of technical and operating personnel which will include some consultants; and company E, general surface geological reconnaissance using company and consulting personnel.

I have given a general outline there which I will turn over to the reporter for the purposes of the record.

Then I will say one more word, in addition. Last week, before I left Ottawa, I received a letter from one of the companies outlining its program in more detail, and I have asked for a copy of the letter here this morning. They are trying to get it for me. This company outlined a program in the Arctic islands which totalled approximately $500,000 for this summer's operation. So, when you say "general geological surveys or reconnaissance in the area" it is not a small amount. These summaries I have read would indicate in some cases moderate sums, but in this case I would consider it a very extensive program if it costs $500,000.

Mr. HARDIE: Mr. Chairman, may I ask the minister if the five people he referred to are companies or individuals? Are they all companies?

Mr. HAMILTON (*Qu'Appelle*): Four of them are companies. One is an individual who, I know, is operating on behalf of certain companies.

Mr. HARDIE: What was the acreage, the total acreage, of these five companies?

Mr. HAMILTON (*Qu'Appelle*): It would take a minute to add it up, but we can get it for you.

The CHAIRMAN: Do you want them separately or together, Mr. Hardie?

Mr. HARDIE: Just the total; or a total of the individuals, and then a total of the companies.

Mr. NIELSEN: Is there any reason why the names of these companies have not been disclosed? If there does exist a reason, would not the disclosure of the totals lead to disclosing the names of these companies?

Mr. HAMILTON (*Qu'Appelle*): Yes, on the statement I had, the department had put in the names of the companies; and I think it has been made public, the names of these five companies that hold these exploratory licences. I did not

read in the names of the companies. I would not mind any person, individually, looking at them if they gave their undertaking they would not go beyond this meeting. But I do not think it would be wise, in accordance with the code of ethics we are working on, that we should divulge what each company is doing; and that is why I called them "company A", "company B", and so on. Likewise, I think the total acreage should be sufficient. I could give the breakdown of the total acreage involved, the amount for each, but not in the same order I read off the outline.

The CHAIRMAN: Mr. Hardie asked for the total originally, and I think that is satisfactory.

Mr. HAMILTON (*Qu'Appelle*): This is a round figure, but it totals approximately 28 million acres.

Mr. HARDIE: That is out of 89 million?

Mr. HAMILTON (*Qu'Appelle*): Yes—whatever that total comes to.

Mr. HARDIE: Individuals who have taken out licenses or who have decided to do geological or reconnaissance work, on how many acres?

Mr. HAMILTON (*Qu'Appelle*): On 10 million.

Mr. HARDIE: On 10 million acres?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: Out of a total of 45 million or more acres that were given out?

Mr. HAMILTON (*Qu'Appelle*): Yes, whatever that total is.

Mr. HARDIE: Approximately 52 per cent of the total acreage that was covered under these priority rights was given to Canadian and American individuals?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: The minister mentioned a moment ago that in the Arctic islands none of these people—with the exception of the five companies he has listed now—have now paid a $25 licence fee, and all they have is priority rights when the government decides to issue permits. I wonder how he can justify this, compared to the statement made by the Prime Minister recently in Montreal, where he said:

> In the far north, as the direct result of action taken by this government, 85.9 million acres on the Canadian mainland in the Mackenzie District and the Yukon have been taken up by firms and individuals for oil and gas development.

And "development" is underlined.

> Another 86.5 million acres on the continental shelf and the Arctic islands are now being developed under exploratory permits. These are stupendous figures.

Have any permits been issued?

Mr. HAMILTON (*Qu'Appelle*): Do you want an answer now?

Mr. HARDIE: Yes. Can you justify that statement by the Prime Minister?

Mr. HAMILTON (*Qu'Appelle*): Yes, I think that he is letting the public know that on the mainland there are 85.9 million acres out on oil and gas development, either reservations or permits, and, I hope some day, leases. On the Arctic islands there are 86.5 million acres—and I think that is corrected now to 89 million acres—under which they are working with exploratory permits. Five have actually taken out exploratory permits—

Mr. HARDIE: No, they have taken out exploratory licences and not "permits". No permits have been issued.

Mr. HAMILTON (*Qu'Appelle*): Exploratory licences—if you want to correct it to that. That means they are working under that type of operation.

Let us take a realistic look at it now. At the present time there are 89 million acres out under options to get permits.

Mr. HARDIE: Or licences?

Mr. HAMILTON (*Qu'Appelle*): Or licences, but as an intermediate move five have taken out exploratory licences.

Mr. HARDIE: For $25 each?

Mr. HAMILTON (*Qu'Appelle*): Which means they are not waiting until permits are granted. If cabinet approves of the new regulations this week, then all those who are under exploratory licences and all those who have priorities can move in and take up their permits, if they so wish.

Mr. HARDIE: Have they 12 months in which to do this?

Mr. HAMILTON (*Qu'Appelle*): How long?

Mr. HARDIE: Have they 12 months in order to take up their permits?

Mr. HAMILTON (*Qu'Appelle*): I do not think there is any period of 12 months. A licence is good for 12 months, it is true.

Mr. HARDIE: There is no licence issued.

Mr. HAMILTON (*Qu'Appelle*): All right, there are five of them who have exploratory licences and the others simply hold priorities.

If we declare these in effect this week—which I am very hopeful we can do—then all those with licences, I would expect, would automatically move in and take out their priorities in areas in which they are working with their exploratory licences.

Mr. HARDIE: Those five?

Mr. HAMILTON (*Qu'Appelle*): All those who have priorities, if they do not take them up they immediately lose them.

Mr. NIELSEN: For further clarification on this, Mr. Chairman: the exploratory licences of which the minister speaks, are these licences, ones which have been issued under any existing regulations, apart from the Dominion Companies Act, or are they licences which are granted under part V of that act to any mineral company which wishes to conduct mineral exploratory work in the Northwest Territories?

Mr. HARDIE: They are covered under the oil and gas regulations of the Northwest Territories.

Mr. NIELSEN: I asked the question of the minister, Mr. Hardie.

Mr. A. T. DAVIDSON (*Chief, Resources Division*): They are issued under a section in the oil and gas regulations.

Mr. NIELSEN: Is it not a fact that under the Dominion Companies Act mineral exploratory licences are available and they may be issued under the authority of the Secretary of State to any mineral company which wishes to undertake exploratory work of a general character anywhere in the Northwest Territories?

Mr. DAVIDSON: I do not know whether this is true, but these particular ones are issued under the oil and gas regulations.

Mr. NIELSEN: And if I am correct in this, then it is quite possible that a good many other companies, of which you have no knowledge, have such exploratory licences at the moment?

Mr. HAMILTON (*Qu'Appelle*): I would like to ask the member from the Yukon a question: Are you referring to "mineral" in the sense of quartz mining?

Mr. NIELSEN: I include liquids as well as solids.

Mr. HAMILTON (*Qu'Appelle*): There is a regulation which applies along that line with regard to minerals. The hard rock minerals—

Mr. HARDIE: We are way off the beaten track.

Mr. HAMILTON (*Qu'Appelle*): Because under these oil regulations—this is one of the things I could give you under section V of the regulations.

Section V(1) says:

> No person below the age of 21 years and no company that is not incorporated in Canada or in any province or is licensed pursuant to part IV of the Companies Act of Canada may be licensee, permittee, or lessee.

So under the oil regulations they could not do it under that act.

Mr. NIELSEN: These regulations surely would not supercede the Dominion Companies Act?

Mr. HAMILTON (*Qu'Appelle*): I cannot give you the answer to that.

Mr. NIELSEN: I think it makes a big difference because if I am correct, that minerals are included and licences issued under the Dominion Companies Act—and I am not certain whether they are or not—but if the term "minerals" includes oil and gas, then it is quite conceivable that many, many companies above and beyond these five that have been mentioned by the minister today are in possession of both licences, to explore in the Northwest Territories.

The CHAIRMAN: Since you raised the point, I think we should have an opinion from Justice on that. Maybe the minister can provide that?

Mr. HAMILTON (*Qu'Appelle*): I think we can clarify it to this degree, that there are many companies who have licences to explore in the north, if you are referring to the hard rock or quartz minerals. As far as oil and gas are concerned, we issue them under our oil and gas regualtions.

Mr. NIELSEN: The Secretary of State by virtue of the Dominion Companies Act may issue others.

The CHAIRMAN: Mr. Nielsen has a point.

Mr. HARDIE: He has not any point at all. He is just confusing the issue, and the minister is having an awful time running away from him.

I still have not had an answer to how you justify this statement of the Prime Minister, and I quote again:

> Another 86.5 million acres on the continental shelf and the Arctic islands are now being developed under exploratory permits.

How many companies have exploratory permits in the Arctic islands? Say "None" and tell the truth.

The CHAIRMAN: Listen, Mr. Hardie...

Mr. HAMILTON (*Qu'Appelle*): Mr. Chairman, I am going to give Mr. Hardie an answer, because I do not see any reason for his getting annoyed. Here you have one of the largest development programs, in the broad sense, going on. This oil rush in the Arctic started in February. Here it is the first day of June, and already we have 86.5 million acres on exploratory permits.

Mr. HARDIE: No.

Mr. HAMILTON (*Qu'Appelle*): As far as I am concerned, if during this year—if during this year these permits are taken out, as I expect they will be, then we will have 86 or 89 million acres. But the acreage figure is not the point. I think the Prime Minister is right in every detail, and the only thing wrong is that every day more are being taken out. Whether you want to quibble over the fact the Prime Minister used the word "permit" instead of "permits and licences"—or whatever word you wish to use—is not the issue.

Mr. HARDIE: You are confusing the issue.

Mr. HAMILTON (*Qu'Appelle*): I am not.

Mr. HARDIE: You have stated several times they have permits, when you mean priorities, or land sale or real estate...

The CHAIRMAN: Go on with your question, Mr. Hardie.

Mr. HARDIE: Could the minister then tell me if the department wrote a letter prior to these priority rights being given to any of these 27 companies, or people, asking them if they would take up acreage in the islands?

Mr. HAMILTON (*Qu'Appelle*): No letter was written by me.

Mr. HARDIE: Was there any public tender called?

Mr. HAMILTON (*Qu'Appelle*): No, no public tenders were called because the regulations are there. Any person in Canada,—or any person, period—under the regulations can come in and take these permits, and tenders (called) are not necessary.

Mr. HARDIE: The regulations do not cover this, but cover exploratory licences, exploratory permits. This is not either a licence or a permit. It does not come under the regulations at all.

Mr. HAMILTON (*Qu'Appelle*): What do you mean by "this"?

Mr. HARDIE: The priority, rights to acreages—it does not come under the regulations.

Mr. HAMILTON (*Qu'Appelle*): We have a regulation on that, I think.

Mr. HARDIE: You show me the regulation.

Mr. HAMILTON (*Qu'Appelle*): In regulation 9(1) it says:

> Applications for permits to do exploratory work for oil and gas in territorial lands may be received by the chief on any day except Saturdays and holidays between the hours of nine o'clock in the forenoon and four o'clock in the afternoon.

Mr. HARDIE: "From any licensee"?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: There are no licensees?

Mr. HAMILTON (*Qu'Appelle*): Then section 9(2):

> Each application for a permit shall be made in person at the office in Ottawa of the chief of the mining and lands division by the applicant or his authorized agent.

Supposing that five people get there on the same morning. He has to deal with one first, with another second, and so on. Therefore, in practice, in all provinces where they handle this, and here, you take the first one and give him service on the principle "first come, first served".

If they are applying—as this was the case here—for lands in the northern Arctic islands, which we did not have regulations to cover, all that we could do was to take their applications for a permit, and say, "The order in which we take these applications will give you priority in getting these permits for these Arctic island areas."

In the meantime, some of them wanted to get busy, so we took them on previous precedence, under these regulations of granting exploration licences. Five companies have taken those exploration licences out, and that is the only item that is different from the fact that the others are waiting until we have regulations in effect for the Arctic islands.

Any person has a right to take considerable pride in the fact that this amount of acreage was taken out, whereas none was taken out before.

Mr. HARDIE: It is not taken out.

Mr. HAMILTON (*Qu'Appelle*): If the hon. member wishes to quibble over every little phrase I use, I cannot continue.

Mr. HARDIE: If we allow you to use the phrases you have used, the public will not know what the score is.

Mr. HAMILTON (*Qu'Appelle*): I am saying this, Mr. Chairman, that I have given a logical explanation, and if during this year, and the next two or three years, this acreage is taken out, no person in Canada is going to quarrel about it. They will be so glad that something is being done to give Canada effective control that they will not care whether they are taken out in June or October; and that is the only thing that seems to upset the hon. member.

Mr. HARDIE: No, i is not.

Mr. HAMILTON (*Qu'Appelle*): And unless he wishes to get on with something that is tangible, and something that contributes something to this committee, I do not see the purpose of going over the same rat race again and again.

Mr. HARDIE: I have to go over your utterances to clear up the situation in the public's mind. The Prime Minister's statement has created more confusion.

Mr. NIELSEN: You are trying to confuse it.

The CHAIRMAN: The minister has made a statement. Any further questions?

Mr. HARDIE: Let us go back to the individuals. Has the minister any guarantee that the individuals who have taken up over 45 million acres can do this work; and, also, I would like to ask, are these priorities transferabl?

Mr. HAMILTON (*Qu'appelle*): On one occasion in the past, I told the hon. member they cannot get these permits until I know something about them. And in my statement this morning I listed financial ability to carry out this work, the latest audited financial statement, and the exploration program.

Then I gave an example of a letter I received last week, in which the man listed a five- or six-point program, totalling $500,000. I would assume that would be gratifying to any person.

Secondly, I think I have intimated to the committee one individual who is shown in the record as an individual but represents several companies. At least, several companies have been in contact with me asking for information about the regulations, and so on, and naming this person as their representative.

Before permits are granted I naturally will make certain of the financial standing of the person taking out the permit, and that their exploration program is one that warrants them to go ahead.

Mr. HARDIE: But are these priorities transferable?

Mr. HAMILTON (*Qu'appelle*): Yes.

Mr. HARDIE: They are?

Mr. HAMILTON (*Qu'Appelle*): I would imagine that any company has a right to transfer.

Mr. HARDIE: Under the regulations a $25 licence, surely, is not transferable?

Mr. HAMILTON (*Qu'Appelle*): The priority under the names of an individual we accept, but I do not know what is going on behind that individual during the period of time that he is getting the permit; but once he gets his permit, then any transferring comes under our watchful eye.

Mr. NIELSEN: Transfers, if any, would be subject to those criteria you have mentioned?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: But he can transfer it many times prior to the issue of the permit?

Mr. HAMILTON (*Qu'Appelle*): Yes, the same person must take out the permits, which means that if individual "A" has a permit for one million acres or five million acres, he must take it out. I cannot have him come in and say, "I am transferring the permit to 'B' ". what I am saying is: if a person is, say, an oil broker and has come in here and taken out a number of million acres on behalf of five or six clients, all we know is that he has taken out the number of million acres for himself alone. What is happening behind that, I do not know.

Mr. HARDIE: When the permits are issued to this broker, he may be acting for, as you say, five or six different groups, or obtaining priority in five or six different blocks of land. When you issue the permits covering these five blocks, do you issue them to him, or to the company?

Mr. HAMILTON (*Qu'Appelle*): I certainly would issue to the man who holds the priority; but at the time of getting the permits he must show what his backing is, what his financial standing is, and what his plans are.

These are typical procedures in the oil business, when a man who may be a lawyer, or a broker, comes in and makes a request for a permit. He eventually gets that permit, and then the permittee must show what his financial standing is and what his plans are.

Mr. HARDIE: These companies take out priorities—and the public knows who they are and how many acres they have—and I do not see why the minister should not know, when he gives out a priority, say, to—well, this bartender in Ottawa for 3½ million acres—who this man is dealing for; is he dealing for himself, or is he dealing as an agent for a company?

Mr. HAMILTON (*Qu'Appelle*): In the first place, he would not get a permit until we know what his financial standing is. But do I understand from the hon. member that he is opposed to a bartender getting a priority?

Mr. HARDIE: Not a bit; but I want to know how you satisfy yourself about the amount of work that is going to be done on this acreage. He has to have some financial responsibility.

Mr. HAMILTON (*Qu'Appelle*): Before he gets the permit, he must satisfy us, and that is all.

Mr. HARDIE: Before he gets the permit?

Mr. HAMILTON (*Qu'Appelle*): That is right.

Mr. NIELSEN: Could this not be likened to a mineral claim, where any individual—as long as he is within the age limits and the other requirements of the act—can stake a mineral claim; but in order to hold that mineral claim he has to perform certain assessment work on it. In the Yukon Territory it is equivalent to $100 per claim per year, and this is the evidence of financial ability to develop the claim that the government requires in order to give him renewal of that claim. Is that the principle you are after in these regulations?

Mr. HAMILTON (*Qu'Appelle*): I would think we go even further. Even before he gets the permit, he has to show financial backing and plans, whereas the traditional method with a mining claim in Canada is that a man goes out, stakes it, pays a nominal amount when he registers his claim, goes back and does his representation work, then goes back and proves up and gets a patent.

We are actually tougher on them in oil and gas exploration, because of the tremendous payments that are required to do the exploration work. I think we go further than they do in the traditional method. But—going back to the question asked by the member for Mackenzie River—I gathered he was using the word "bartender" in the sense that a bartender was an evil person.

Mr. HARDIE: No.

Mr. HAMILTON (*Qu'Appelle*): He is a Canadian and has just as much right as any one of us to do this. I saw the story in the Ottawa *Citizen* on May 30, and I do not know who was confusing that. But in Canada we look on a bartender, or a barber or a section man who discovers these things, as being just as good as the Clint Murchisons and Gardiner Symonds who got trans-Canada hooked up. This is one thing I am surprised at, the constant use of the word "bartender", because he is a Canadian citizen and has every right.

Mr. HARDIE: I am surprised the minister knows so little about mineral claims. Regarding a mineral claim, this man in Ottawa who took up 3½ million acres would have been required to fly into the Arctic islands and spend the money in staking that claim, to give him the right to go to work and hold it for a year.

Under this system, he walks into the Department of Northern Affairs office here in Ottawa and says, "I want this 3½ million acres". He looks at the map and says "This is taken up. I will take 3½ million acres over here some place; it looks pretty good". As a matter of fact, can the minister now produce the map with these acreages on?

Mr. HAMILTON (*Qu'Appelle*): We had it here before.

Mr. HARDIE: Could we have the map with all these acreages on?

Mr. HAMILTON (*Qu'Appelle*): Getting back to your question, you have said I do not know these things. That is an assumption which I do not think is warranted. I am not posing as an authority on these mineral rights, but I do know that before a man gets this permit, he has to pay a nickel an acre deposit. There is a great deal of difference between five cents an acre and two or three thousand dollars proving up mineral claims.

Mr. HARDIE: It would cost him $500,000 or $600,000 to stake that acreage.

Mr. NIELSEN: The hon. member, I am sure, is misleading the committee with regard to the staking of mineral claims, because he does not have to be there, personally, on the ground; he can be there by his attorney.

Mr. HARDIE: He pays for the staking, which would cost him at least $500,000 for that acreage. He would have something in it. Could Mr. Davidson point out the area on that map where the Department of Mines and Technical Surveys did their geological work in 1955?

Mr. DAVIDSON: I would prefer that Mr. Christie answered this, if you do not mind; he is more familiar with this matter than I am.

Mr. K. J. CHRISTIE (*Assistant Chief, Resources Division*): The geological survey which commenced in 1955 was known as "Operation Franklin", and covered this area here, on the map.

The CHAIRMAN: Will you describe it for the record.

Mr. CHRISTIE: It is known as the Queen Elizabeth island group.

Mr. HARDIE: It was on the Queen Elizabeth islands?

Mr. CHRISTIE: Yes.

Mr. NIELSEN: The Franklin survey?

Mr. CHRISTIE: "Operation Franklin".

Mr. HARDIE: Is all this area taken by priorities now?

Mr. CHRISTIE: Not all of it. The areas that are shown in colour have been taken up as priorities.

Mr. HARDIE: What we see in the different colours represents a part of the geological survey that was carried out in 1955 by the Department of Mines and Technical Surveys?

Mr. CHRISTIE: No.

Mr. NIELSEN: That is not what he said.

Mr. CHRISTIE: Some of the areas shown here lie without the area that was covered under "Operation Franklin".

Mr. HARDIE: I would like to go back now to the oil regulations and the amendments that were made. I think the amendments affected 38 sections of the old regulations, and on questioning the officials of the department some time ago, section by section, we found that 19 out of the 38 amendments were just changes in wording and did not alter in any way the effect of the old regulations.

Mr. NIELSEN: Question?

Mr. HARDIE: Listen. Question: I have heard statements from you—

The CHAIRMAN: Let us get on with the questions, Mr. Hardie.

Mr. HARDIE: You get on with the questions; I will do what I have to do.

The CHAIRMAN: You are asking the questions.

Mr. HARDIE: You have shown partiality in this committee right from the start.

The CHAIRMAN: No, I have not. No one can say that. If you want to make observations, go ahead. I hope they are based on questions.

Mr. HARDIE: Section 20 was amended; the company must now spend $1.50 during the last three years, instead of 50 cents for each acre included in the permit prior to the commencement of the third year. That was not much of a change.

Section 23: double the actual expenditure on deep test wells can now be applied against the whole of the permit area. I would like to ask the minister: is this in the public interest, or in the interest of the company?

Mr. HAMILTON (*Qu'Appelle*): Yes, this is in the public interest.

Mr. HARDIE: Show me how.

Mr. HAMILTON (*Qu'Appelle*): Because the only way you finally get any information about an area is by actually drilling, and to encourage the drilling we have given double benefits for deep test wells—or deep wells—in virgin areas.

Mr. HARDIE: But a company does not drill a deep test well, does it, without doing other exploratory testing first?

Mr. HAMILTON (*Qu'Appelle*): Yes, they usually do other exploratory testing first. But as an encouragement for them to really go down and find out what is there, we give double benefits.

Mr. HARDIE: There was another section—I am not too sure of the number now—that was an amendment to allow for the lessening of the survey regulations. Under the old regulations, a company had to do certain survey work, and in the new regulations they have limited that. I am wondering if that is in the public interest, or in the interests of the company?

Mr. HAMILTON (*Qu'Appelle*): As you know, in survey in the settled areas of Canada we followed the American system of using the square section method, and this survey system seemed to be quite advantageous in the opening up of the prairie lands of the three western provinces. But as the oil exploration moved into northern Alberta and into northern British Columbia, it became obvious to the oil companies that to fulfil their requirements of survey on going to lease was costing them very large sums of money. One estimate that was given to me was that it was costing close to $3 an acre. Thereby, you are adding on tremendous extra cost to the exploration of a company in a difficult geographical area by insisting on the traditional methods of survey.

As one of the inducements provided by this government to encourage exploration in the north, we took out these traditional requirements on survey and replaced them by a new method of establishing their position, which would reduce their cost to a much smaller figure.

I will have to refer you now to regulation 36. The whole section deals with these new regulations. If you go on further, in section 37 you will see a number of sections revoked, which indicates that we have changed this section drastically.

Mr. HARDIE: Not very much. But anyhow, section 42 gives the minister power to reduce lease rentals any year after the first year from 1.00 per acre to 25 cents an acre. Is this in the public interest, or in the interest of the company?

Mr. HAMILTON (*Qu'Appelle*): Yes, this gives wide discretion to the minister. The minister has a terrific responsibility if oil or gas is discovered in commercial quantities. He has to use this discreton to (a) push development and production, or (b) let it stand, according to his judgment of the over-all commercial situation—

Mr. HARDIE: This is after it is in production?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: I mean, not after it is in production, but after they have found oil or gas and go to lease or get a 21-year lease?

Mr. HAMILTON (*Qu'Appelle*): That is right.

Mr. HARDIE: You now have power to reduce the lease fee from a dollar to 25 cents. Is that in the public interest, or in the interests of the company?

Mr. HAMILTON (*Qu'Appelle*): This is a situation in an area where the company has taken out a lease after they have found supplies in commercial quantities. They do not take out the lease until they do. Therefore, you are asked by the company which has done all this work if you will reduce the lease fees. In other words, they want to hold this lease at a reduced rate. You have the option of saying, "You must pay the full lease rental; you must continue your development program of bringing in these various wells and show the size of the field", or you have the option of saying, "Stop your development program and, as an assistance in letting you hold that without too much cost, we will reduce the lease rental."

This is one clause where the minister can lead his province, or his country, the wrong way or the right way. There is no person on this earth who is wise enough to say that he will give the correct answer all the time. But I would like to say this, on my own behalf, that I would hope that the members of parliament in the federal house will support me if ever it becomes necessary for me to say I do not think these companies should be forced into production in an area, when that production is not needed in the economic wealth or health of the country.

In other words, if there is a great surplus of oil and gas in some area, it would be wrong—if that company asked for the privilege of withholding production for a number of years—for me to force that company into production, and thereby reduce the economics, not only of the company we are talking about, but all the other companies already in commercial production.

That is a very important statement, because if a government gets so greedy for royalties that it forces companies into uneconomic production, then you are, in effect, dissipating the resources of the country in a manner which future generations will hold against us forever.

That is one side of the situation. The other side of the situation is this: suppose we have a large number of commercial fields and we feel, as a government—and, to put it right down to me—the minister feels, that this company

that is asking for a postponement is not doing it for good and just reasons. Then I would hope that the members of the House of Commons at Ottawa, and the people of Canada, would support me in making that company pay its full lease rentals and fulfil all the other obligations of that lease, or give it up.

Mr. HARDIE: At the end of the 21 years?

Mr. HAMILTON (*Qu'Appelle*): Yes, before the 21 years. If they do not fulfil their obligations, I have a discretionary power—and this is important—to take that lease away from the company.

Mr. HARDIE: Their obligations would be the 25 cents an acre, if you laid it down?

Mr. HAMILTON (*Qu'Appelle*): Yes.

Mr. HARDIE: If they went to lease?

Mr. DAVIDSON: They are also obliged to drill.

Mr. HAMILTON (*Qu'Appelle*): Under the lease terms, one of the main requirements of the regulations is that they go to lease as a commercial production; they are required to drill. One of the other regulations is that they must pay a lease rental for the whole area they are holding. I am talking about clause 42, which you were discussing. If there is a surplus of oil and gas production, I would hope you would not ask me to penalize a company which had acted in good faith, and force it into production when it is uneconomic to do so.

On the other hand, if I think a company is not acting in a just and reasonable manner, because they may have too much acreage and cannot develop it, and they are just holding it, or "hogging" it, I would enforce the provision that they must continue drilling and must continue paying the full lease rentals.

I was referring particularly to one of the provinces where companies have received leasehold acreages and have been able to hold those leases and pay the regular rate, and not fulfil their other obligations. The government was caught in this position, that because they had let one company get off without fulfilling their requirements, they had to give the same privilege to all the other companies. This section on rentals and the section on taking away leases puts a great discretionary power on the minister, and it is up to the minister to use that power wisely. This rental clause is just part of that over-all discretion, and this is one of the most important sections in the regulations.

Mr. HARDIE: Section 43 reduces the royalty for the first three years of production from 10 to 6¼ per cent. It was 10 per cent under the old, and it is 6¼ under the new. Is this in the public interest, or in the interests of the company?

Mr. HAMILTON (*Qu'Appelle*): As an additional inducement to the oil companies, we reduced the royalty in the first three years to 6¼ per cent. You will recall that when we established the crown reservation system, naturally the companies were very unhappy with this crown reservation system, because it meant that the state was going to take a much larger share than it had ever taken before.

By putting in this crown reserve system to make sure the public interest was protected, I knew that in the bargaining process I would have to give additional inducements to oil companies to keep them encouraged to open up the north. Therefore, this additional inducement of half royalty—6¼ per cent is half of 12½ per cent—was given during the first three years. Not all, but most oil companies work on the assumption that in the first three years they can get most of their pay out—that is, the actual out-of-pocket expenditures

on exploration and development—and from then on they have their development cost and their returns. Therefore, the 3-year period was an inducement, by reducing the royalty, to encourage them during the first 3 years.

Mr. HARDIE: Section 46 increases the amount of acreage a company may group. Under the old regulation it was 22,400, and now it is 120,000. Is this in the interests of the public, or in the interests of the company?

Mr. HAMILTON (*Qu'Appelle*): This was discussed very carefully with the Canadian Petroleum Association—

Mr. HARDIE: Is it in the interests of the public, or the company?

Mr. HAMILTON (*Qu'Appelle*): This was discussed very carefully with the Canadian Petroleum Association, and we decided that the larger grouping would be in the interests of the public, because of the geological structures in the north, covering large areas, and in some areas the sediment is much deeper and the dip is a certain way. Before this grouping is allowed, the Department of Mines and Technical Surveys advise our department as to whether the credit for the work they are doing on point "A" should be allowed over the whole area that they request. The studies the Department of Mines and Technical Surveys people have carried out are on the same geological structure, or area. Therefore, if it is in the same geological structure, we get the information we want to know about that whole area. Therefore, grouping is in the public interest.

Mr. HARDIE: Going back to the Arctic islands, I have one more question. Did the department, after handing out the priorities to these people who applied, write these individuals and companies asking them if they wished to take out exploratory licences?

Mr. HAMILTON (*Qu'Appelle*): When the rush was over and we had to complete our work on changing the regulations for the Arctic islands, several companies telephoned me and telephoned the department asking when these regulations would be in effect. They move very quickly in their business. We had a meeting within the department and decided to tell them—which we did, in the form of a letter to all of them—that while these regulations were being ratified by the cabinet, they could take out an exploratory licence. We wrote them.

Mr. HARDIE: Of the whole 28, how many have taken out licences?

Mr. HAMILTON (*Qu'Appelle*): Five.

Mr. HARDIE: Five out of 28. I think we have enough as far as I am concerned. We can raise this in the House of Commons. You will be hearing more about this when your estimates are before the house. I shall not delay the committee with any more questions except as to the mainland. Now we are speaking of permits which require the companies to do development work, or the payment of a deposit to guarantee so much work, or through reservations, such as in the Peel Plateau, where, by order in council, they have to spend so much money.

Is it true to say that prior to July 1, 1957 of the 24,928,265 acres which were held by permit or by reservation—that is, including the Eagle Plain reservation —that 51.57 per cent of these were held by Canadian companies; 8.98 per cent by American companies; 26.5 per cent by Canadian subsidiaries of United States companies, and 12.95 per cent by American individuals?

Is it also true that on the mainland of Canada after July 1, 1957 permits issued to American companies comprised 33.15 per cent; to American individuals .6 per cent; to Canadian subsidiaries of United States companies 30.02 per cent; and to Canadian companies and individuals a total of 36.23 per cent?

Is it not true that since July 1, 1957 in the Canadian north, the government has issued permits to American companies and individuals or subsidiaries of 63.77 per cent as against, prior to July 1, 1957, to companies, individuals and subsidiaries of approximately 48 per cent?

Why is there this increase in permits now issued to American companies?

Mr. HAMILTON (*Qu'Appelle*): My first reaction to those figures is that they are altogether different from the figures—

Mr. HARDIE: Might I say that my figures are based on the figures that were tabled here the other day; and that along with American companies, Canadian companies, or Canadian subsidiaries I included joint holdings which you have separated; I just took the joint holdings, and if there were American companies, I put them in with American companies, and if they were Canadian companies I put them in with Canadian companies.

Mr. HAMILTON (*Qu'Appelle*): All we shall have to do then is to make sure we are using the same terms of reference.

Mr. HARDIE: We are using the same figures; they are the figures supplied to me the other day.

Mr. HAMILTON (*Qu'Appelle*): I think this is important, because earlier in this committee I told the hon. member that there was no point in adding these two sections where you have the whole thing once and for all.

Mr. HARDIE: This is the whole thing; these are the permits issued to date.

Mr. HAMILTON (*Qu'Appelle*): That is all I am saying. We should have the whole thing on the record. The questions in the House of Commons are broken down into several sections. Here for instance is starred question 74 dated May 20. This question was asked by Mr. Hardie. He asked for the total acreage, oil and gas permits, as of July 1, 1957, and March 31, 1959. We agreed that March 31, 1959 was the cut-off.

Mr. HARDIE: The figures I have just put on the record are the figures based on permits issued first, prior to July 1, 1957, and secondly, since July 1, 1957, and up to the latest record that the department has.

Mr. HAMILTON (*Qu'Appelle*): You are not using a cut-off date of March 31?

Mr. HARDIE: I am going beyond that. I am taking them right up to the date that the department gave me.

Mr. HAMILTON (*Qu'Appelle*): These figures which the department gave you would be up to March 31?

Mr. HARDIE: That is fine. That covers them all pretty well, does it not Mr. Davidson? I mean as to the mainland permits issued?

Mr. DAVIDSON: Yes.

Mr. HARDIE: Incidentally I just wonder where our sovereignty—

The CHAIRMAN: Please let the minister answer the question which you asked.

Mr. HAMILTON (*Qu'Appelle*): Just a minute, Mr. Chairman. I want to get these accurate. Sticking to that answer given by the department last week, prior to July 1, 1957, the percentages were as follows: first, American, 10.9 per cent; second, Canadian subsidiaries of American companies, 30.7 per cent.

Mr. HARDIE: This is prior to July 1st?

Mr. HAMILTON (*Qu'Appelle*): That is right. Third, Canadian companies, 30.7 per cent; fourth, American citizens, 17.2 per cent. These joint holdings are four in number, I understand. You have divided these according to your judgment?

Mr. HARDIE: No, on the basis of the share, for instance, of the joint holdings. Section five of that answer says Shell Oil, British American, Texaco

Exploration, and Mobile Oil, divided 266,587 acres. I divided them up. Shell took one quarter as a Canadian subsidiary; Mobile Oil took one quarter as a Canadian subsidiary; British American took one quarter as a Canadian subsidiary; and Texaco Exploration took one quarter as an American company. That was a very fair way, I would say, of doing it. I also included in that figure 6,133,760 acres in the Peel plateau which are held by Canadian companies.

Mr. HAMILTON (*Qu'Appelle*): You added on the 6 million acres?

Mr. HARDIE: Yes; it was not added in your figures.

Mr. HAMILTON (*Qu'Appelle*): How did you divide Canadian Husky and Canadian Superior?

Mr. HARDIE: Canadian Husky, one half; Canadian Superior, being a Canadian subsidiary, one half.

Mr. HAMILTON (*Qu'Appelle*): You added them on as Canadian subsidiaries?

Mr. HARDIE: Yes, the Canadian Husky oil company.

Mr. HAMILTON (*Qu'Appelle*): I have not worked these out in percentages, but I do not quarrel with what the hon. member has done.

Mr. HARDIE: So what the Prime Minister said in Montreal. . . .

Mr. HAMILTON (*Qu'Appelle*): Hold it now. I want to get this record accurate. What percentage did you quote for Canadian companies?

Mr. HARDIE: Prior to July 1, 1957: American companies, 8.98.

Mr. HAMILTON (*Qu'Appelle*): You have taken the Peel plateau in that?

Mr. HARDIE: Yes, because I included all Canadian companies.

Mr. HAMILTON (*Qu'Appelle*): Did you take the Peel plateau into the next computation?

Mr. HARDIE: No. These are permits issued prior to July 1, 1957.

Mr. HAMILTON (*Qu'Appelle*): Did you take it right down through your total then?

Mr. HARDIE: Yes, right through.

Mr. HAMILTON (*Qu'Appelle*): Did you also include it in your over-all total without working out the percentages after July 1, 1957?

Mr. HARDIE: No.

Mr. HAMILTON (*Qu'Appelle*): To get accurate information, if you are going to count the reservations in on the first stage, you must extend the reservations all the way through to get the final average.

Mr. HARDIE: I took everying prior to July 1, 1957, where permits were held or taken out, that is, prior to 1957. I took the permits issued since July 1, 1957 and I made a separate computation for them. That is the only way you can do it.

Mr. HAMILTON (*Qu'Appelle*): The only thing is reservations; I am not averse to putting them in, but where have you changed that reservation into permits? It doubles the acreage held. The only thing is this; we are trying to get accurate figures for the record of the committee. Are the answers you got from the department on record?

Mr. HARDIE: Yes.

Mr. HAMILTON (*Qu'Appelle*): You are changing them and adding in certain joint holdings and dividing them; and secondly, you are adding six million odd acres on top of the others. You have doubled the Canadian by adding on the reservations, but in our figures we gave you the Canadian companies were 30.7 per cent because they held 5.7 million acres.

If you add the Peel plateau to it you get an additional 6 million acres which in fact doubles the Canadian portion.

Mr. HARDIE: In any event I want to know this: is it true that prior to July 1, 1957, the total acreage that you gave me included Canadian companies?

The CHAIRMAN: Total acreage for what?

Mr. HARDIE: For oil and gas permits.

The CHAIRMAN: I want it on the record.

Mr. HARDIE: Perhaps I should reword my question. The total acreage prior to July 1, 1957, included, either under permits or reservations, the items that you just read, the Peel plateau plus the acreage held under permits; these were issued prior to 1957?

Mr. HAMILTON (*Qu'Appelle*): That is right.

Mr. HARDIE: The figures given in the statement before you include that acreage covered under the permits issued since July 1, 1957, up to March 31, 1959.

Mr. HAMILTON (*Qu'Appelle*): If you want to add that reservation.

Mr. HARDIE: You did not want any part of it in your opening statement.

Mr. HAMILTON (*Qu'Appelle*): If you are going to talk about the statement, the people keeping the record have to get it straight. If you take the permits over our percentages, and if you want to show that Canadian ownership has been doubled because they had such a large acreage, you can make it any percentage you like.

Mr. HARDIE: I am not making it anything. I am simply saying that the total acreage held to July 1, 1957 was split up, Canadian and American, into these figures which I gave you, the American being 51.57 per cent and the Canadian being 48.43 per cent; that would be all American since July 1, 1957—

Mr. HAMILTON (*Qu'Appelle*): This was before 1957; it was 48 per cent and 51 per cent Canadian.

Mr. HARDIE: That is approximately correct, yes. Since July 1, 1957 it is 36.23 per cent Canadian, and 63.77 per cent American. Does this make it apparent that Canadian sovereignty is not now being neglected?

Mr. HAMILTON (*Qu'Appelle*): I think the hon. member has got himself into a trap. What he has done is to take the period before July 1, 1957 and by adding on Canadian reservations which I accepted, it breaks even, American and Canadian.

If he is going to do this, then in all fairness he must take all the acreage of all sorts allowed since July 1, 1957.

Mr. HARDIE: No.

Mr. HAMILTON (*Qu'Appelle*): Yes, he must.

Mr. HARDIE: You have not issued permits.

Mr. HAMILTON (*Qu'Appelle*): If he is going to take the dividing of reservations and all the rest of it, I must say that the Canadian people will want to know the total figures for the whole operation. The total figures for the whole operation indicate that there is more Canadian acreage held at the present time since July 1, 1957 on the mainland and in the islands than there was before. This is such an apparent device to try to show by a few percentage points that Canadian sovereignty is suffering.

Mr. HARDIE: There has been a 15 per cent drop since you took over.

Mr. HAMILTON (*Qu'Appelle*): The only place where Canadian sovereignty is at stake is in the Arctic islands. No one ever questioned who owned the

Mainland. No one ever questioned that the Northwest Territories and the Yukon belonged to Canada, but there was a question about the Arctic islands in the minds of some American writers.

Mr. NIELSEN: We sometimes wonder to whom we belong.

Mr. HAMILTON (*Qu'Appelle*): Surely the hon. member from Mackenzie River was not under the impression that the territory he represented was not in Canada?

Mr. HARDIE: Please do not be so childish.

Mr. HAMILTON (*Qu'Appelle*): The sovereignty in the Yukon and Mackenzie River used to be half and half but now it is 63 and 36. There was no question about sovereignty in the minds of the people of the Yukon and the Northwest Territories, but there was such a question in the Arctic islands.

When you take the figures for the Arctic islands out of this, it becomes altogether different. I said at the beginning of the committee and I now repeat, that the only fair way to handle this thing is to take the figures for the whole deal, and not take little bits and parcels and trying to prove a case from a single instance.

It is outrageous to say that Arctic sovereignty has declined since July 1, 1957, because these permits shown in red along the Mackenzie River have reduced Canadian sovereignty. There was no question in the mind of the Canadian people about the sovereignty of the Mackenzie river before.

Mr. HARDIE: Not according to you in your last election campaign.

Mr. HAMILTON (*Qu'Appelle*): Now I see what is bothering the hon. member. I thought what he wanted was information.

Mr. HARDIE: I have obtained all the information I want.

Mr. HAMILTON (*Qu'Appelle*): I know how he will try to make use of it; but he will find that just as in the case of his leader, when he tried to misinform the house when he said there was a sale of three million acres and only three or four per cent was Canadian. That was the sort of misinformation that I had to correct.

Mr. HARDIE: You have misinformed us about practically every aspect of oil and gas.

Mr. HAMILTON (*Qu'Appelle*): There is no use in our talking about this any longer, if you are talking about sovereignty in the Mackenzie river.

The CHAIRMAN: Are there any other questions on item 261? If not, is the item agreed to?

Item agreed to.

NORTHERN ADMINISTRATION AND LANDS BRANCH

Item 275—Branch Administration ..... $ 1,587,128

Mr. HARDIE: Just a minute. This also covers minerals. Does this item cover the mineral portion of the work of the department?

Mr. HAMILTON (*Qu'Appelle*): It does in general, yes.

Mr. HARDIE: I wonder if the department had considered some loosening in the regulations to mining companies and prospectors in the north, particularly in those areas around the Nahannai, and in the more inaccessible places outside Yellowknife?

Mr. HAMILTON (*Qu'Appelle*): The department has had under consideration now for five or six months part of the mining regulations in the Yukon and the Northwest Territories, but I am not in a position at the present time to make any statement as to where we are going. However, I would object very

strenuously to the thought that we were going to loosen the regulations. Actually what we want to do is to provide scientific regulations which would encourage exploration and also protect the public interest.

Mr. NIELSEN: If the minister will allow a correction, there are no regulations in the Yukon, only the Yukon Quartz Mining Act.

Mr. HARDIE: Has the department considered any change in the Yukon Quartz Mining Act?

Mr. HAMILTON (*Qu'Appelle*): The Yukon Quartz Mining Act and the Northwest Territories Quartz Mining Act regulations are under review. But I am not in a position to make any statement for months to come.

Mr. NIELSEN: May I ask one supplementary question: is it the intention of the minister in connection with the review that is being made of the legislation in effect in both territories to consult those who are in the mining fraternity before any changes are made?

Mr. HAMILTON (*Qu'Appelle*): We have already consulted a good many of the mining operators across Canada to date, but there is still a great deal to do.

Mr. NIELSEN: Is it your intention to consult with mining organizations in both the territories? Is that right?

Mr. HAMILTON (*Qu'Appelle*): When you say "organizations", do you mean those newly formed?

Mr. NIELSEN: I mean mining organizations which have been in existence for a good length of time in the Yukon.

Mr. HAMILTON (*Qu'Appelle*): Yes, I think we shall consult those organizations.

Mr. NIELSEN: Thank you.

Mr. HARDIE: Could the minister tell us what is the expected life of the Eldorado ore body at Port Radium? I think there have been public statements on that. I wonder if the minister could tell us when the Eldorado Mining and Refining Company expect they will be out of ore at Port Radium?

Mr. HAMILTON (*Qu'Appelle*): As a matter of fact, it does not come under my department, although I have heard it discussed.

The CHAIRMAN: I do not think that should be asked of the minister.

Mr. HARDIE: Oh no? We have gone all over the place in this committee.

The CHAIRMAN: You can get the information if you want to, Mr. Hardie, by bringing in a witness. You can send for a witness, if you like.

Mr. HARDIE: Has the minister received any word recently as to the Rayrock ore body?

Mr. HAMILTON (*Qu'Appelle*): I think it would be absolutely improper for me to divulge any information I have from these companies. I know one is a crown corporation, and that is the exception; but it would be wrong for me to say anything about Rayrock.

Mr. HARDIE: I can possibly ask this another time, on another item, but will the road be extended this year, to Rayrock?

The CHAIRMAN: That comes under the northern administration, Mr. Hardie.

Mr. HARDIE: It would, but this is a road to a mine.

The CHAIRMAN: Let us finish up this item first, and your road could come under item 275.

Mr. HAMILTON (*Qu'Appelle*): I can give the answer now.

A decision on that proposition is incomplete, but there are no plans for this year's work.

Mr. HARDIE: No plans for this year's work, to extend the road?

Mr. HAMILTON (*Qu'Appelle*): To Rayrock.

Mr. HARDIE: Or the Lac LaMartre area?

Mr. HAMILTON (*Qu'Appelle*): That is on the subject of the road. It is under study now, but there are no plans for this year's operation.

The CHAIRMAN: Item 275. We are on item 275, gentlemen.

If you have had an opportunity of going over any of the material that has been supplied to you this morning, you could base your questions on that information, as a start.

Mr. NIELSEN: I would like to deal with the question of the Flat Creek to Fort McPherson road, Mr. Chairman. Are the questions and answers supplied to us this morning being included in the record?

The CHAIRMAN: I think that was agreed at the beginning, Mr. Nielsen.

Mr. NIELSEN: I see. There are one or two points I would like to have clarified, if I may.

The answer to the question put by me, as to whether the lowest bidder in each item obtained the contract is answered merely by reference being made to the tabled chart. I would like the minister, if he pleases, to give a yes or no answer to that question, as to whether the lowest bidder on each item was, in fact, awarded the contract for the work.

Mr. HARDIE: I wonder if you would let the committee know which contracts you are referring to.

Mr. NIELSEN: That is the contract on each individual item.

Mr. HARDIE: In which particular instance?

Mr. NIELSEN: As I said at the beginning of my question, on the Flat Creek to Fort McPherson road.

Mr. HAMILTON (*Qu'Appelle*): I have just been discussing this with Mr. Sivertz and there are 21 individual items. Do you want them all?

Mr. NIELSEN: I want to know whether on each of those items that have been awarded the low bidder got the contract.

Mr. HAMILTON (*Qu'Appelle*): You will have to wait to get that when Mr. Williams comes back.

Mr. NIELSEN: Mr. Williams from Public Works?

Mr. HAMILTON (*Qu'Appelle*): He is the engineer from Public Works.

Mr. NIELSEN: Was Public Works in charge of the letting of contracts for this road?

Mr. B. G. SIVERTZ (*Director, Northern Administration Branch*): Yes, Mr. Nielsen.

Mr. NIELSEN: I would like to defer any questions until we have Mr. Williams before us. Could we have him here at the next meeting?

Mr. HAMILTON (*Qu'Appelle*): He was here earlier this morning, but he had to leave.

The CHAIRMAN: In that case, there is nothing more that we can do. Do you want anyone else to answer the question you asked a moment ago, Mr. Hardie—of Mines and Technical Surveys, on the life of mines, and so on?

Mr. HARDIE: If we could obtain someone from Mines and Technical Surveys to give us that information—perhaps the department can get that information from Mines and Technical Surveys, without calling a witness. I do not think there is anything secret about the information on Eldorado. It was printed a couple of years ago. I think the life of the mine is expected to be two more years; and Rayrock is next month.

The CHAIRMAN: Gentlemen, before we adjourn, there is some information available here, produced by Mr. Sivertz of the department. The chart was ordered to be printed, and I think that the details of the rental agreements should be printed also. Is that agreed.

Agreed.

(At the afternoon sitting this day, the Committee decided that, due to the obvious difficulties of reproduction from photostatic copies of the rental agreements of which the said chart is a summary, neither the said chart nor the said rental agreements should be printed in the proceedings of this day.)

The CHAIRMAN: Well then, if there are not any further questions you wish to ask this morning, I would suggest we adjourn until after the Orders of the Day in the House this afternoon.

Mr. HARDIE: Orders of the Day today?

The CHAIRMAN: Yes, agreed?

Mr. HARDIE: Not agreed!

Agreed.

The CHAIRMAN: There is a lot of work to be done.

Mr. HARDIE: Did our representative on the steering committee agree to this?

The CHAIRMAN: This adjournment is made subject to the call of the chair.

Mr. HARDIE: That is fine!

AFTERNOON SITTING

MONDAY, June 1, 1959.
3.45 p.m.

The CHAIRMAN: Gentlemen, we have a quorum. The minister is on his way down to our committee room. We were on item 275. I assume you have looked over the questions and answers. I see that Mr. Coates is not here.

Mr. SIMPSON: Mr. Chairman, what is item 275?

The CHAIRMAN: Item 275 is on Branch Administration of Northern Administration Branch, on page 55.

Mr. NIELSEN: May I continue with my questioning as to the Flat Creek to Fort McPherson road project, Mr. Chairman?

The CHAIRMAN: Yes, Mr. Neilsen.

Mr. NIELSEN: Now Mr. Williams is here from the Department of Public Works, I wonder if I could ask him a number of questions?

The first of these is: in the number of items shown in the table that has been included in the evidence and proceedings—I believe there are 22 items—was the lowest bidder in each case awarded the contract for those items for which contracts have been concluded?

Mr. G. B. WILLIAMS: (*Chief Engineer, Development Engineering Branch, Department of Public Works*): Yes, although there were some items—for example, there was a heavy-duty ripper—on which tenders were asked for and the only quotation we got was a quotation of $1,500 a month, and that, we thought, was an excessive rate. A substantially reduced figure was eventually negotiated in the rental agreement.

Mr. NIELSEN: This was negotiated?

Mr. WILLIAMS: Yes, with the lowest tender.

Mr. NIELSEN: With the lowest tender, in the first instance?

Mr. WILLIAMS: Yes, that is right.

Mr. NIELSEN: In the case of the ripper, Mr. Williams, the contractor is shown as the John McIsaac Construction Company?

Mr. WILLIAMS: Yes, that is correct.

Mr. NIELSEN: Was his the lowest tender, in the first instance?

Mr. WILLIAMS: McIsaac and two others, they were all the same price.

Mr. NIELSEN: What item is that?

Mr. WILLIAMS: That is item 21.

Mr. NIELSEN: That is McIsaac?

Mr. WILLIAMS: Yes, and Proctor and General Enterprise.

Mr. NIELSEN: They all had the same original bid?

Mr. WILLIAMS: That is right.

Mr. NIELSEN: You negotiated with the first man on the totem pole? How did he get there?

Mr. WILLIAMS: Actually, I do not know whether they were all approached. I assume they were all approached; but in general if everybody had asked the same rate, a man would not want to have a ripper working independently, and the fellow who has the most equipment in there would tend to quote the lowest rate.

Mr. NIELSEN: Did you get quotations from the other two?

Mr. WILLIAMS: I could not say.

Mr. NIELSEN: Would anybody in your department know?

Mr. WILLIAMS: I would probably have to go to Whitehorse to find out.

Mr. NIELSEN: Further along...

Mr. HARDIE: I wonder if I could ask a question on the ripper? Were all these contractors Yukon contractors, or were they split up, like MacIsaac is, from the Yukon—were the other two contractors from the Yukon?

Mr. WILLIAMS: Yes, I believe so.

Mr. HARDIE: They were all from the Yukon?

Mr. WILLIAMS: Yes, I think so, but I would have to look it up.

Mr. NIELSEN: The other questions I have concern the contracts which have been awarded to what is called Polar Construction and Engineering Corporation Limited?

Mr. WILLIAMS: Yes.

Mr. NIELSEN: Has your department checked to find out whether, in fact, such a corporation is in existence?

Mr. WILLIAMS: No.

Mr. NIELSEN: So, if I suggested to you there was no such corporation, as a corporate entity, in existence, you would not be able to say whether I was wrong or right?

Mr. WILLIAMS: No.

Mr. NIELSEN: I am suggesting there is no such corporation in existence. Inasmuch as the contract with the so-called Polar Construction and Engineering Corporation Limited appears to contain no clause as to assignment, I am wondering whether your department or anyone has investigated the suggestion this contract has been assigned to any other firm.

Mr. WILLIAMS: This is a contract which is a rental agreement. It is not a contract in the concept of, for a price, undertaking to do a job. This contract

says that he will supply, for example, a D.-8. tractor for so many dollars per hour. The contract is that for every hour that tractor works we will pay him that unit price, and that is all.

Mr. HARDIE: I take it from that, then, sir, the reason you called for tenders in this way, on the hourly rental basis, was because you did not have a proper survey of the road completed in order to call for tenders on a unit price basis?

Mr. WILLIAMS: No.

Mr. HARDIE: There is a survey of that road now?

Mr. WILLIAMS: Yes.

Mr. NIELSEN: That has got away from my point.

Mr. HARDIE: I started the questioning on this the other day, Mr. Nielsen, and I asked the first question on it.

Mr. NIELSEN: I was pursuing a specific line of questioning here, Mr. Chairman, in connection with the existence of the Polar Construction and Engineering Corporation, and with regard to certain suggestions that the contract has been assigned. I understand, Mr. Williams, that Interior Construction of B.C. Limited, is in fact the organization carrying out the work which is called for in the contract—that is, in the contract with Polar?

Mr. WILLIAMS: Yes.

Mr. NIELSEN: Do you know whether that is correct?

Mr. WILLIAMS: I have no knowledge on that question.

Mr. NIELSEN: If you found this to be so, would the department object to another organization carrying out the work that Polar hand undertaken to do by this agreement?

Mr. WILLIAMS: I do not think so. As far as we are concerned, Polar would supply and run a piece of equipment. We pay Polar for so doing.

Mr. NIELSEN: But if you found Polar were not doing the work?

Mr. WILLIAMS: As far as we are concerned, they are.

Mr. NIELSEN: But if some other organization was doing it, would there not be an objection to that?

Mr. WILLIAMS: I do not think so.

Mr. NIELSEN: Why not, Mr. Williams?

Mr. WILLIAMS: We asked Polar to operate a D-8 tractor for eight hours on such and such a day. A D-8 tractor operates on that day for eight hours, and we pay Polar for it. What he does with the money, I am not very concerned with, as long as he does the day's work we asked him to do.

Mr. NIELSEN: So the Department of Public Works consider it as quite acceptable then?

Mr. WILLIAMS: If you are talking in terms of general contract, where we have a contract with a contractor, where he has undertaken to complete a certain project, and where we have to have protection for the completion of that preject, there are very definite specifications and requirements, requiring approval of the contracts and everything else.

In the case of a rental agreement this is not an important factor at all. This is an agreement to perform work, an hour's work for a certain rate. If he does not perform the work someone else may do so.

Mr. NIELSEN: Assuming my suggestion is correct, and some other organization is doing this work, you have two factors that are important, I think: one, that the contract with Polar is not being operated by Polar; and, two, the Polar Construction and Engineering Corporation Limited does not exist. So that this leads to the conclusion that the Department of Public Works may not even have a contract with the person who is doing the work.

Would this not put us in a position where I, as a man of straw, could be operating in government contracts, and bidding, if I happened to know how to do so, and then barter them off to other organizations?

Mr. WILLIAMS: Yes, definitely.

Mr. NIELSEN: Is that a desirable situation?

Mr. WILLIAMS: No.

Mr. NIELSEN: If you found that situation existed in this case, would it not be an acceptable suggestion to say the dealings with Polar should be terminated, and that the contract should be called for on the basis that you know with whom you are dealing?

Mr. WILLIAMS: I am not prepared to say whether or not we should. I am only concerned with getting the work done; and if the tractors are working, I am not concerned with it. If this is a situation that the department is asked to do something about, then I will have to go to the chief of our legal services and see what he recommends should be done.

Mr. NIELSEN: I am greatly in sympathy with your position and the position of your department, in view of my own knowledge of the short construction season in the north; but, at the same time, it seems to me a contract with an outfit that may not be in existence, or which may be being performed by some other organization, leaves the department in a position where not only are they not dealing with the person who bid and purported to sign the contract, but it leaves them in the position where they have nobody on whom to pin liabilities, in the event of non-performance of the contract. If you are dealing with a ghost you cannot do it.

Mr. WILLIAMS: Any one of these men can quit work tomorrow or today, and there is no penalty attached. This is a rental contract; this is not a firm contract for the performance of certan work. This is strictly a rental contract for a service.

Mr. NIELSEN: Now, Mr. William, you have these allegations of fact—that I can only term allegations, in view of the way they have reached me. I wonder if you would, as a representative of the department in charge of this construction, investigate the truth of the allegation, as to whether or not Interior Construction of B.C. is in fact carrying on this work? I believe they are a subsidiary of Dawson and Hall, Registered, in British Columbia.

If this is found to be the fact, I suggest some remedial action should be taken by the department, either to go to the next lowest tender, or find the man you are dealing with.

Mr. WILLIAMS: You are asking me? I do not know whether this is something I do as a result of that question, Mr. Chairman.

The CHAIRMAN: Mr. Williams, it will be in the proceedings, and the officials of your department will take notice of what has been said. It has not been proven that this firm does not exist, but it is alleged they do not exist.

Mr. NIELSEN: It is simply an allegation at the moment.

The CHAIRMAN: It is just notice to your department of government to make an inquiry.

Mr. NIELSEN: I am finished with that point,—if Mr. Hardie wishes to pursue his line of questioning.

Mr. HARDIE: I am wondering if Mr. Williams can produce for the committee the survey plans showing the location of material for the road?

Mr. WILLIAMS: No, I cannot do that. Your question was, I think, "Could we have called a unit price contract?" Yes, we could.

Mr. HARDIE: On the present survey?

Mr. WILLIAMS: Yes.

Mr. HARDIE: Knowing the location of the material and the rest?

Mr. WILLIAMS: We would not have complete information, not on the location of material. We would not have complete information on how much permafrost we could anticipate. There would be a lot of information we would not have.

Mr. HARDIE: So, in other words, you could not call for a unit price contract because there was not sufficient information for the contractor in order to give a realistic bid?

Mr. WILLIAMS: No, the point would be, if we called a unit price contract the contractor in making up his bid—and you must realize this road starts at the northern limit, at which there had been road construction in this area, and it took off at the edge of the mountains. The existing road skirted the south boundary of the mountain, and we took off at that point and went north. It is relatively isolated.

Any contractor who bid a unit price tender, not the department having called up any work in that area, the contractor would have to bid high to protect himself for the unknowns.

The unknowns would be the length of the working season; the amount of permafrost there would be—just the general working conditions. In other words, he would have to gamble on how many hours his equipment could work; and also he would have to gamble on what production he could expect in each hour of work.

As I say, he would be gambling, and would have to bid high. We could have gone ahead and done this, but we felt it was putting a lot of risk on the contractor, to do so.

Mr. HARDIE: Only because you could not supply him with the information. For instance, when you do a road survey, do you not test for permafrost?

Mr. WILLIAMS: Yes.

Mr. HARDIE: Do you not test for location of material?

Mr. WILLIAMS: Yes, we do.

Mr. HARDIE: But you have not that information now?

Mr. WILLIAMS: We had at the completion of our survey last year; when we pulled out of the field, we had a great deal of that information. But I could survey *ad infinitum*, and sometimes I would like to; but the cost of these things builds up, and when you are dealing with a development road you do not want to put too much money in your survey. So you have a situation where you have to balance how much you can afford to spend for survey against what you have available to do the construction work.

Within the limit of this we had enough information. We could go to a unit price tender. But our information was not precise. We would be forecasting our design on not as much information as we perhaps would like; and, again, the contractor would be forecasting his estimate or his bid on conditions of which he was not sure. We will have a situation now where any contractor who wants to bid on this work can go and have a look at it under construction.

Another thing to be considered is, if we would go out on a unit price tender we would have to call a minimum of a two-year contract. For a contractor outside of the territory to move in on a job he would have to estimate what it would cost to move in and move out, and it could cost him approximately $300,000.

Mr. HARDIE: Are there not capable contractors in the Yukon Territory who could do it?

Mr. WILLIAMS: Yes, there are some, but in relation to the amount of work they would be capable of doing and the amount there is to do and the equipment they had available for it, somebody else would have to move a sizeable fleet of equipment in there.

Mr. NIELSEN: Could you give the committee some idea of the opportunities given by this survey, if any, for local contractors to bid? Were they any greater or less by adopting this system as opposed to the unit price system?

Mr. WILLIAMS: They were greater.

Mr. NIELSEN: Could you explain that?

Mr. WILLIAMS: If I could just develop what I said to Mr. Hardie, the contractor would have to have a minimum of a two-year contract because he is going to have to write off $150,000 a season on moving in and out all the equipment. We would then be going out for a tender on an area where we had not had work before, and in an area where no one had done anything north of this point. We had an unpredictable season and unpredictable permafrost; the only thing we knew was there was lots of it.

The contractor would bid, and we would be stuck with the unit price that he bid for that year for two years. Conversely, he is stuck with them too. But the conditions may not be as bad as we anticipate, or they may not be as bad as he anticipated; and if we can get the thing started we can get a look at the situation that has developed.

Mr. NIELSEN: By extending them from one-year to two-year contracts. Of course, I do not agree with that; that is just an opinion.

Mr. WILLIAMS: But the point is, you know, that when we first called tenders in the Mackenzie district we got three bids, and now we are regularly getting seven; and we have got as many as 14 bids.

Mr. NIELSEN: The tractors had done work in the Yukon from Whitehorse to Dawson, when they built that road; they have that experience.

Mr. WILLIAMS: Yes.

Mr. NIELSEN: It was built by the federal government?

Mr. WILLIAMS: You also have the situation that the terrain is very much different north from Flat Creek than it is from Flat Creek to Dawson or back towards Mayo.

Mr. HARDIE: With the lack of information you have, how do you estimate the cost of this stretch of road? How many miles is this stretch of road will be built this year?

Mr. NIELSEN: Is there any lack of information to start with?

Mr. HARDIE: We do not know how much permafrost we have, or how little we have.

Mr. WILLIAMS: Now I am under-selling what we have on it. We have a location survey firm for 140 miles. We have soundings, and we have spotted out where we want to take borrow pits. We know what the thaw-line of frost is, as it occurred throughout last summer. We know the moisture contents, as they were last summer, when our crews were in the field. We have some information from Transport on their permafrost records—not in that particular area, but as close as we could get. And we got some information from the U.S. bureau of Public Roads. We have this sort of information, and we can go to unit price tender; but we think we removed some of the gamble, and we are trying to create a climate in that area where we will get good competitive bids, where we are going to get a good job done for a reasonable price; but we are not going to mislead anybody.

Mr. HARDIE: What do you estimate is the cost per mile?

Mr. WILLIAMS: There is a wide variance as to what it is. I have thought it might be in the range of $35,000 to $40,000 a mile.

Mr. HARDIE: What would be the width of the road?

Mr. WILLIAMS: Here again, the standard of road is very difficult to select for a job like this, because there you have no yardstick on which to measure traffic. You have the desire to open up and develop the country, and so you can go to either the extreme of knocking the stumps down and just building a little bit of road, to make it possible to travel in the winter time only, or you can go the whole hog and try and provide full traffic at all times of the year. Somewhere in between is where we have to get.

Where the going is easy, we have established that on the grading we can save on the average perhaps 15 per cent between a 24 foot top and an 18 foot top. Where the going is easy, it will be possibly less than 15 per cent. On a little more rolling terrain with a bit of rock in it, it is going to go at least to the 15, and might go 25.

So where the going is easy, we will build a 24 foot top. If we get into some heavy fills, and that sort of thing, we are going to trim it down to an 18 foot top. If we get into rock, we are going to go to a minimum grade. If you are not moving heavy equipment, you can pass on this; you will have passing traffic at reduced speeds, if you are moving big equipment; it will be one-lane traffic.

Mr. NIELSEN: May I go back to the point we were discussing two or three minutes ago regarding the opportunities you feel were offered to Yukon contractors by adopting the rental system, as opposed to the unit price system? Do you feel they were given any greater, or any less opportunity?

Mr. WILLIAMS: They were given a greater opportunity, from the standpoint that there was not, to our knowledge, anyone in there who had sufficient equipment to meet our requirements. But by calling it this way, any equipment that was there had a chance to get on the job. This gives the local fellows a chance; but at the same time it gave us a chance to start this job and get it opened up so people could have a look at it and just see how tough, or how easy, it was going to be, without our paying the moving in and out costs. If they were there and had equipment available, they could go to work. If they did not have to pay to move in and out, obviously the rental would be less.

Mr. NIELSEN: As to the route of the road, it now runs from Flat Creek to Fort McPherson. There has been some suggestion in the Yukon that a better alternative route would have been provided by commencing the road in the Mayo-Keno hill vicinity and up the Beaver river country to Fort McPherson, and that way.

Could you tell the committee whether any consideration was given to the route I have just described, and if consideration was given to it, why was it rejected in favour of the Flat Creek route?

Mr. WILLIAMS: We looked at it originally in the fall of 1957. In 1957 we did just reconnaissance from the aerial pictures, and some flying. It was a poor fall and the crew did not see too much. But we looked at it again, as carefully as we could, last year. We did not traverse it at all on the ground, but we obtained aerial pictures. We did some of it on the ground, and we close-flew all the rest of the way with helicopters to have a good look at it.

Some sections of it, particularly near Mayo, up along the Wind river, are quite good. They are at least as good as the present section up the north Klondike near the Blackstone river. But as you moved north of there, you could not get out of it. We got so far, and we could not get from there up into the Richardsons, either to McPherson or into Eagle Plain. We ran into a dead end. I should not say we could not get through, because you can get through

anywhere. But on the basis of cost—and with the view that this road was to serve Eagle Plain—we could not get over to Eagle Plain from there. We also had horrible country to get through to go north from the Wind up into the Peel.

Mr. NIELSEN: Was any liaison conducted between your engineers and the Department of Mines and Technical Surveys, or the Department of Northern Affairs and National Resources—

Mr. WILLIAMS: Yes.

Mr. NIELSEN: —in connection with the assessment of the mineral potential, comparing the mineral potentials on both the Flat Creek route and the Mayo-Keno hill route?

Mr. WILLIAMS: Yes; when the Department of Northern Affairs asked us to undertake the survey, we had a meeting and asked them to give us some terms of reference within which to work: Where do you want the road; where are your starting points, and what is it to serve?

Then we start out and do it from reconnaissance sheets and aerial photography. We pick out possible routes and these possible routes are discussed with the Department of Northern Affairs and, in turn, generally we discuss that with the Department of Mines and Technical Surveys. Sometimes they select routes that, as far as building a highway is concerned, I wish they would go somewhere else. But if this is what the highway is for, it is obviously no use my picking a sand ridge.

Mr. NIELSEN: In this particular instance was, to your knowledge, any consideration given to routing the road through the Mayo-Keno hill area for the purpose of assessing the hard rock mineral potential in this area?

Mr. WILLIAMS: This is another reason we were asked to take another look at this route, that there was mineral potential there that was going to be served, or might want some service to it. This is the basis on which we were asked to take another look.

Mr. NIELSEN: Was that potential south of the Wind river?

Mr. WILLIAMS: I could not say.

Mr. HAMILTON (*Qu'Appelle*): This question of minerals, I think really falls into my department, rather than Mr. Williams'.

Mr. WILLIAMS: Yes, we do the surveys where we are asked to do them, and we try to figure out where we can get to on some kind of a cost basis. But whether a road should be built from which side of the range, and in which direction it goes, is a matter for the Department of Northern Affairs to take care of.

Mr. NIELSEN: I simply ask the question because of the criticism that has arisen in the Yukon by certain individuals and groups, that a greater mineral potential would have been assessed on a route run through the Mayo-Keno hill area.

The CHAIRMAN: Would you like to have a statement from the minister?

Mr. NIELSEN: Fine.

Mr. HAMILTON (*Qu'Appelle*): I want to make a statement on this, because you have touched on a very important part of this road building policy. But before I do, I think that question about the choice of routes, in so far as mineral potential of the area is concerned, should be answered by Mr. Cunningham.

Mr. F. J. G. CUNNINGHAM (*Assistant Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, there has been in existence for several years an inter-departmental committee of officials, which is chaired by myself for Northern Affairs, and which contains representatives of Public

Works and Mines and Technical Surveys and, in appropriate instances, other departments having responsibilities in connection with resources, such as fisheries, agriculture and forestry, which is from our own department.

When it comes to looking at a general area for the purpose of routing a development road in a territory, this committee meets. In the case of the road in question, the point which Mr. Nielsen is asking about was the subject of consideration. Attention was given by this committee to the mineral potential of the road from Mayo north, as well as the mineral potential of the road from Flat Creek north. That was one consideration. Another consideration was that one of the primary purposes of this road was to service the oil areas of the Peel Plateau and Eagle Plain. It was the feeling that the oil potential was perhaps a more dominant factor than the mineral potential of the area from Mayo north through Elsa and up the Wind River.

The third factor which had to be considered was the one Mr. Williams has spoken of in some detail, and that is the comparative cost factor. The ultimate decision to go through Flat Creek rather than Elsa was a decision based on a composite approach to all these three factors. It did not refer solely to the mineral potential, although that was one of the three basic factors involved in making this decision.

There is one other thing I might mention that was considered by the committee: that is, the relative world demand for the minerals which would have been made more available if the route through Elsa camp had been followed. As I think the members of the committee know, the present demand for those minerals is not great enough to lead one to think that even a paved highway through there would lead to a producing mine in the Wind river area at this time.

Mr. NIELSEN: Would there not have been one other factor considered in the final decision—one that Mr. Williams has mentioned—that being the inability of the highway, if it were constructed north from Mayo to the Wind river, crossing from the Wind into the oil fields?

Mr. CUNNINGHAM: Yes, that would be a fourth factor. Really, I was considering that factor as being a portion of the cost factor that I mentioned.

Mr. NIELSEN: How about the ability of going through the Wind River area, east through the Richardsons; is that also a prohibitive factor?

Mr. CUNNINGHAM: That was not within our terms of reference, because our primary concern was to go to Eagle Plain and Peel Plateau, with a potential of going on to Fort McPherson.

Mr. WILLIAMS: We had the same problem of getting across the Peel in either case. On the east side of the Richardsons it is just a mess of silt 75 feet deep—It is just jelly.

Mr. HARDIE: Would Mr. Williams know the comparable transportation rates for shipping equipment from Whitehorse through to Dawson; from Vancouver, because some of these contractors are going from the city of Vancouver? Does Mr. Williams know the cost of shipping freight from Vancouver to the start of this road—the Flat Creek road—as compared with shipping equipment from Edmonton to McPherson by rail and water?

Mr. WILLIAMS: No, I do not know that. I do not have that information.

Mr. HARDIE: Have you any idea of the comparable rental rates per hour of equipment working for you in the Northwest Territories, as compared with rental rates on the basis of this contract?

Mr. WILLIAMS: I should, but I do not. I am sorry.

Mr. HARDIE: I wonder if you could get that for us?

Mr. WILLIAMS: I can get some of those in the Northwest Territories.

Mr. HARDIE: What would be the difference of the road through Flat Creek into the Peel Plateau as compared from McPherson into the Peel Plateau?

Mr. WILLIAMS: It would be roughly about 200 miles, I would say, from Flat Creek in; as against, perhaps—here again, depending upon the location of the route you could get through on—250 miles.

Mr. HARDIE: Two hundred and fifty miles, the other way?

Mr. NIELSEN: May I ask one question here, Mr. Chairman? Mr. Williams, it is the opinion of the Yukon contractors association, expressed in a meeting which I attended recently, that the remainder of the contract for the construction of this road be made on a unit price basis. What is the intention of the department in this regard?

Mr. WILLIAMS: We have not made up our minds on it.

Mr. NIELSEN: Would you take note of that representation from the Yukon contractors association, please?

Mr. HAMILTON (*Qu'Appelle*): This is a point where I think I should like to make a statement, because I think it is recognized that Mr. Williams has been giving us some very valuable evidence here and has been pointing out in some detail the steps by which the decisions have been made in conjunction with this Flat Creek-Eagle Plain road.

The way I would like to present it is this, that when we put forward the policy of developing roads in the territories, these roads were designed for a certain purpose, to open up virgin areas quickly for exploration. All we thought of the road was simply as a device to get heavy equipment in over most of the year. I made it very clear in public, in the house, and to my own staff, that if these roads cost too much, we could not go forward with this program as we designed it. Therefore, a good deal of time was spent, in the early stages, trying to calculate the advantages of the different systems of handling the tendering of these roads.

In relation to the road under discussion now—that is, the Flat Creek-Eagle Plain road—the decision to go ahead this year on a rental basis and then, sometime at the end of this fall, when more information was ready, to consider what we are going to do for the next two years, was made, as I said, as a result of a great deal of consideration. We asked for advise, not only from the Department of Public Works, but also from the army engineers in the area. We asked for advice from contractors in the area—at least, I should say, people who had built roads in this area north of Mayo-Dawson City. We asked several of the contractors who had done a great deal of the work in the territories to submit to us various programs of how they thought they could meet my request to provide a large mileage road that would satisfy standards, and get away from these high cost factors which they had to bid into their contracts.

There was the question of cost and time which was largely considered by us. One of the things that had a great deal to do with our decision to use this technique of going into rental this year was to give contractors the opportunity of coming out and watching the work, so they could have a better chance of bidding a realistic price next year. We had experience in this regard at the airport in the new town of Inuvik. There we put the strip out to tender, and the lowest tender was $10 million. In fact, the only tender was $10 million. This struck the department as exorbitant, so what they did then was to negotiate with two or three firms to do this on a target price basis, and they gave them an incentive. For every dollar they did the job for less than this target, they would receive 30 per cent.

I cannot quote you the precise figures, but I can say that the original strip of 4,000 feet was built for a lot less than $5 million; and since then they have extended it and it has moved up to 6,000 feet, and I understand the cost now is still about $5½ million. Therefore, once the contractor is relieved of some

of these risk factors and comes in on some sort of contract where he knows he is not going to lose everything because of the unknown, he can get his price down considerably.

Therefore, the taxpayer, by that device, was saved a sum of—on the original basis of 4,000 feet of runway—well over $5 million. We are hoping that the same experience will prove true in connection with this Flat Creek-Eagle Plain road, the first 250 miles of the road through to McPherson. If they get up there and get experience, they will bid really tight next year, and we want to get as many contractors to bid as possible, because this is Dominion of Canada money and we want to save as much as possible. In this way, contractors will get experience in this matter. If you examine the early prices of roads in the Mackenzie river basin, because of the uncertain factors with which the contractor had to deal, the prices paid were very high. Now the road has gone around Slave lake and is heading towards Rae and Yellowknife, and the prices are not much different from those in northern Alberta. In other words, we are getting competitive prices on this road in the Mackenzie valley because of the confidence of contractors in knowing the situation, and therefore they can make realistic bids.

We have no way of knowing whether this will happen in the Flat Creek-Eagle Plain-McPherson area; but we took this device of starting on a rental basis this year to try and give every opportunity to the contractors to make a really tight bid if we decide to open up for tender next year.

There is one thing I should like to say in conclusion. I think you recognize, from the calibre of the evidence given by Mr. Williams, that this road building program is in fairly competent hands, and as minister, I know what I want from a policy point of view. I have to rely—and I do rely—implicitly on the advice of the experts, and in this case you have heard the evidence of the experts as to why we have gone ahead this way on this road.

Mr. NIELSEN: Mr. Chairman, may I ask Mr. Williams if he has been over the road himself?

Mr. WILLIAMS: Yes.

Nr. NIELSEN: Both of them?

Mr. WILLIAMS: Not over the Wind river. I have not been over the Wind river but I have gone in on the north end, in the area where they could not get through—along that part of the area.

The CHAIRMAN: I think the committee would be interested in knowing, Mr. Williams, your ideas of the engineering costs—of surveying, and all that sort of thing—necessary for data in order to ask for bids. In areas such as these, would the engineering costs be a serious cost factor, and would they run, say, $10,000 or $15,000 a mile?

Mr. WILLIAMS: They could, quite easily. I think this is the point Mr. Hardie was getting at as well. It is not so much the difficulty in the pre-engineering, but you have to measure what is there to make the unit cost contract possible. In the unit price contract you have to measure every particular of material and classify it. That means you have to go along and take not only the centre line profile and all the elevations, but you must cross-section every 100 or 25 feet on the ground, measure the ground before you start and remeasure after you have finished. This is where a big sum of money comes in. This cost per mile—regardless of whether it is 18 feet, 24 feet or 34 feet roads—this is going to run up in that country anywhere between $6,000 and $10,000 a mile.

Mr. HAMILTON (*Qu'Appelle*): I think I could add one word on that. The government of British Columbia is working on roads-to-resources in that province. I saw their figures for pre-surveying one section of road around

Dease lake; and if my memory serves me correctly the cost per mile came to over $20,000 on the preliminary survey. We refused to pay that amount and we are not paying for that survey but just the road.

British Columbia is now using the principle we are using here. I think the province of Saskatchewan is going to use the same system; and I suppose Manitoba will as well, even though I have not been in such close contact with them.

Mr. WILLIAMS: It depends a bit on the accessibility of the terrain and the competitive climate. If there is really tough competitive bidding and the work is not as tough as some people might think, you can save some of your engineering costs.

Mr. COATES: Mr. Chairman, I wonder if Mr. Williams would have had any experience in the past in the building of air strips?

Mr. WILLIAMS: No, I have not.

Mr. COATES: You have no knowledge?

Mr. WILLIAMS: No.

Mr. COATES: Further in this regard, would it be possible to have either the technical departmental officials obtain comparable information with the Department of Transport, or have someone from the Department of Transport provide information for the committee as to the cost of the construction of a 6,000-foot air strip in this part of Canada, in order that we might be in a better position to compare it with the cost of the building of the air strip in Inuvik, and thereby get better information as to whether the $5½ million spent in that air strip is actually an economy resulting from the first bid, or whether this amount is still quite exorbitant?

The CHAIRMAN: Mr. Coates, I think Mr. Robertson can answer that.

Mr. ROBERTSON: I was just going to say, in view of the interest that was evinced the other day in the air strip, I phoned the deputy minister of Transport to see whether they have someone they could send here, if the committee wanted to have someone from Transport, who knows this sort of business,—which we do not,—and he said he would be glad to provide a witness if the committee wants one.

Mr. HARDIE: If that is the case, in order to expedite the length of time which we have this witness before us, I wonder if we could also get the cost of a 9,000-foot air strip at Frobisher bay?

Mr. ROBERTSON: I suppose this could be done. That was mainly done by the United States air force.

Mr. HARDIE: The Department of Transport did not come into this at all?

Mr. ROBERTSON: They do now, but they did not at the time of construction. It was built during the war as part of the crimson route.

Mr. HARDIE: The $25 million the minister was talking about was not this government's expenditure but the American government's?

Mr. HAMILTON (*Qu'Appelle*): The expenditure I mentioned was the addition we would be spending money on.

Mr. HARDIE: $25 million?

Mr. HAMILTON (*Qu'Appelle*): No, not as far as I know. I think it was $19 million on the airport.

Mr. ROBERTSON: The initial construction was done by the United States air force during the war, and since that time it has been added to substantially; but a large part of the cost is not a Canadian government cost and probably does not appear in any of our accounts.

Mr. HARDIE: I wonder if we could get the figure for the 3,000-foot extension?

Mr. ROBERTSON: I think the best thing we can do is to get somebody from Transport.

The CHAIRMAN: Is it agreed then, that we should have someone from Transport to give this information?

Mr. NIELSEN: I have one more suggestion on this Eagle Plain road. Has the minister received any indication of any increased expenditures likely to be made as a result of the construction of this road into the Eagle Plain area?

Mr. HAMILTON (*Qu'Appelle*): It is not too easy to answer, but I can put it this way, I have received a lot of complaints from the company that went in first, and they came in and complained about this money, and said they should have the help of the other companies. The companies who wanted to go into the Mackenzie valley would like to see us speed up our road operations in this area, which seems to indicate they feel these roads are helpful to them.

Mr. NIELSEN: Have you received any indication of building projects to be implemented this year or next year, other than those undertaken by the company now in the area?

Mr. HAMILTON (*Qu'Appelle*): Do you mean Peel Plateau?

Mr. NIELSEN: Yes, and Eagle Plain?

Mr. HAMILTON (*Qu'Appelle*): Yes, the hottest area now is in the upper Mackenzie, in the area south of Fort Simpson, towards Fort Liard.

Mr. NIELSEN: And in the Eagle Plain area where this road is going?

Mr. HAMILTON (*Qu'Appelle*): Interest remains very high there.

Mr. NIELSEN: Has the road made any difference?

Mr. HAMILTON (*Qu'Appelle*): The only difference I know is that when the road was announced as being considered and being under discussion, there was a rush for oil permits in the area.

The CHAIRMAN: We will probably be able to take the witness from the Department of Transport this afternoon.

Mr. HARDIE: I have some further questions for Mr. Williams. I was questioning Mr. Williams on this particular road, and I asked first the distance between Flat Creek and Peel Plateau, and then from Fort McPherson to Peel Plateau, and he gave me figures—200 from Flat Creek, and 250, approximately, from Fort McPherson.

Mr. WILLIAMS: This is approximate.

Mr. HARDIE: What type of road-building country lies between Flat Creek and the Peel Plateau? I am speaking of the costs more, as compared to the road from Flat Creek to Fort McPherson?

Mr. WILLIAMS: Do you mean whether it is tougher from McPherson into Peel Plateau?

Mr. HARDIE: Whether the cost would be greater from McPherson into Peel Plateau or from the other side, from Flat Creek into Peel?

Mr. WILLIAMS: I will be able to answer you an awful lot better in a couple of years from now, I hope. But, actually, the south end, from Flat Creek up for about 35 miles, we do not think is going to be too tough—something like the Mayo road.

Then we start getting into the places where we have to go from Klondike over into the Blackstone, and this is pretty miserable looking country, all broken up and fractured.

Mr. HARDIE: It looks like you might have a lot of rock in that area?

Mr. WILLIAMS: Yes, and there are some areas in there where there is a sort of disintegrated sandstone, and it is going to be a little easier going because we will be able to use it for fill. That carries on pretty well up to the pass through the Richardson mountains.

Mr. HARDIE: How many miles would that be?

Mr. WILLIAMS: —that is really through the Eagle Plain, and where you are cutting across, over the McPherson.

From the McPherson end, as you know, you start out in a mess. As you proceed you have to cut up through, and from all the information we have on it now—from the drilling we had from the oil companies, as well as our own surveys and examination, and Mines and Technical Surveys have from their geological surveys—what in many areas it is going to be nothing but silt. There you can see gullies and ravines, and every bit of snow that melts cuts its way through its own channel. I am not quite sure how we are going to use it, but we are going to excavate frozen silt to put on top, and it is going to be pretty tough country.

Mr. HARDIE: Your material on the other end is fairly handy. What would be the average haul you would have to haul the material?

Mr. WILLIAMS: We are going to build pretty well all the way through from Flat Creek, going north, basing the design on using side borrow, except where we hit rocks or narrow gorges, there we will haul or bench in. But if it is too slow taking out the permafrost and too wet—and this will depend on what kind of season they get into or, how the weather is the previous season—if it is too wet we will go into some of the gravel benches along the river, and take those out for fill.

This again will balance off, because it may be a little cheaper for the contractor to haul a little further from the gravel bench than to take a side borrow. This will be flexible, depending on the season we are in.

Mr. HARDIE: How many miles do you expect to build this year?

Mr. WILLIAMS: We are going to shoot for 35 miles, and if we get 50 we will be very happy.

Mr. HARDIE: That is complete?

Mr. WILLIAMS: No, it is never complete the first year.

Mr. HARDIE: How long would it take you to build the first 35 miles up to standard?

Mr. WILLIAMS: If we can get it graded in this year, next year we would probably have to go back and put in culverts in places where we did not anticipate they would be required. We are hoping to get enough pit-run gravel to put on top; and you have to go in and patch it up again with that. There is also the odd spot where permafrost fill is going to slide out on us.

Mr. HARDIE: That is due to the shortness of the season?

Mr. WILLIAMS: Yes.

Mr. HARDIE: In how many years would it be complete, the 35 miles, would you estimate?

Mr. WILLIAMS: I could not even hazard a guess at this stage.

Mr. HARDIE: Would it be five, ten, fifteen years? What would be the closest?

Mr. HAMILTON (*Qu'Appelle*): I think this is my baby here.

Mr. HARDIE: You are not building the road?

Mr. HAMILTON (*Qu'Appelle*): No, but I have a policy decision to make here, and the mileages on the chart, Flat Creek to Eagle Plain is 200; and from Eagle Plain over to Fort McPherson is 150.

I want to make it very clear that the decision to go through to Fort McPherson is not made yet, but it is simply a target, and I want to make it very clear to the committee we are moving up to Eagle Plain because we are fairly certain where we are going that far. But whether we go around to the south or go farther north, to avoid that bad area around Fort McPherson, is a decision I can only make when I see all the figures before me and the amount of money we have. It is pure policy. I have always made it very clear in several statements I have made that Fort McPherson is simply a target in that area. I know we are going to Eagle Plain, and that is the first step.

What is your expected progress in the next few years, after the first year of experience?

Mr. WILLIAMS: I would hate to give an estimate of what it is. As I say, we are shooting for 35 miles this year. We will have brushed up to about 45 miles this summer. We hope to get at least 35 miles built this season; and if we have a really good season and everybody works hard at it we might get as much as 50 miles done. But, anyway I would like to get about 35 miles in.

Depending on what is provided for the next two years we will decide on what form of contract we have and how much operation we are going to put in.

Mr. HARDIE: You said this stretch of road is the easiest part?

Mr. WILLIAMS: Yes.

Mr. HARDIE: If you get 50 miles of this easy part in, how would you expect to get 50 miles in if you start to hit the moutain passes and silt in the McPherson area?

Mr. WILLIAMS: That depends on how fast the road is required, because if we want to go 50 miles in the tougher going, it means a bigger outfit.

Mr. NIELSEN: Is it your intention to call for further trucking contracts this winter?

Mr. WILLIAMS: I could not answer that.

Mr. NIELSEN: Could the minister answer that question?

Mr. HAMILTON (*Qu'Appelle*): We have not decided that yet. We would have to take a look at what the experience is. I am very much interested in the point the hon. member for Mackenzie has mentioned, namely with regard to McPherson. There is nothing wrong, if we decide to speed it up, to come at it from both ends. The method of getting material in by water down the Mackenzie will be made much easier with transportation being improved up to the Great Slave lake; but before we can make these decisions—and all these various routes are under consideration now—we need to know some more information, both on survey and the type of work we will have to do. If these roads are going to cost too much through some particular area, we will have to move around another area.

Mr. HARDIE: The minister has taken my suggestion of last year before this committee, and is considering starting the road from McPherson into the Peel.

Mr. HAMILTON (*Qu'Appelle*): I did not say "McPherson," but some place there.

Mr. HARDIE: Along the Mackenzie?

Mr. HAMILTON (*Qu'Appelle*): Yes, we have had that in mind all the time.

Mr. HARDIE: The estimate given last year in committee for the total of the road—that is, to McPherson, or some spot along the Mackenzie—was

$5 million to $8 million. I wonder if Mr. Williams expects they can still build a 24-foot road, the grade of which you are building this year, from Flat Creek to McPherson for $5 million to $8 million?

Mr. HAMILTON (*Qu'Appelle*): I think you are asking the impossible from Mr. Williams. I would say myself now that I could raise it to well over ten million.

Mr. NIELSEN: I have here photostatic copies of the individual contracts and the table of equipment rental rates on those roads. They appear to me to present some difficulty in the way of reproduction. I would like to suggest, if for no other reason than to assist those who have to compile these reports, that these statements and tables be made available for inspection by members of the committee, and to suggest that with the concurrence of the committee they be not reproduced, because it would be a tremendous task to try to put all these in the record.

The CHAIRMAN: I think that is a good idea. Does the committee agree?

Mr. NIELSEN: Mr. Hardie was one of those who wanted them included in the record, so I waul like him to second my motion.

Mr. HARDIE: Very well, I second the motion.

The CHAIRMAN: Is that satisfactory, Mr. Hardie?

Agreed.

Mr. COATES: May I ask the minister a question about Inuvik?

The CHAIRMAN: Are you through with roads?

Mr. HARDIE: That particular road.

The CHAIRMAN: Go on. Are there any other questions on roads?

Mr. HARDIE: Mr. Payne asked a policy question the other day and it was decided to wait until the minister returned to give us a statement of policy, in regard to compensation.

Mr. COATES: This question is a general one.

The CHAIRMAN: How would it be if we took up the question regarding that department after we have finished with roads?

Mr. HARDIE: We were on Inuvik for two days. So let us clean it up.

The CHAIRMAN: You have Mr. Williams here from the department and you are going to have a witness from the Deparement of Transport to give comparative costs of runways.

Mr. HARDIE: There have been many questions answered.

The CHAIRMAN: I suggest we finish the road question, and then pick up Inuvik. Let us start on roads.

Mr. COATES: There will be bridges included in that, will there not?

The CHAIRMAN: Bridges and roads. Go ahead.

Mr. COATES: I would like to ask some questions carrying on further than the answers already given and having regard to the contract awarded to John A. MacIsaac at Whitehorse for $197,496.60, for the Mayo-Whitehorse bridge, for its reconstruction rather than the original construction of the bridge.

Mr. ROBERTSON: This was for a replacement bridge at Mayo on the Whitehorse to Mayo road. It was listed as question number eleven.

Mr. COATES: Yes.

Mr. ROBERTSON: Yes, that is the bridge at Mayo. It is a new bridge built at Mayo on the road from Mayo to Whitehorse to Keno. It is a completely new bridge.

Mr. COATES: On that aspect, is it usual for the Department of Public Works to accept the lowest bid when there are only two tenders submitted?

Mr. WILLIAMS: Yes, if there are only two, and there are published tenders, that is all we can do.

Mr. COATES: Can you give me an idea of the size of the bridge in question here?

Mr. WILLIAMS: I cannot, but I can get it for you if you wish. Would it be all right if I gave you the dimensions of it, and if I provided them for the committee in the morning; or would you prefer that I call for them now?

Mr. COATES: It does not make any difference to me as long as I get the information. Can you tell me the type of material, whether concrete or steel?

Mr. WILLIAMS: Steel truss.

Mr. COATES: There is another bridge at Crooked creek. I note a comment to the department, that the original tender was for $233,000 and some odd dollars, and you were able to effect the actual work for $171,437, as a result of negotiations, by doing certain things yourselves. I wonder if this type of thing is an indication of the bids which you receive from contractors in the north?

Mr. WILLIAMS: No; actually on that one, one of the points was that it was based on a rock-filled crib. We established, after we started in to drive the piles, that it would be cheaper to put in a pile foundation than to go ahead with a rock-filled crib. So we negotiated for a new type of foundation.

Mr. DOUCETT: It was a unit price bridge?

Mr. WILLIAMS: Yes, and we used more of the piling units; and I think we had to ask for quotations on one or two items.

Mr. DOUCETT: So you cut down your number of units and therefore you cut down the price?

Mr. WILLIAMS: That is right.

Mr. COATES: Why would it be, when you discovered this, that you did not call for tenders?

Mr. WILLIAMS: We had called for tenders by public tender, so we had the man with the tender actually on the job. So we dealt with the lowest tenderer. We had awarded the contract on that basis then found that we could make a saving in design, and we did so.

Mr. COATES: You agreed to the lowest tender and later on you discovered that?

Mr. WILLIAMS: Yes.

Mr. DOUCETT: He completed the bridge at the unit price, but probably with less units?

Mr. WILLIAMS: I would like to say that was exactly it, but there was a change in design. We had to put in some additional items.

Mr. DOUCETT: But the other items would be done at the unit price?

Mr. WILLIAMS: That is right.

Mr. AIKEN: There was an earlier instance where there were three bids on a rental basis for the same amount. I believe it was rental for a ripper. Were there many instances in your recollection where bids were identical or very close?

Mr. WILLIAMS: No, this is a piece of equipment which has no motive power. It is just a tearing unit, and they cost so much. These fellows—I do not think there was any collusion—just arrived at the same depreciation rate for the unit.

Mr. AIKEN: This was an isolated instance?

Mr. WILLIAMS: That is right.

Mr. NIELSEN: I wonder if Mr. Williams would have regard to the representations from the Yukon contractors association based on their experience with a short construction season and so on? The Pelly and Stewart bridges have been called for tenders, and the tenders closed, I believe, at the end of last April. The contract, however, has not yet been awarded and already they are within two months of the construction season; and because of the delay in awarding the contract I wonder (*a*) if there is any reason for such a long delay; and (*b*) if not, whether the procedure could be speeded up particularly in that part of the country where it is so vital.

Mr. WILLIAMS: We receive the tenders and make our submission to treasury board, and wait for their decision.

Mr. HAMILTON (*Qu'Appelle*): Treasury board has dealt with these two projects and has agreed to give two bridges to the lowest tender, but there was a question about renegotiation of one part of the supplies, amounting to about eight or nine per cent of the total.

Mr. NIELSEN: Are you at liberty to expand on that, because I have received a number of representations from the Yukon inquiring about this delay?

Mr. HAMILTON (*Qu'Appelle*): I would have to inquire back to treasury board as to the status. I think the directive of treasury board was that the lowest tenderer was to be accepted—I do not remember his name—but there was a question of the supply of a certain part of the equipment and they put in alternative tenders for this equipment; and they had to be straightened out by treasury board.

Mr. NIELSEN: Is it not close to a solution now?

Mr. HAMILTON (*Qu'Appelle*): The man can go ahead with the bridge. There is nothing to hold up the construction of the bridge. This was to supply a certain part of it, and it was a different concern.

Mr. NIELSEN: My understanding is that the contract has not been awarded, but if it is possible for the contractor to get ahead with the construction, I am sure he will be very happy to learn of it.

Mr. HAMILTON (*Qu'Appelle*): I will check into this because I was at Treasury Board when this went through, and saw what happened to it. These bridges are being built this year and next year.

Mr. COATES: Could Mr. Williams give the unit prices of those bridges?

Mr. WILLIAMS: At Mayo?

Mr. COATES: Yes.

Mr. WILLIAMS: It is Mayo you refer to, and you want the dimensions of the span and unit prices?

Mr. COATES: That is right.

The CHAIRMAN: Gentlemen, we have with us Mr. Lane, who is the engineer in charge of airfield construction in the Department of Transport. Mr. Lane, would you take a chair.

Mr. COATES: Mr. Lane, this is a general question. If possible, I would like you to provide the committee with information on costs of a comparable airstrip in any part of any one of the provinces of Canada, comparable in size and width to the airstrip at Inuvik.

The CHAIRMAN: The same type of construction?

Mr. COATES: Yes; gravel. This does not have to be down to the last cent. I would think, however, that you have built many airstrips of a similar size.

The CHAIRMAN: You might also ask about the three thousand additional feet at Frobisher.

Mr. HARDIE: Let us deal with Inuvik first.

Mr. D. A. LANE (*Assistant Chief Engineer, Airport Development Division, Department of Transport*): This is a general question. It will have to have a general answer. The conditions off Frobisher are not comparable to the conditions at Inuvik, nor are they comparable to the conditions of any other site. Nothing is the same—the river transport and the loading and unloading at the waterways. There are substantial differences. I do not know whether you could ever get a comparable price. However, just to bandy around figures you could say that the 3,000 foot extension, or near 3,000 foot extension at Frobisher bay, is in the order of $5½ million. This is on a unit price basis.

To arrive at a price is more difficult at Inuvik. In the case of Frobisher you must consider that you have a good harbour at Montreal to take off from and have sea transportation all the way. This is just one factor, the transportation factor, which you do not have equivalent at the Inuvik site. Another one is that your materials land directly at Frobisher and at Inuvik you have 8½ miles to take them from the town at Inuvik to the airport.

As far as blasting of rock is concerned, the type of rock may be a little harder at Frobisher than at Inuvik. It is dolomite at Inuvik and granite at Frobisher. The bulk rock price at Inuvik is about $2.28 and a little bit more at Frobisher.

Mr. COATES: Is it $2.28 a yard?

Mr. LANE: No, a ton. At Frobisher it will amount to something like $3. This will give you an idea of price. Another example for a runway of similar length would be the one at Norman Wells where we went to tender on a partially prepared strip. We went to tender and came up with a price in the order of $5 million. We had two tenders. We received one for just under $5 million and another over $5 million, although there were some differences in the contract to that at Inuvik. Generally, however, this was the cost of that airstrip.

Mr. COATES: What would it cost to build an airstrip of similar length in this part of the country?

Mr. LANE: When you say this part of the country, where do you mean?

Mr. COATES: I do not care where.

Mr. HARDIE: It will change all over. It depends on the material.

Mr. LANE: You mean the same size. I would say roughly in the order of $1 million to $1½ million—say $750,000 to $1¼ million average.

Mr. COATES: The airstrip at Inuvik then would cost five or seven times as much as a similar type of airstrip?

Mr. LANE: Let us say four times as much.

Mr. HARDIE: And Frobisher about the same.

Mr. LANE: Actually more. We are doing a little more then extending the strip there.

Mr. COATES: What is the depth of the field?

Mr. LANE: At Inuvik?

Mr. COATES: Yes.

Mr. LANE: The minimum depth is eight feet. This is arrived at by means of analogue computing. We went down to the Forests Prospects laboratory of the U.S.E.D. in the United States at Boston and, in cooperation with the United States corps of engineers, and based upon their and our experience, and any other experience we could lay our hands on, including that of the Russians, we finally arrived at a minimum depth of eight feet. To substantiate our design we installed thermal couples in this area at four different locations with a control thermal couple out in the moss itself. We have taken readings for two years and found the 32°F isotherm just at the base of the rock or within six inches of the organic material underlying the rock.

Mr. COATES: But you consider it necessary to go down eight feet?

Mr. LANE: I am certain of it. We have all the data above to prove this. We did not know this when we decided to put it down eight feet, but we do now. If we wanted to hard-surface this in asphalt, we would have to put additional fill on top of it.

Mr. COATES: Have you built other airstrips in the vicinity of Inuvik. Are there any other airstrips? Is there one at Aklavik?

Mr. LANE: There was one attempted there at one time, but not by our construction branch.

Mr. HARDIE: Could the strip at the old townsite compare with the strip at the new townsite as far as service to aircraft is concerned?

Mr. LANE: If we built it?

Mr. HARDIE: No. The present strip at the old site of Aklavik. How does it compare with the strip at Inuvik?

Mr. LANE: There is no strip at old Aklavik.

Mr. HAMILTON (*Qu'Appelle*): There was an area cleared off.

Mr. HARDIE: Yes.

Mr. ROBERTSON: If you are interested in some of the closest comparable strips these would be some of the DEW line strips. I do not know whether or not Mr. Lane has any information on the depths of those.

Mr. LANE: I think you have to admit that most of the DEW line strips were chosen on the basis of an airport itself and they were normally on the coast and on gravel sites to begin with. The Inuvik site was not a gravel site to begin with. By moving the airport to the Dolomite lake area we had rock available with which to build the airport. Otherwise, we would have had to haul the rock from the Dolomite quarry or into the Reindeer depot area, or wherever you chose to build an airport.

Mr. COATES: I believe the Inuvik site was chosen because the material in question was close enough at hand that an airstrip could be built.

Mr. ROBERTSON: That was one of the reasons. It was wanted to be in the delta area—that would be outside the delta proper, one side or the other. Another of the essential factors was what we called the social factor. We wanted it inside the tree line but not far enough inside the tree line so that it would not be usable for an Arctic or coastal administrative centre. There were a number of factors. There is also the matter of contour to get sewage by gravity flow and things of that kind.

Mr. COATES: But an airstrip was an absolute necessity?

Mr. ROBERTSON: Yes. Old Aklavik was completely cut off for six weeks of freeze-up and six weeks at break-up—four to six weeks— because of the lack of anything to land on. You cannot land on ice when it is floating around.

Mr. COATES: Have you any idea how many tons of rock are required?

Mr. LANE: One million ton and some odd. That is of six-inch crushed with about 115,000 ton two-inch crushed. This is for a nine-inch layer on the top.

Mr. HARDIE: How would that compare with the comparable airports about which Mr. Coates asked?

Mr. LANE: Very closely with Frobisher.

Mr. HARDIE: But say in this area down here?

Mr. LANE: There would be no comparison. Taking the geometric factor alone, you have to provide the entire width of 300 feet, eight feet deep. This cuts down the desirable shoulder width. Our normal width of a runway—graded area—would be 500 feet. We have cut that down to 300 as a cost saving. This is an area 300 feet wide by eight feet deep. In a comparable runway such as in the Toronto area you would merely put the hard-surface area, which would be 200 feet wide and probably three feet deep. It would depend on the type of aircraft you would handle.

Mr. COATES: Would the 300 feet at Inuvik all be built up in the same nature, or would the 150 feet in the centre be different?

Mr. LANE: Apart from the grading off on the side slope, it is, to all intents and purposes, eight feet deep. You would get a better idea of cost if you would consider the tonnage price for rock at Inuvik which is now roughly $2.28 and at Toronto it would be about $2 a ton. This gives some comparison.

The CHAIRMAN: Are there any other questions, gentlemen? Are you through with item 275?

Mr. HARDIE: I wonder if the minister would answer this question. I do not think I should ask the question of the witness. In view of the fact that recently an aircraft flew nonstop from London to Seattle, does the minister contemplate the same usage of Frobisher as a refueling base, as he did a year ago?

Mr. HAMILTON (*Qu'Appelle*): The only information I have to go on is the statements of policy of these companies, that they expect to be using Frobisher as a fuelling stop, a stop-over for passengers, on the way to the west coast.

Mr. HARDIE: For how long?

Mr. HAMILTON (*Qu'Appelle*): There has been no definite time mentioned. I suppose the traditional way of saying it is, for the foreseeable future they have asked for this type of facility at Frobisher.

Mr. HARDIE: Does not the minister think, in view of the great improvements every day in jet aircraft, that aircraft in the future will be flying non-stop—as was done the other day? Is not the trend to longer distances, without refueling?

Mr. HAMILTON (*Qu'Appelle*): I do not think there is any question that aircraft are improving everyday; but we do not stop building air fields in Canada just because we think that some day we are going to use all helicopters, and things such as that. You still have to provide the facilities for the foreseeable future.

Mr. HARDIE: Are these expenditures based on just commercial landings at Frobisher, or is it considered that SAC—

Mr. HAMILTON (*Qu'Appelle*): Both items have been considered. A large bulk of the cost is absorbed by SAC.

Mr. HARDIE: Because they will be using it more?

Mr. HAMILTON (*Qu'Appelle*): In the early stages.

The CHAIRMAN: Mr. Aiken, you were going to ask the minister for a statement of policy regarding the move from Aklavik.

Mr. COATES: Mr. Chairman, may I ask Mr. Lane another question?

The CHAIRMAN: Certainly.

Mr. COATES: Mr. Lane, you have said that you went down a depth of 8 feet?

Mr. LANE: No, we did not go down any depth.

Mr. COATES: You went up 8 feet.

Mr. LANE: That is right. Permafrost in this particular area has a temperature of −5°C, below freezing, and in this type of area you would use the passive method of construction. If the temperature were higher than that, you could excavate and put rock in; but when the temperatures are this low, you do not attempt this type of construction, you go along with the existing terrain.

Mr. HARDIE: You try to insulate the permafrost?

Mr. LANE: Yes, that is correct; that is what we have done. These measurements I gave you of isotherms bear this out.

Mr. COATES: You went up 8 feet, and your strip is 300 feet wide and 6,000 feet long; is that correct?

Mr. LANE: This is correct.

Mr. ROBERTSON: If I might say so, Mr. Coates, this is a normal construction technique in permafrost areas. The basic thing is to leave the surface undisturbed, and you put whatever you are going to put on top of it. The roads are built that way. For a small building, it may be put on a gravel pad or be put up on piles, but you do not go down into it.

Mr. NIELSEN: I think those who are not familiar with permafrost and its actions might be interested in an engineering explanation of why you have to go up.

Mr. LANE: I think that is pretty well explained, if you take the moisture content and the soil conditions found in the test holes here. It was found to be 180 per cent moisture; there was twice as much water in the soil as there was soil. What are you going to do with that when it thaws? There is nothing you can do with it, except pump it away, possibly. So there is nothing economical to do except the passive method of construction.

Mr. ROBERTSON: Apart from that, there is the fact that if you do try to get down in while the stuff is frozen, it is about the same as rock. What could be done, for instance, in the gravel pits in Inuvik, is simply to take up the area of gravel that has thawed and leave it for four or five days, or two weeks, and come back and take off the foot or so that has thawed since, then let it thaw again and come back and take off another foot. You cannot just dig into the stuff; it is like digging into rock but a little worse. You can put piles down by steam jetting. You can steam jet a small distance and put piles down, but you cannot do this all the way.

Mr. HARDIE: Also, you get the building well off the ground to be sure you do not thaw the permafrost, do you not?

Mr. ROBERTSON: That is correct.

Mr. HARDIE: Mr. Lane, you have to insulate the permafrost—that is the whole thing—so it does not go and wreck all the money you have spent in construction, whether it is road or whether it is buildings?

Mr. LANE: This is right. In this particular case it will just flow away on you when it thaws. In fact, we put some piles in one particular area,—the Department of Public Works did this for us—and it turned so wet that we immediately had to choose another area; we could not put the piles in there.

Mr. ROBERTSON: We have carried out some study of the Russian experience in this regard, and in some of the places where they have substantial buildings, such as their new mining areas, they have not been able to get any support for the melting permafrost, month after month, year after year, and get down to rock—For a large building, such as a smelter, or something like that—which cannot stand on piles—they have found no solution, except to get down to the rock. But permafrost is really the No. 1 construction problem.

Mr. HAMILTON (*Qu'Appelle*): If I may add here, Mr. Chairman. Any one who survives the thawing out of a basement month after month, with all the smoke, and fires that are burned, they will make him a hero of the Soviet Union.

Mr. AIKEN: Mr. Chairman, I think this all points to the fact that a good many members on the committee are working under a handicap in not understanding the conditions we are discussing, which opens up another matter; the fact that members of the committee ought to see, I believe, some of this territory so they can understand this. It may save a lot of time in the committee.

The CHAIRMAN: You are making a bid for a trip, I understand.

Mr. AIKEN: It is a good start.

The CHAIRMAN: I have been working on the minister for quite a while. Would you like now, Mr. Aiken, to ask the minister for a policy statement regarding the moving from the old village to the new, and compensation?

Mr. AIKEN: Yes, if the minister is now in a position to deal with that particular subject. We did have some discussion as to the theory of payment of compensation to the owners of property at the Aklavik site.

The question that was raised was whether these people should be paid at all. Now, after seeing the basis of compensation I felt, so far as I could see from what comparative rates there were, that the compensation rates probably were reasonable. But here is a case where nothing is being taken from the owners; they are free to stay or go as they like and yet they are paid compensation for something which they do not lose. I did point out the similarity in connection with the Department of Highways and various other agencies which feel quite free to change the course of a roadway and be under no obligation whatever to the owners on the old road. Mr. Robertson felt he would not like to delve into this question of policy and if you have had a chance to consider it, the committee would be interested in hearing your views.

Mr. HAMILTON (*Qu'Appelle*): Generally speaking, in our modern society if in the public interest a highway or public buildings are undertaken where

people have to be moved, we accept the fact that there is no compensation in the great majority of cases. Now, if you take a man's property on the side of a highway, you compensate him for the actual property; you do not reimburse him for the future value of the land you take away, but the going price per acre.

I have looked at the case of Inuvik. There was a commitment made to those people which I intend to honour. I grant you the commitment was made as a special case because people living in a remote area like this can be seriously harmed by a change of government policy. This is not the only special case; it is a matter of great concern all through the northern area, particularly where there has been a great deal of activity because of the defensive operations in those areas. It is a matter of great concern to the department at Whitehorse, for example, with the airport there being shifted from a defence airport to a Department of Transport airport. This was examined in the light of the harmful effects it would have on the community of Whitehorse; and because the number of personnel in each case was about the same and the amount of economic flow into the community from the airport was the same, we did not think it required any special action on our part.

But if you have another remote area where the only activity is the work of looking after government projects and where it was government policy to pull out, then we would move into those northern areas to see what we could do to find alternative work, or move them to a new area.

I grant you there are not many special cases like this. The St. Lawrence seaway was a type of special case where they moved whole towns and communities free of cost, in addition to paying for the land and buildings that were flooded out.

I think the decision I have made to honour this commitment and recognize it as a special case, and not create a precedent, would be the case.

Mr. AIKEN: That was our point, that it is a special case and not a change in the concept of awarding compensation. I do not think we would quarrel with this if the matter has been given consideration, and compensation allowed; but we were concerned with the possibility of other similar cases coming up where perhaps a claim for compensation would not be at all valid.

Mr. COATES: The thing that disturbs me in regard to the building of Inuvik is the fact that in the beginning it would appear that one of the main reasons for the building of this new town was to relocate the town of Aklavik, which now is not going to be relocated but is going to remain; and further, that here we are building a town on a grandiose scale and of a nature which we do not have in southern Canada, which appears to be mainly an educational and administrative centre, and we are paying compensation and building buildings at a cost that is far above the cost that would be expended in building anything comparable in these parts of Canada. I wonder, and I am disturbed about the fact, that maybe we could have built a town, if it was necessary to build a town, or an administrative and educational centre that would have done the job at a much lower cost.

Mr. HAMILTON (*Qu'Appelle*): Mr. Coates, I am not going to say too much on this, because the decision to make this move was made before my time.

It is true I have examined all the papers and looked at the reasons. I have looked at the items of cost and so on, and whenever a question has come up in

connection with Inuvik, I have asked my deputy to answer it because he is more familiar with the reasons and more familiar with the locale than I am. I think I will leave it at that.

Mr. HARDIE: After your examination of all the papers and the reasons, and so on, which you said a moment ago you had examined, do you feel that you would have taken the same decision or not? Yes or no?

Mr. HAMILTON (*Qu'Appelle*): That is a very good question. I will answer it this way.

Mr. HARDIE: I want to know, yes or not?

Mr. HAMILTON (*Qu'Appelle*): We are opening up Frobisher as an administrative centre, and I am trying to keep Frobisher Bay, so far as possible, on a self-liquidating basis.

Mr. HARDIE: I asked a direct question and I want an answer, yes or no?

Mr. NIELSEN: Obviously you are not going to get a yes or no answer.

Mr. HARDIE: It is obvious that he is not going to answer it.

Mr. HAMILTON (*Qu'Appelle*): I was very unhappy in looking at the figures on the cost of Inuvik; but as you well know, I have not been there, and on this matter my department is very proud of what they have done. They are very satisfied with the reasons and I am with them to this degree, that I have no better advice to accept.

Mr. HARDIE: After your examination of the compensation paid in the amount of 15 per cent for dislocation, would you have agreed to this 15 per cent; yes or no?

Mr. HAMILTON (*Qu'Appelle*): Yes, if the decision had been made to set up the new town of Inuvik, I think that under the circumstances I would have agreed with the decision to pay dislocation charges.

The CHAIRMAN: Well, gentlemen, we shall adjourn until eleven o'clock tomorrow morning.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 30

RECEIVED
JUN 10 1959
Library of Parliament

TUESDAY, JUNE 2, 1959

Estimates 1959-60 of the Department of
Northern Affairs and National Resources

WITNESSES:

The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources; Mr. R. G. Robertson, Deputy Minister; Mr. F. J. G. Cunningham, Assistant Deputy Minister; Mr. B. G. Sivertz, Director, Northern Administration Branch; Mr. A. B. Connelly, Chief, Engineering Division; Mr. J. V. Jacobson, Chief, Education Division; and Mr. G. B. Williams, Chief Engineer, Development Engineering Branch, Department of Public Works.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21342-1—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

CORRIGENDUM (*English Edition only*)

Minutes of Proceedings and Evidence No. 23, May 19, 1959.
Page 659, line 15: for "Mistassini" substitute "Mattagami".

MINUTES OF PROCEEDINGS

TUESDAY, June 2, 1959.
(36)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Cadieu, Coates, Doucett, Fleming (*Okanagan-Revelstoke*), Gundlock, Hardie, Korchinski, MacRae, Martel, McFarlane, McGregor, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Slogan, and Stearns—(17).

In attendance; of the Department of Northern Affairs and National Resources: Messrs. R. G. Robertson, Deputy Minister; F. J. G. Cunningham, Assistant Deputy Minister; B. G. Sivertz, Director, Northern Administration Branch; A. B. Connelly, Chief, Engineering Division; J. V. Jacobson, Chief, Education Division; G. M. Carty, Chief Administrative Officer; D. W. Bartlett, Executive Officer; M. A. Currie and G. H. Montsion, Administrative Officers; and E. R. Stimpson, Northern Administration Branch: *and of the Department of Public Works*: Mr. G. B. Williams, Chief Engineer, Development Engineering Branch.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Items 275 to 280 inclusive, relating to the Northern Administration Branch were called. Officials were questioned on matters concerning the said items, in particular on the establishment of a new townsite, Inuvik.

At 12.45 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m. this day or as soon thereafter as routine proceedings in the House are finished.

AFTERNOON SITTING

TUESDAY, June 2, 1959.
(37)

At 3.30 o'clock p.m. this day the Standing Committee on Mines, Forests and Waters resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, and continued on Items 275 to 280 relating to the Northern Administration Branch.

Members present: Messrs. Aiken, Doucett, Fleming (*Okanagan-Revelstoke*), Gundlock, Hardie, Korchinski, Martel, McFarlane, McGregor, Mitchell, Murphy, Simpson, Stearns and Wolliams—(14).

In attendance: The same as at the morning sitting with the exception of Mr. Jacobson and with addition of the Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources.

Mr. Martel recorded a revision to Issue No. 23 of the Proceedings of the Committee dated May 19, 1959, at page 659, line 15, the word "Mistassini" should read "Mattagami".

21342-1—1½

Mr. Aiken proposed that, when the Committee considers the estimates relating to the Canadian Government Travel Bureau on June 8th and 9th, the following persons representing the tourist industry be heard, namely, on Monday, June 8th, Mr. Roy Corbett, General Manager, Hotels Association of Canada; Mrs. Flora Montgomery, Managing Director, Canadian Restaurant Association; and Mr. Charles Smith, Secretary-Manager, Montreal Tourist and Convention Bureau: and on Tuesday, June 9th, Mr. James M. McAvity, President, and Mr. John W. Fisher, Executive Director, Canadian Tourist Association. The Committee concurred in Mr. Aiken's proposal.

Officials were further questioned on matters relating to the establishment of the new townsite, Inuvik.

At 4.29 o'clock p.m. the Committee adjourned until 9.30 o'clock a.m. on Thursday, June 4, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

TUESDAY, June 2, 1959.
11:00 a.m.

The CHAIRMAN: We have a quorum, gentlemen.

Mr. HARDIE: Is the minister not going to be here this morning?

The CHAIRMAN: Not this morning; there is a cabinet meeting this morning. He will be here this afternoon.

Mr. HARDIE: Do you mean this committee is going to sit again this afternoon? We have other meetings to attend, you know. If he wants to go to the cabinet meeting, that is fine, but the rest of us fellows have other work to do. Sitting twice a day in this committee is too much for anybody.

The CHAIRMAN: We have a schedule, and we have to get rid of our work. If we have work to do we are going to get on and do it.

Mr. HARDIE: There are other committees too.

NORTHERN ADMINISTRATION AND LANDS BRANCH

Item No. 275.	Branch Administration	$ 1,587,128

YUKON TERRITORY

Item No. 276.	Operation and Maintenance, including grants and contributions as detailed in the Estimates	$ 1,090,457
Item No. 277.	Construction or Acquisition of Buildings, Works, Land and Equipment	$ 4,499,400

NORTHWEST TERRITORIES AND OTHER FIELD SERVICES

Item No. 278.	Operation and Maintenance, including grants and contributions as detailed in the Estimates	$ 9,692,954
Item No. 279.	Construction or Acquisition of Buildings, Works, Land and Equipment, including costs arising out of the relocation of the town of Aklavik and payment of such compensation as the Governor in Council prescribes to persons affected by such relocation	$ 18,640,498
Item No. 280.	Contributions to the Provinces to assist in the development of roads leading to resources in accordance with agreements entered into by Canada and the Provinces	$ 9,000,000

The CHAIRMAN: We are on item 275, combined down to item 280. Would you like to have anyone here from the Department of Public Works? What is the wish of the committee?

Mr. HARDIE: Maybe the departmental officials from Northern Affairs can answer a series of questions I have to ask in regard to Mr. Coates' questions.

The CHAIRMAN: If you think you need someone from Public Works, let us say so now, so we can have them over here, and so there will not be any delay.

Mr. HARDIE: I think Northern Affairs can answer a series of questions which I have.

The CHAIRMAN: Let us proceed then, and if we find we have to have them, then we can send for them. Ready for questions, gentlemen?

Mr. HARDIE: In the questions and answers that were tabled yesterday with regard to Mr. Coates' questions, the first one was concerning the chief warden's house at Fort Simpson. Is the department of the opinion that this contract was completed to their satisfaction?

The CHAIRMAN: This is on the first page, under the questions asked by Mr. R. C. Coates.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): One of our troubles, Mr. Chairman, on that question, as far back as that, is that since that time the deputy minister of the department has changed, the two assistant deputy ministers and the director of the branch are changed. So it is a little hard for any of us here to answer it from our own personal knowledge. We can check the records and see if there is any comment on it.

Mr. HARDIE: We will go to question 9 regarding the O. I. Johnson Company contract at Fort Rae in 1954-55. Was this contract completed to the satisfaction of the department?

Mr. A. B. CONNELLY (*Chief, Engineering Division*): All I can say is, as far as we know. I have heard no complaints about it.

The CHAIRMAN: This is page 2.

Mr. HARDIE: Question No. 10, with regard to the contract of John A. MacIsaac in upper Whitehorse. Was this contract completed to the satisfaction of the department?

Mr. CONNELLY: Yes.

Mr. HARDIE: Question No. 11, regarding the contract with John A. MacIsaac, for the construction of a bridge at Mayo, was this contract completed to the satisfaction of the department?

Mr. CONNELLY: Yes.

Mr. HARDIE: Question No. 13, concerning the details of the Pan Abode (1951) Limited at Churchill, Manitoba, in the years 1955-56. Was this completed to the department's satisfaction?

The CHAIRMAN: Which question is that, Mr. Hardie?

Mr. HARDIE: Question No. 13.

Mr. CONNELLY: Yes.

Mr. NIELSEN: Were there any contracts that were not completed to the satisfaction of the department?

Mr. HARDIE: In these questions of Mr. Coates?

Mr. CONNELLY: None that I know of.

The CHAIRMAN: It is the responsibility of your department, when the contracts are let, to see they are completed satisfactorily, anyway, it is not?

Mr. CONNELLY: Yes:

Mr. HARDIE: It is the responsibility of the department?

The CHAIRMAN: To see the contracts are satisfactorily completed.

Mr. HARDIE: I want to find out if they are, because these questions, apparently, have been asked for other reasons. I want to find out whether the department is satisfied these contracts were completed to it's satisfaction.

Mr. NIELSEN: He said, "yes".

Mr. HARDIE: All of them?

Mr. CONNELLY: They would not have been accepted, unless they had been satisfactorily completed.

Mr. HARDIE: You are satisfied they are completed satisfactorily and the costs are legitimate?

Mr. CONNELLY: Yes.

Mr. HARDIE: Fine.

Mr. MCGREGOR: Who was the deputy minister at that time?

Mr. ROBERTSON: The deputy minister in 1952-53 would be General Young, the present deputy minister of Public Works.

Mr. HARDIE: So, regardless of whether the answer Mr. Connelly gave me would cover the contracts in 1952-53—

Mr. ROBERTSON: Pardon me?

Mr. HARDIE: The answer Mr. Connelly gave me would cover contracts in 1952-53, and they would not have been paid unless satisfactorily completed?

The CHAIRMAN: That applies to all contracts?

Mr. CONNELLY: Yes.

Mr. B. G. SIVERTZ (*Director, Northern Administration Branch*): Mr. Chairman, on first inspection it is common that something is not to the satisfaction of the department; but in all circumstances this dissatisfaction is remedied before a payment is approved.

Mr. HARDIE: I just want to have it made clear to the committee the prices were right and the work was done to the satisfaction of the department.

Mr. NIELSEN: There is another element in there, Mr. Chairman. I suggest the answer of the officials of the department gives no indication of the prices being "right", to quote the hon. member. The answer of the department was, "all these contracts as far as we are concerned, are completed to the satisfaction of the department."

Mr. HARDIE: I asked Mr. Connelly, a moment ago, if the prices were right, and he said, "yes".

Mr. MCGREGOR: The question is, who is to say whether they are or not?

Mr. NIELSEN: What does the hon. member mean by, "are the prices right"?

Mr. SLOGAN: Right for whom?

Mr. NIELSEN: Yes, right for whom?

Mr. HARDIE: You have not been able to prove anything by the series of questions you have asked. I imagine these prices are pretty well right.

Mr. NIELSEN: There are two hostels and one school at Inuvik; and are there any separate schools at Inuvik?

Mr. ROBERTSON: No.

Mr. NIELSEN: Are there any building of that size being constructed by the department at Inuvik?

Mr. ROBERTSON: Not by the department, but the hostel is more or less the same size, a 120 bed hostel.

Mr. NIELSEN: One of the hostels is Anglican and the other Roman Catholic?

Mr. ROBERTSON: Yes.

Mr. NIELSEN: And the school is a public school?

Mr. ROBERTSON: Yes, a public school.

Mr. NIELSEN: Is there a gymnasium in the public school?

Mr. ROBERTSON: Yes.

Mr. NIELSEN: Is there in the Anglican hostel?

Mr. ROBERTSON: There are two—you can call them gymnasiums or playrooms—in each hostel.

Mr. NIELSEN: Could you advance reasons, if any, why there should be a gymnasium in each of the hostels and the school?

Mr. ROBERTSON: Yes, the school gymnasium is self-explanatory. It is a 24-room school and has a combined gymnasium-auditorium.

The CHAIRMAN: What is the cost of the school?

Mr. HARDIE: It is $5,400,000—

Mr. ROBERTSON: That is for the hostels, too.

The CHAIRMAN: Can you break that down?

Mr. ROBERTSON: I have not the breakdown—yes, I believe we did give a breakdown yesterday, Mr. Chairman, in the material returned.

Mr. HARDIE: $1,725,750, is that it?

Mr. ROBERTSON: The three buildings were done under one contract, but we did give a breakdown yesterday in the material returned, showing the Anglican hostel, $1,842,000, the Roman Catholic hostel, $1,847,600—why the small difference, I do not know; they are identical—and the federal school, $1,725,750. That is a 24-classroom school plus the added domestic science laboratories, science rooms, work shops, and so on.

Reverting to Mr. Nielsen's question: as far as the gymnasium in the school is concerned, I think, as I said, that is self-explanatory, it is a gymnasium-auditorium for the school. In the two hostels, each hostel is for 250 children. Those 250 children live in those hostels for ten months of the year. Most of those months are months of darkness and months of pretty extreme temperature. A good deal—well, all the evening recreation, playing for the children, and so on, and any exercise they get, except for short periods during the daylight hours, has to be inside. So, two playrooms have been provided in each hostel.

If you want the size of those playrooms, each one is 44 feet by 69 feet.

Mr. NIELSEN: Two in each hostel?

Mr. ROBERTSON: Two in each. There are 250 children, as I mentioned; there are two in each. This works out at a square footage of 24.2 square feet per pupil; and for the purposes of comparison, the standard playroom space in Indian Affairs schools is 50 square feet per pupil.

We feel that the square footage of playroom space is too small, but we knew the kind of costs we were going to get into, and it was felt we could not provide 50 square feet per pupil. So it is down to a little under half the Indian Affairs square footage.

The CHAIRMAN: What was the cost per square foot for each of those?

Mr. ROBERTSON: It was $26, and $26.30 and $26.40 per square foot. constructed in the Northwest Territories?

Mr. HARDIE: How does this square foot cost compare with other buildings

Mr. ROBERTSON: Mr. Connelly might say something on that.

Mr. CONNELLY: The cost of the Fort Smith school was $20.80 per square foot.

Mr. NIELSEN: Did the two playrooms in each hostel cost $15,780?

Mr. ROBERTSON: I have not multiplied it out, but I would accept that, if the multiplication is correct.

Mr. NIELSEN: I might be wrong in my multiplication, but it is a duplicated cost in each hostel?

Mr. ROBERTSON: Yes, there are two in each hostel.

Mr. NIELSEN: How far is that school auditorium from each hostel?

Mr. ROBERTSON: About 150 yards.

Mr. NIELSEN: Would there be any serious objection to having planned these hostels so the children could have played in the school auditorium rather than going to a cost of some $32,000 for additional playrooms?

Mr. ROBERTSON: I think there are considerable problems in handling the thing. You have to realize these 250 children will be in ages all the way from six years up to high school age—say, 14 or 15 years, or something of that kind. And as far as smaller ones are concerned, just as anyone who

has small children knows, there has to be some recreational or play space that they are in virtually all the time when not engaged in study. They cannot sit on their beds or bend over books doing homework. There has to be recreational space, and the 50 square feet per student has been found to be reasonable by Indian Affairs.

At Fort Smith we provide 26.8 square feet per pupil, and at Inuvik we provide 24 square feet per pupil. I think if we are open to criticism about it, it is in providing too little space for the children to have any reasonable form of play and exercise during the winter months when they are substantially inside.

Mr. SLOGAN: It says that the designed occupancy is for 250 children. How many children are in these various hostels?

Mr. ROBERTSON: None at the moment. They will open in September.

Mr. AIKEN: Would Mr. Robertson explain to the committee the relationship which will exist between the two church groups that are mentioned and the federal government, and particularly why two churches are selected to have hostels built; what degree of supervision will there be as between the church and the government and how will this work out as far as that relationship is concerned?

The buildings, I assume, will belong to the federal government and they are called a Roman Catholic hostel and an Anglican hostel. I do not happen to belong to either church.

The CHAIRMAN: You would not be allowed in!

Mr. AIKEN: Let us put it this way: that the pupils who attend either of these schools will end up as Anglicans or Roman Catholics, while the United Church will be short. I think I understand the reason for this particular location, but I am very intereted in the theoretical division of responsibility that lies behind it.

Mr. ROBERTSON: Perhaps I should say at the outset that I belong to the United Church, so I am an outsider looking in at this thing.

Going back to the rationale of the thing, these two hostels will replace two residential schools which are in very decrepit condition. At old Aklavik one of them is a Roman Catholic residential school and the other is an Anglican residential school. In a sense the rationale is simply that they are replacing these facilities. But there is a further and even more basic point which lies behind the fact that these residential schools were Anglican and Roman Catholic. It is that most of the missions to Eskimos and Indians in the Northwest Territories in the early period were and still are, either Roman Catholic or Anglican, so that actually all the Eskimos and Indians are one or the other.

As to the arrangement between the churches and the government, I could say first of all that the churches have nothing to do with the school. The school is purely and simply what we call a federal day school, although the territorial government contributes to the capital cost and the operating cost in proportion to the number of pupils attending it who are not Indian or Eskimo.

Mr. AIKEN: They all go to the same school?

Mr. ROBERTSON: That is right.

The CHAIRMAN: How many children are going to the schools in old Aklavik?

Mr. ROBERTSON: We will get that information for you. We will have the chief of the education division give us an answer.

Mr. AIKEN: Yes.

Mr. ROBERTSON: I think that the churches have nothing to do with the school. With regard to the hostel, what is done is to enter into a management contract with each church, and under that contract the government covers the total cost of operation.

Now, Indian Affairs have worked out a formula which they apply, and which sets a certain proportion of cost for each Indian Affairs school where they have the same or a similar contract or arrangement.

We cannot do that, at least in the north, because we do not know yet how the costs will work out. But we have worked out a complicated contract under which certain advances are made and the costs are assessed at the end of the first year. Then new advances are made for a second year and the costs are assessed the second year, subject to auditing, checking and so forth.

After that has been done, I think, for three years, to establish the costs, we will enter into a five-year arrangement with the costs relatively set, in the way that Indian Affairs now do it for their Indian Affairs schools.

Essentially it is a case of the federal government owning the capital facilities and entering into a management contract for the operation of the hostels.

Mr. AIKEN: This may be a matter of policy and I do not want to push it too far if you consider it so. But if another church organization were to apply for similar accommodation in such an area, what would the policy of the department be in that case?

Mr. ROBERTSON: It is mainly a question of policy and I think I would leave this for the minister to deal with. However, basically, I think the answer is that at the present time the people who need the hostels are Indians, Eskimos, or people of mixed blood. I was told they are of one faith or the other, almost exclusively, so it is really a contingency which has no likelihood of arising.

Mr. AIKEN: While we are speaking on the subject of Indians what would be the situation in another location?

Mr. ROBERTSON: It is the same situation throughout the territories. There may be a trifling percentage some place or another that are not of the Anglican or Roman Catholic faith. But none of the other churches established any missions in the early period. In the last five years the Pentecostal Assembly have begun to establish missions in one or two places. But apart from that there have not been any others.

Mr. NIELSEN: You mean throughout the Northwest Territories?

Mr. ROBERTSON: Yes; perhaps I should have made that clear.

Mr. AIKEN: Is there any danger—certainly the other churches if they have not established missions at these places are behind; but is there any danger that we are going to underwrite a monopoly for two religious organizations?

Mr. ROBERTSON: These contracts are not made in perpetuity. If that situation were to arise it would be perfectly open to the government of the day, if it thought desirable, to decide that some hostel would be operated by, let us say, the Department of Northern Affairs. In fact the hostel at Yellowknife is operated by the department and not by a church organization. So this could be done.

Mr. AIKEN: What sort of religious conveniences are in the hostels? Is there a chapel?

Mr. ROBERTSON: Yes, there is a chapel in each hostel.

Mr. AIKEN: I presume it is furnished in accordance with the request of the church group?

Mr. ROBERTSON: Not entirely. Pews or benches are put in. The immovables are put in, but not the movable furnishings.

Mr. AIKEN: Thank you, I do not want to pursue it any further, but I did want to have some assurance that it was not set up in the north for all time.

Mr. MUIR (*Cape Breton North and Victoria*): I do not like the use of the use of the term "monopoly", because I think both of these denominations deserve a great deal of credit for getting into the north country. It may be that other denominations are laggard in not getting in there; but two of them are very deserving of credit.

Mr. AIKEN: I am not complaining.

Mr. MUIR (*Cape Breton North and Victoria*): I do not belong to either faith.

Mr. AIKEN: I am not complaining, but I am looking to the future.

Mr. HARDIE: Mr. Chairman, on a point of order: we are now switching from roads or contracts to Inuvik. Now we are getting into education in general terms. I wonder if we cannot clean up the question of the contracts pertaining to the relocation of Aklavik and to the other questions that were asked under the contracts in the Northwest Territories, and the roads, and clean them up before we get into the general field of education. The chief of the education division is not here.

The CHAIRMAN: He will be here in a few minutes.

Mr. HARDIE: Are we going to roam from education to roads, to contracts, or are we going to clean this up? You are talking about meeting in the afternoon every day in the week. Are we going to clean this up step by step, or are we going to wander all over the place and he here until the end of July or until Christmas?

Mr. AIKEN: I do not think the discussion has gone too far. I think we have been perfectly in order. We have discussed hostels and schools at Inuvik, and I do not think we have digressed too far.

Mr. NIELSEN: May I correct my calculation. It is $157,872 for two playrooms in each hostel, making a total of four playrooms at $157,872. That is what I calculate very roughly.

The CHAIRMAN: May we obtain from the Department of Public Works the square foot cost of these three buildings for the new village? I think the committee would be interested to know what the square foot cost was of the smaller buildings as compared, let us say, to any place in Ontario.

Mr. CONNELLY: Mr. Chairman, I can give you the square foot cost of a school in the Ottawa area. I do not have anything similar for the hostels, but the cost for the classrooms including the auditorium would be $21,400.

The CHAIRMAN: I mean per square foot.

Mr. CONNELLY: $11.80 per square foot.

The CHAIRMAN: Inuvik is about two and one half times more.

Mr. CONNELLY: Yes, and at Forth Smith school, the cost per square foot is $20.80 and of the hostel, $22.

Mr. HARDIE: What about the cost of the school at Hay River?

Mr. CONNELLY: I do not have it.

Mr. HARDIE: Or the school at Cambridge Bay?

Mr. CONNELLY: I do not have it immediately available.

The CHAIRMAN: While we are on Inuvik, could you tell the committee about the disposal plant and the heating system you have in the new village? It cost how much money, and what are its functions?

Mr. ROBERTSON: The total figure for the public utilities to completion is $7.8 million. That breaks down as follows: power plant and electrical distribution, $1,100,000; central heating and distribution, $2,900,000; water and sewage system, that is, water and sewer, central operation, $1,225,000; the utilidor structure which you have seen, which distributes the water and the sewers, $2,566,000.

As to the function and character of it, the arrangement is one under which the electricity is provided from a thermal plant using bunker c oil from Norman Wells; and combined with it is the heating plant; and the excess heat, the waste heat from the power plant goes into the production of heat. There is to be additional boiler capacity as well for heat.

The whole of the service area of the townsite will be heated centrally in this way, with heat, sewers, and water running through what are called utilidors which are a little hard to describe. It is a sort of boxlike structure which stands on piles above the ground. The reason is that in perma-frost areas of this kind you cannot put sewer or water or heat underground because it immediately begins to thaw the surrounding area and you upset the thermal ratio, and you get considerable heaving and shifting which normally breaks the pipes.

So these utilidors are placed above ground and insulated against the surrounding temperature. This scheme produces a very substantial economy. I mean the central heating with combined sewer and water systems. It was originally recommended to us by the Foundation Engineering Company. We had their calculation checked because everything was so specific in their calculations that we were suspicious of them. So we had them checked by the Montreal Engineering Company, and they were confirmed by them.

For the information of the committee, if, instead of a central heating scheme —just thinking of heat for the moment—if we were to have individual heating plants in the hostels, the schools, the hospital, the administration building, the army establishment and so forth, and if they were to produce power separately, the excess cost of that over our present scheme would justify our spending from $9½ million to $12 million on the present facilities. In actual fact they are costing $7.8 million; so with this scheme we are ahead by between $2 million and $5 million.

The CHAIRMAN: How many buildings does this serve?

Mr. ROBERTSON: All the large buildings.

The CHAIRMAN: How many in number?

Mr. ROBERTSON: At quick count it would be about twelve large buildings, and then all the houses.

The CHAIRMAN: How many houses?

Mr. ROBERTSON: We do not know yet how many are being built. I cannot get the figure immediately. We will try to get one on that.

The CHAIRMAN: Have you any idea?

Mr. ROBERTSON: Perhaps we could check this figure.

The CHAIRMAN: Would it be 100 houses?

Mr. ROBERTSON: It would be in the vicinity of 100 houses.

The CHAIRMAN: How many of the people serviced are paying for it? ?

Mr. ROBERTSON: None is being serviced at the present time.

The CHAIRMAN: I mean when it is in operation.

Mr. ROBERTSON: Under the government or crown housing regulations there is a formula under which the government employee pays for his heat up to $350 per year or a percentage of his salary, whichever, is the greater. As

far as non-government employees are concerned, rates will have to be worked out which will roughly equate the cost or perhaps be a bit better than the cost for which the person could provide alternative heating.

Mr. NIELSEN: I think the national average would be $250. But perhaps I am mistaken there.

Mr. ROBERTSON: $250.

Mr. MCGREGOR: I understand there has been some $20,800,000 spent up there up to the present time.

Mr. ROBERTSON: That is right.

Mr. MCGREGOR: How many houses do you anticipate building there this year?

The CHAIRMAN: The deputy minister says there are 122 houses that are being serviced.

Mr. ROBERTSON: We can try to get that figure. It includes other departments and we will try to pull it together.

Mr. MCGREGOR: I want to get into that. As I understand it this community was built to take care of the people from Aklavik. Up until the present time there have been only seven families moved.

Mr. ROBERTSON: That is right.

Mr. MCGREGOR: Is there any estimate as to how many families are going to move into this district when it is completed?

Mr. ROBERTSON: It is not correct to say that it was built basically for the people from Aklavik. It was built with the knowledge that there was going to be need for an administrative centre at the lower end of the Mackenzie; an administrative centre, an educational centre, and a hospital centre, and that these would be needed in the future.

The big investment that was going to have to go in was for this purpose. That was the reason it was put in a new site because it was felt that the other site was not satisfactory.

It was hoped that most of the people in Aklavik would move over there so that we would have a trading post left at Aklavik, plus the administrative centre at Inuvik. But we at no time were certain that all the people would move. We do not know at this stage how many will move.

Mr. MCGREGOR: You are pretty sure, as a matter of fact, that this was really built there to move those people from Aklavik?

Mr. ROBERTSON: No, it was built there as an administrative centre. That is what it was built for.

Mr. MCGREGOR: I read in the papers somewhere that the reason they were moving people away from Aklavik was that the land was sinking.

Mr. ROBERTSON: There have been a lot of things written about this which I would not myself support or agree to. The land is not sinking. There is a lot of frost. There is flooding in spring at high water, and there are a number of other things wrong with it as a site. I have some pictures here which show a little bit of what the location looks like. They may give you some idea.

Old Aklavik is out in the delta. This will give you some impression of what the delta is like. This is looking over Inuvik out in the delta.

Mr. MCGREGOR: How bad have the floods been in this particular place? They could not be so bad or these Eskimos would not have lived there all these years. If they had been flooded out year after year, they would have moved some place else, would they not?

Mr. ROBERTSON: That is probably true. They are not bad for people who are simply living in a small house; but to put substantial hospital and school facilities there, the advisory committee felt it would be a serious mistake.

Mr. McGREGOR: Who are the advisory committee?

Mr. ROBERTSON: It is mainly at the deputy minister level.

Mr. McGREGOR: Who are the deputy ministers?

Mr. ROBERTSON: I do not know that I can name them all off the bat: the Deputy Minister of Finance, the Deputy Minister of Public Works—

Mr. McGREGOR: Who was the Deputy Minister of Public Works at that time?

Mr. ROBERTSON: At that time the Deputy Minister of Public Works was not on the committee; he was added when General Young became Deputy Minister of Public Works.

Mr. McGREGOR: Mr. Young was the deputy minister?

Mr. ROBERTSON: General Young was the Deputy Minister of Northern Affairs.

Mr. McGREGOR: He was the man who made the recommendation that this should be done?

Mr. ROBERTSON: He was the chairman of the committee; and then there were a number of deputy ministers from other departments on the committee.

Mr. McGREGOR: In other words, Mr. Young was the man who finally made the recommendation that this should be done?

Mr. ROBERTSON: The whole committee did.

Mr. HARDIE: The commissioner of the R.C.M.P. too, I think.

Mr. ROBERTSON: The commissioner of the R.C.M.P., General McNaughton was on it, the chairman of the chiefs of staff, the Defence Research Board, National Research Council, the Deputy Minister of Transport—all the departments that are concerned in the north.

Mr. McGREGOR: According to what we read in the newspapers and so on, today, there is some question as to whether this is just going to be a further sink hole for a lot of money, and it is a question as to whether we should take another look at it before we go on spending another $20 million or $30 million. Could you tell me how much money you intend to spend this year, and how much longer this is going to go on?

Mr. ROBERTSON: We will try to get a figure. I can give you the total figure to the end of the program. Actually, it has already been returned.

Mr. McGREGOR: The figures to the end of the program?

Mr. ROBERTSON: The end of the whole thing.

Mr. McGREGOR: How much is that?

Mr. ROBERTSON: The total cost is set at $34,045,970.

Mr. HARDIE: When do you expect to complete the program?

Mr. ROBERTSON: It will be virtually all complete by the end of next summer —not this coming summer, but the summer of 1960.

Mr. HARDIE: So 50 per cent of the remaining expenditure which has to be spent each year would run around $7 million this year and $7 million next year?

Mr. ROBERTSON: Roughly.

Mr. McGREGOR: In view of the fact that we seem to get more from what we read in the newspapers—because what we read in the newspapers does not jibe with what we are getting here—I would suggest that this committee recommend that we take a much closer look into this whole project before we spend any more money on it.

The CHAIRMAN: That is not a question the deputy minister can answer: the minister should answer that.

Mr. COATES: Further to that, is it not a fact that all contracts for all the major expenditures to be made at Inuvik have already been let to the contractors?

Mr. ROBERTSON: That is correct; they have all been let and they are all under way. I do not want to get into the question of policy on this, because that is not mine. In actual fact, I would think that to wind up the contracts would cost a great deal in itself. Mind you, my own private opinion is that this would be a terrible waste; but that is only my private opinion.

Mr. STEARNS: Is this $34 million estimate the department's figure, or the contract figures that are established today?

Mr. ROBERTSON: Those are contract figures. The other day, when I mentioned these figures, they added up to $35,700,000. Since then we have checked that with all the other departments, and the correct figure is $34,045,000.

Mr. STEARNS: What was the department's estimate of the costs before the contracts were let?

Mr. ROBERTSON: The revised estimate, as of June 15, 1956—exclusive of eight items, which were added later—was $23,282,000.

Mr. STEARNS: Did the items that were added later take care of another $1 million?

Mr. ROBERTSON: No; they would take care of $2½ million.

Mr. NIELSEN: You were saying that to date $7 million had been spent on this project; but, to be perfectly accurate, while this amount of cash may have been spent to date, we are committed for $35 million?

Mr. ROBERTSON: No; that was an answer to a question as to what this department had spent. We have spent $7 million odd. Most of the other is Public Works, National Health and Welfare, Transport, Northern Canada Power Commission. That $7 million is just the departmental figure.

Mr. NIELSEN: We are committed for $35 million?

Mr. ROBERTSON: That is correct.

The CHAIRMAN: Mr. Robertson, will you put on the record the amount spent by all departments?

Mr. MCGREGOR: Do you mean to say that you are now going to bring this up to $34 million?

Mr. ROBERTSON: Yes.

The CHAIRMAN: Just a moment, Mr. McGregor; Mr. Robertson is going to put on record the amount spent by all departments. I am told that information will be furnished.

Mr. ROBERTSON: I can only get it approximately from this, Mr. Chairman. The public utilities were all paid for by Northern Canada Power Commission; that is $7.8 million. The airport, air strip, equipment, terminal building and lighting, the total is $7 million; National Defence, $900,000; the hospital, $1,793,000—that would be National Health and Welfare. For the rest, it would be a division between Public Works and ourselves: that would be for the balance. I would try and get that division.

The CHAIRMAN: No. What would the total be—

Mr. NIELSEN: When were these plans first made—the date on which the scheme was first conceived, and implemented?

Mr. ROBERTSON: The recommendation to move was made in November, 1953. The site party went on the ground in the spring of 1954. The decision to accept the site of East Three was October or November, 1954. Foundation

Engineering Company reported in the spring or summer of 1955. Plans were worked out between then and the date I have given for the first estimate, which was June 15, 1956.

The CHAIRMAN: We will have the total figures quoted by Mr. Robertson and the amount spent to date by all departments. I think that should be on the record.

Mr. ROBERTSON: These figures I have given are the amounts to the end of the program—not spent to date.

The CHAIRMAN: I think the committee should have the total amount spent to date.

Mr. ROBERTSON: $20 million is the total amount spent to date.

Mr. STEARNS: Does that mean there is $14 million to spend?

Mr. ROBERTSON: Roughly, yes.

Mr. SLOGAN: Over what period of years was the $20 million spent?

Mr. ROBERTSON: The expenditures really started in the summer of 1955. I suppose the first items were spent then; and it has been spent since then.

The CHAIRMAN: With regard to these utilidors, or whatever you call them, Mr. Robertson, you say you have 122 residences. What would be your revenue for this $7 million odd outlay, apart from government assessments?

Mr. ROBERTSON: I would have to get figures on that. The electrical power part will be self-liquidating. I would have to get the heating part. But when you say, "apart from the 122 residences", the occupants of those 122 residences will pay $250 per year out of their own salary for their heat.

This is under the government regulations: the private party will pay the cost of heating. In fact, we suspect he may pay a bit more than that, because the cost of heat this way will be less than the cost of heat in any other way.

The CHAIRMAN: The rest of the payment will be made by the federal treasury?

Mr. ROBERTSON: The balance over and above what is paid by a government employee occupying a residence, and over and above what is paid by non-government people occupying services residences.

Mr. NIELSEN: Mr. Chairman, I think this should be cleared up. The government employee occupying government residences receives up to $250 for the purpose of applying on heat.

Mr. ROBERTSON: No, he receives a northern allowance, and the northern allowance is set on the basis of a number of factors; but it does not include an estimate of heating cost. It includes things like isolation, lack of facilities, the question of whether it is inside or outside the tree line, living costs at a particular location.

Mr. HARDIE: It takes in fuel costs, does it not?

Mr. ROBERTSON: It takes in fuel costs, but not heating costs for an individual. That is only a part of the cost of living. What I am trying to say is, there is not $250 included in this as a heating increment; that is not the way it is worked out.

Mr. NIELSEN: I suggest a government employee occupying a government home gets, as part of his government allowances, up to $250: anything over that he has to pay in addition. But he is allowed up to $250. So as part of the expenditure of this program, that $250 goes to pay it off.

Mr. ROBERTSON: No, this is not correct.

Mr. SIVERTZ: He is given the northern allowance, which is at a rate set by Treasury Board for employees of this department and other government employees in the north; and this is different for each locality. Remember this:

he must pay all his living costs, including the rent for the house that he occupies, if he occupies a house owned by the government. This rent will include heat, because at Inuvik the heat is supplied from the central heating plant. This is part of the rental rate set under the crown-owned housing regulations of treasury board.

Mr. NIELSEN: My understanding was that in that rent is included a national average, computed $250 for heat. That is schedule D of the regulations of which you speak.

Mr. SIVERTZ: This is correct; this is the basis on which the crown-owned housing regulations have arrived at the total rent figure for a given kind of house, at a given locality.

Mr. NIELSEN: The only point I wish to make is this: when you say the power is self-liquidating, part of that self-liquidation comes in the form of government money to pay it off. I am not questioning the mode of paying that government money; but one must have regard to that fact.

Mr. ROBERTSON: But it is not paid to the person as $250 for heat.

Mr. NIELSEN: But it is from one pocket into the other?

Mr. ROBERTSON: So is the salary from one pocket into the other, on that basis.

The CHAIRMAN: Is the company which supplies the services a crown company?

Mr. ROBERTSON: Yes.

Mr. COATES: What do the employees have to pay for rent?

Mr. ROBERTSON: It depends on the house. Perhaps Mr. Sivertz could outline the basis.

Mr. SIVERTZ: Most of the houses at Inuvik will be, I think, at $76 per month.

Mr. COATES: That is for the employees?

Mr. SIVERTZ: Yes.

Mr. MCGREGOR: What would one of those houses cost?

Mr. COATES: What is the allowance paid by your department—the northern allowance—to employees?

Mr. ROBERTSON: This is worked out. It is not for our department alone. There are government northern allowance regulations, and there are crown-owned housing regulations. The northern allowance regulations set down the amount of northern allowance that is payable to a government employee of any department. It is on exactly the same basis—except for National Defence and R.C.M.P.

Then the crown-owned housing regulations are also general, except for National Defence and R.C.M.P. They work out the rental which is based on—

Mr. SIVERTZ: Based on national averages. But I believe that for the Mackenzie district, in the compilation there, the costs of living at Edmonton—the costs of building and rental rates at Edmonton—were used.

Mr. NIELSEN: The assessed value, less 10 per cent, if I am not mistaken, was the figure used.

Mr. COATES: This rental rate is for a furnished home; is that correct?

Mr. ROBERTSON: That is correct.

Mr. COATES: And the department has, at Inuvik—I do not know now whether this is correct for other places as well—purchased the furniture themselves?

Mr. ROBERTSON: I am sorry; I missed the question.

Mr. COATES: Your department has purchased the furniture to furnish these employees' homes at Inuvik—is that correct—for all homes in all parts of the Northwest Territories and Yukon?

Mr. ROBERTSON: Before answering that, Mr. Sivertz reminds me that there is a $5 per month additional cost if the house is furnished, over and above the rent.

Mr. COATES: That would be $76 a month plus $5?

Mr. ROBERTSON: Yes.

Mr. COATES: And that is for a furnished house? Is it also for heat?

Mr. SIVERTZ: The basis of the rent charged under the crown-owned housing regulations, which were set up by Treasury Board with the advice of representatives of this department and other departments operating in the North, and the Dominion Bureau of Statistics, was as follows: the amortization of capital costs, based, however, on the cost of building such a house at an outside location. I believe that Edmonton was used for this purpose, but I am not certain. This figure results in a rent of something like $76 a house, per month for most of the houses. It varies with the size of the house—and these houses throughout the north vary considerably; so there is a different rent for each house, depending upon its size and cost.

The CHAIRMAN: What about the 512, Mr. Sivertz—what is known as the 512?

Mr. SIVERTZ: I believe it has been set at $35 a month, but I would like to check that figure.

Mr. COATES: Are any employees living in 512 houses?

Mr. SIVERTZ: Yes. May I finish speaking on the basic rent?

Mr. COATES: All right.

Mr. SIVERTZ: Added to that is the charge for furniture when furniture is supplied by the government, which is usually the case, but not invariably. It is $5 per month, regardless of the size of house.

Finally, a charge for utilities, which consist of light, water, electric power which is charged for at 5 per cent of the employee's salary, up to a maximum of $250 per year.

Mr. COATES: Have you finished now?

Mr. SIVERTZ: Yes.

Mr. COATES: That is for heat and light, a maximum of $250?

Mr. SIVERTZ: That is right.

Mr. COATES: Do you have electric stoves in those homes? What electric appliances do you have in these homes—can you tell me that?

Mr. KORCHINSKY: T.V.

Mr. SIVERTZ: I am sorry; what was your question?

Mr. COATES: What electrical appliances do you have in the homes of the employees?

Mr. SIVERTZ: This varies from community to community. In some communities there are electric ranges and electric water heaters; in others there is no electric power available at all. The variation in between these is considerable. But as a general rule, oil fuel is used; but in Inuvik electric power will be used for cooking.

Mr. COATES: All employees have the same facilities?

Mr. SIVERTZ: No.

Mr. COATES: Do they have to pay at the same rate, whether they have the facilities or not?

Mr. SIVERTZ: Yes.

Mr. NIELSEN: Then there is discrimination.

Mr. ROBERTSON: Mr. Chairman, Mr. Nielsen has said "then there is discrimination". May I say, we do not defend the northern allowance regulations unreservedly at all.

Mr. NIELSEN: They need, in your view, a good deal of review and changes?

Mr. ROBERTSON: They need some review and change.

Mr. COATES: I would say that this would be somewhat of an incentive in itself, in locating people there, in trying to come closer to the required northern posting, if they were provided with heat and electricity. If a home down here were provided with heat and electricity for $250 a year, I would buy very quickly.

Mr. ROBERTSON: Would you go up north to get the saving?

Mr. COATES: I might, if I got a good job.

Mr. ROBERTSON: What I was really getting at is, that the incentive does not operate enough to make it something that people lunge to get.

Mr. COATES: I am wondering whether it does, or whether it does not.

Mr. ROBERTSON: It does not.

Mr. NIELSEN: It is more compensation, is is not?

Mr. ROBERTSON: That is right. I can say, from experience, that it does not.

Mr. COATES: I am trying to determine just how much employees got in the way of compensation for going north. They get the northern allowance, they get furnished homes with heating and appliances and electricity, heating and electricity for $250 a year?

Mr. ROBERTSON: That is correct.

Mr. COATES: Do they also get their transportation costs for their families paid to the north?

Mr. ROBERTSON: Yes.

Mr. COATES: They get that as well?

Mr. ROBERTSON: Yes.

Mr. COATES: Do you have problems with regard to getting personnel?

Mr. ROBERTSON: Yes, but it depends on the categories, and it depends on the qualifications that one sets; and also a further consideration is the rate of turnover. For instance, we recently had a competition for northern service officers. We received quite a number of applications. Out of those only a very few were considered to be suitable, however, for the kind of work that is involved. If one does not set high qualifications, one can get employees without too much difficulty, yes; but to get the kind of qualified people we want it is often quite difficult.

For instance, we recently wanted to get a vocational training administrator, and we offered what the Civil Service Commission thought was quite a good salary; and we did not get one single applicant. Now, for teachers we have had greater success in the last little while. The turnover rate is higher than we would like. There are so many things to offset against this. When one adds up the financial side one can say, "Yes, this is most attractive". But when one adds up the fact that the climate is rigorous, that in some places the dark period is long, and you are outside the tree line, it is not attractive for outdoor living for a good part of the year, and there are a lot of considerations of that kind.

Mr. COATES: With the differentiation that is apparent, are they not endeavouring to obtain personnel working in Ottawa or any of the provinces?

Mr. ROBERTSON: Mind you, these northern allowances apply in the provinces. They do not just apply in the territories: they apply in the northern parts of Quebec, Churchill, isolated areas in any province. In fact, I am not sure they are called northern allowances, but are isolation allowances.

Mr. COATES: Mr. Chairman, while speaking on this, could the minister get for us information with regard to the purchasing of furniture, the method by which you purchase furniture?

Mr. SIVERTZ: This is done by competitive tender through the purchasing division of Northern Affairs.

Mr. COATES: It is advertised?

Mr. SIVERTZ: I believe it is done by invitation tender.

Mr. COATES: Would you invite the larger companies in Canada to tender?

Mr. SIVERTZ: Yes.

Mr. STEARNS: What would be the average cost per house?

Mr. SIVERTZ: It is in the vicinity of $2,000.

Mr. HARDIE: What would that be for, a three-bedroom home?

Mr. SIVERTZ: Most of our houses are three-bedroom houses.

Mr. NIELSEN: Is that landed cost?

Mr. SIVERTZ: No, that is the purchase cost.

Mr. NIELSEN: What is the landed cost?

Mr. SIVERTZ: That varies; I think the average would be in the vicinity of $2,000.

Mr. HARDIE: Landed.

Mr. NIELSEN: An additional $2,000?

Mr. SIVERTZ: No, I am sorry, I could not give you the average cost.

Mr. ROBERTSON: We can get an average, but I do not know how much it would mean. It depends on the location and freight rates.

Mr. STEARNS: I was curious to know what you thought the average costs were; because you charge $60 a year, and if your furniture cost $2,000 or $3,000 you never recapture that before the furniture has depreciated and is thrown away.

Mr. ROBERTSON: I think that is right.

Mr. SIVERTZ: The alternative is to pay the transportation cost of the employee's own furniture, which is very much higher. This used to be done in this department, in previous years; but it is now normal to provide furniture as government-owned furniture, to avoid the transportation cost and the difficulties of getting it in at all, and out, when the employee must, for reasons which are unavoidable, leave his post when the only transportation available is air transport.

Mr. COATES: It would appear from the figures you have implemented this method of providing furnished homes to a greater and greater degree over the years.

Mr. ROBERTSON: If you are looking at those figures, Mr. Coates, there is also the fact that the amount of staff in the north has been considerably increasing in the last few years. The number of teachers, for instance, has gone up very considerably, as we have provided new schools.

Mr. COATES: It might be a good idea to have the number of teachers presently employed.

Mr. HARDIE: You can get it in the blue book.

Mr. ROBERTSON: It is in the blue book.

Mr. KORCHINSKI: Mr. Chairman, what is the present population of Aklavik?

Mr. ROBERTSON: We went into this the other day.

Mr. KORCHINSKI: I want to establish that because I have a few other questions to ask bearing upon it.

Mr. ROBERTSON: We thought about 700 to 800, winter time population; and up around 1,000 to 1,200 summer time population.

Mr. KORCHINSKI: What was the population in 1954, roughly? I mean, how much change has there been?

Mr. MCGREGOR: Do you mean white population?

Mr. KORCHINSKI: No, the total.

Mr. ROBERTSON: It would be up a bit now; it would not be up a great deal.

Mr. KORCHINSKI: Several hundreds?

Mr. SIVERTZ: It might be up 20 per cent in the five years.

Mr. KORCHINSKI: Would you care to estimate what the population would be in 1970?

Mr. ROBERTSON: As I said the other day, a lot depends on what happens with regard to oil and gas development. You will recall the map which the minister had the other day. The application areas completely cover the Delta, surround both Aklavik and Inuvik, and north into the continental shelf; that is already claimed. We do not know how fast the results of exploration will come.

Mr. KORCHINSKI: Barring any spectacular development?

Mr. ROBERTSON: We have planned for 5,000 but whether they will be there by 1970, I do not know.

Mr. KORCHINSKI: Is that Aklavik or Inuvik?

Mr. ROBERTSON: What I think the population of Aklavik will be?

Mr. KORCHINSKI: Yes.

Mr. ROBERTSON: My private guess is that in 1970 it will be down to the size of Fort Good Hope.

Mr. SIVERTZ: It is a centre for, perhaps, 250 people?

Mr. ROBERTSON: This is not people who live there.

Mr. SIVERTZ: It is a centre out of which a number of people will come.

Mr. ROBERTSON: As I indicated the other day we left our school in Aklavik as a two-room school, and this is the kind of community that will need a two-room school.

Mr. KORCHINSKI: I want to go back to some of the questions and answers given to Mr. Coates. At the bottom of the first page the question asked was: "how many buildings have been constructed at the old site of Aklavik by the department since the decision was made to move the site to Inuvik.

The answer went on to say: "Additional school and teacher accommodation has been provided through the erection of 512 buildings which will be hauled to Inuvik"—

Mr. ROBERTSON: That is what is called a "512" building. It is 512 square feet of space. This is a sort of all-purpose building we have used for houses. We adapt them as schools, and cut them in half to accommodate two Eskimo families, say. They have been built up at Inuvik and hauled on barges to Aklavik. When the thing is finished, they will be hauled on barges and moved over again.

Mr. KORCHINSKI: In the same answer you state that no permanent buildings have been constructed, but temporary buildings constructed which would be moved. Would you care to distinguish the difference between a temporary building and a permanent building?

Mr. ROBERTSON: Yes, these 512's are the kind of thing I am referring to. They will be moved away from Aklavik back to Inuvik as soon as the need is finished at Aklavik. They are 16 feet by 32 feet, and two of them can be put on a barge and moved without any trouble. This has been done.

Mr. KORCHINSKI: Would these 512 buildings be used for departmental use or are they erected specifically with the intention of disposing of them?

Mr. ROBERTSON: Are you referring to the ones at Aklavik?

Mr. KORCHINSKI: Yes.

Mr. ROBERTSON: Some are being used for school rooms and some for living accommodation, for teachers, or something of that kind. When they are finished there they will go back to Inuvik, and they may be sold to an Eskimo or an Indian person there, and they may be continued for one of our own purposes. I do not know at this time. There are some pictures of 512's here, if anyone wishes to see them.

Mr. KORCHINSKI: How much depreciation do you allow each year on a building of that type?

Mr. SIVERTZ: This varies on the use to which it is put. The depreciation during the time these buildings were used as contractors' bunk houses and cook houses at Inuvik was set over four or five years, I believe. Normally we depreciate them at something like 20 years.

Mr. KORCHINSKI: At the end of ten years they would not have to much value. How much would it cost to remove a 512 building from Aklavik to Inuvik?

Mr. SIVERTZ: I would have to ask Mr. Connelly for an estimate on that kind of move.

Mr. CONNELLY: I am afraid I cannot give you that information.

Mr. ROBERTSON: It would probably be pretty hard to put a figure on that. What would be done is that you would use day labour. All that is required is to get a bull-dozer, and you have the thing on skids and move it to the bank and shove it onto the barge, and tow it across to the other side. I have seen it done myself. This was built at Inuvik, was put on a barge and taken over to Aklavik; and they will be put on a barge and taken back again.

Mr. KORCHINSKI: I wonder if it would be a profitable proposition to have them moved?

Mr. ROBERTSON: Yes, it costs very little to do it. It is like moving a granary, or something of that kind.

Mr. NIELSEN: On this line of questioning which is a follow-up to Mr. Aiken's questioning concerning the establishment of church-operated hostels, and having regard to your answer, you anticipate a population of 5,000; but if oil and gas are discovered it is going to increase quite rapidly. If your planning is along those lines, and if the oil and gas exploration does come about as you anticipate, or as you hope, then would not this population differential which now exists between Catholic and Anglican children, be seriously upset so as to throw some doubt on the policy of providing hostels by churches at all; because the influx of people to operate the oil and gas exploration would most likely come, I would guess, from the population of western Europe, and that sort of people, who are basically or traditionally not Roman Catholic or Anglican?

Mr. ROBERTSON: I think that is correct; but most of the people coming in for that sort of development would not require hostel accommodation for their children. They would normally settle in a community, and whether it is Inuvik or another community, they would attend day school.

Mr. NIELSEN: The hostel is for all children who wish to attend?

Mr. ROBERTSON: Not all who wish to attend. If they have a home in town from which they can attend day school they are not eligible to attend the hostel. They may live in a town where there is only a public school, and if they are of high school age they may have to go to a place where there is a hostel.

Mr. NIELSEN: Before oil and gas development comes in, a good many people will be living outside Inuvik, and their children will possibly be attending this hostel?

Mr. ROBERTSON: That could be so, but I would not think that is the normal situation. But if it were, the contract with the Roman Catholic church at Fort Smith is a three-year contract at the present time. We would normally expect to get them on a five-year contract basis; this is not a rigid arrangement.

Mr. HARDIE: To go back to the question of Mr. McGregor, did I understand him to ask what the original estimate was for the re-construction at Inuvik?

Mr. ROBERTSON: Someone asked that question, and I gave a figure.

Mr. HARDIE: I wonder what the figure was.

Mr. ROBERTSON: $23 million, roughly.

Mr. HARDIE: That is the original estimate?

Mr. ROBERTSON: Yes, $23 million.

Mr. HARDIE: I am also wondering—you said some time ago that this is going to be an administrative centre?

Mr. ROBERTSON: Yes.

Mr. HARDIE: At the same time was not the idea that an airport in the area was a "must", first and primarily to bring down the cost of transportation? The people in that area were paying $1.21 a pound express. This, I presume, is because after the C.P.A. arrives at Norman Wells they have to ship their freight and passengers by small aircraft? They used a Beaver up to a few years ago, and the Otter since. The cost of shipping by this type of aircraft is, of course, considerably higher than transporting by Dack or any of the larger machines. Could you have built an airport at the old town site of Aklavik? Did you have enough room?

Mr. ROBERTSON: I think it was Mr. Williams who made the comments about the roads from Flat Creek. I think it was he who said that he could build a road out of any situation, but it is merely a matter of cost. I suppose you could build an airport over at old Aklavik, in some circumstances, but the cost would have been very much higher.

Mr. HARDIE: If I took the figures of Mr. Lane correctly, he said they put down around one millions tons of fill on the airport at Inuvik—1,200,000 tons, I think it was. It would run approximately 600,000 yards. So, in any event, we would have to use 600,000 yards at the old town site, would we not?

Mr. ROBERTSON: I would think so; but I am not an engineer.

The CHAIRMAN: Do you want to ask Mr. Williams that?

Mr. HARDIE: I could ask Mr. Williams that.

Mr. G. B. WILLIAMS (*Chief Engineer, Development Engineering Branch, Department of Public Works*): At least that.

Mr. HARDIE: At least that, and possibly a lot more. In any event, taking the price per yard that Mr. Robertson gave us the other day for gravel, I think it was $25 a yard,—

Mr. WILLIAMS: No.

Mr. HARDIE: If you were to build an airport at the old town site of Aklavik you would have to haul gravel 70 miles by water.

Mr. NIELSEN: That is the per ton price.

Mr. HARDIE: That is definitely not the per ton price; it is $25 a yard. At least, I thought it was $25 a yard.

Mr. ROBERTSON: $25 a yard.

Mr. HARDIE: Right. In that event just for the 1,200,000 tons of fill that would go into the airport—in other words, the 600,000 yards of fill on the airport at Aklavik—the cost of the fill alone would have run around $15 million. And the total cost of the airport at Inuvik is $5 million.

Mr. COATES: That only establishes you would not build an airport at Aklavik.

Mr. HARDIE: Right, but how are these people going to cut the transportation costs?

The CHAIRMAN: Direct your questions to the chair and not to each other, please.

Mr. MCGREGOR: Are we discussing the aiport at Inuvik?

Mr. ROBERTSON: Yes.

The CHAIRMAN: You will finish on Inuvik, I hope, some day.

Mr. MCGREGOR: I knew the figure we got the other day for gravel was $2.35 a ton.

Mr. HARDIE: At Inuvik, $2.35 a yard. If you built the same aiport over at Aklavik it would cost $25 a yard.

Mr. MCGREGOR: How far would they haul it?

Mr. HARDIE: It would be 70 miles.

The CHAIRMAN: About 70 miles.

Mr. NIELSEN: I have one more question before Mr. Hardie goes into a new line.

Mr. HARDIE: We are going back to the old line. We have been all over and back since.

The CHAIRMAN: Let us go on.

Mr. NIELSEN: I want to know whether Mr. Robertson foresaw in 1953, when Inuvik was being planned, the magnitude of the oil and gas development that has taken place.

Mr. ROBERTSON: I would not want to claim that sort of foresight, no, Mr. Nielsen. I would like to say this, though, that the members of the advisory committee at that time included a lot of people who had, and had had for years, a real conception of the importance of the north. They did consider that the north had been neglected. I have heard General McNaughton refer to this situation, as one who is interested in the north, as being one of holding on by the eyelids for a long period.

They felt the north was going to grow and develop. I felt the same way, though I was not there in the committee at the time these things were under way.

Mr. NIELSEN: Did you feel enough was being done for the north at this time?

Mr. ROBERTSON: No, I did not. The feeling we had was that the north was going to be important, and the north was going to grow and have a real future. The people who were on that committee—and I would like to include myself among the number because I supported the contention which they put forward, that they would be derelict in their duty if they allowed the investment that was to go into the old bog at Aklavik. They felt they were recommending something that was going to be required for all time for the proper development of the north.

They did not foresee and I did not foresee exactly where the oil development was going to go. We knew there was oil at Norman Wells, and we knew the geological conditions were favourable.

In 1955 I submitted a report to the Gordon Commission which went to some extent into the means of development of the north. This decision, this recommendation I thought, made sense. I submit that it does make sense if one considers the north of the future, and this kind of facility is going to be required because you cannot administer the north, you cannot administer it at all and develop it without an administrative base.

There was nothing at the end of the Mackenzie River, there was nothing that was known in the lower Mackenzie; this was what was revealed, and this was the basis of the recommendation.

I know there has been a good deal of doubt about the figures. I know there has been a good deal of suggestion that this may have been unwise; but I, myself, feel satisfied that the judgment of history will vindicate the decision to establish a site at Inuvik.

Mr. NIELSEN: I do not think many will have any argument with you there, but I think where the main observations of the members of the committee lie is in the magnitude of the cost and the possibility these costs could have and should have been shaved a lot more than they have been. Perhaps full advantage was not taken of the freighting seasons in the north and perhaps full consideration was not given to air freight of materials going in, as opposed to water freight. Perhaps there has been some criticism—for lack of a better term—of the ostentatiousness of planning, where you build playrooms at a cost of $157,000 when a gymnasium is 150 yards away.

Mr. ROBERTSON: I would not call it perfection, let me say that right off the bat; but I do think the thing was planned, carefully planned. The contracts that were secured were, in most cases, the result of competitive tenders, with the exception of the airport contract, with which we have already dealt. With regard to the play rooms, I do not see how you could have 500 children couped up in a hostel without adequate play room space for these children during the long months of the winter, when the area is in darkness and the children cannot play outside.

Mr. NIELSEN: I do not suggest that for a moment, but the gymnasium and the school are 150 yards away.

Mr. ROBERTSON: But could you put 500 children of different sizes in that gymnasium and school and have them play? What do they do when they are off schedule: do they sit on their beds?

Mr. HARDIE: He will mane up the schedule for you.

Mr. ROBERTSON: If there is any criticism, I think the criticism in this respect is that there is not enough play room space, and it is going to be found that those children cannot get enough exercise during the winter period and not enough chance to run and jump, the way they should.

Mr. NIELSEN: I am simply seeking explanations—

Mr. ROBERTSON: You must remember that it is dark most of the time they are there. The dark period is very long up there; you are at 69° north, and there is a lengthy dark period. And even if it is not dark, the temperature is pretty low.

Mr. NIELSEN: I am simply seeking explanations here; I am not suggesting, for a moment, that the play rooms are not a necessity for children; I am just wondering why there have to be five instead of one, because that is what it amounts to—five instead of one.

Mr. ROBERTSON: I think you cannot look at it as five instead of one. I think the question is, how much space is required for the average child living in inside quarters of this kind. Mr. Jacobson might be able to say something on this, out of his experience with regard to schools.

Mr. SIVERTZ: And the school gymnasium is for community use as well as school use.

Mr. NIELSEN: It is for community use?

Mr. SIVERTZ: Yes, the gymnasium in the school. All our schools provide opportunities for community use; this gymnasium, in the evenings, especially.

Mr. NIELSEN: This introduces another element. If that is the case, this would not allow the children to use the gymnasium in the school?

Mr. ROBERTSON: I wonder if Mr. Jacobson could say something to this committee with regard to schools? Mr. Jacobson is chief of the education division.

Mr. J. V. JACOBSON (*Chief, Education Division*): The gymnasium in the school is about the same size as you would require for the day school population, including its use in out of school hours for community and other purposes. The school gymnasium is about the same size as a gymnasium you would build for about 200 or 250 pupils for ordinary use during the day hours. The other rooms in the hostels allow about 26 square feet per pupil, which is less than is normally allowed in Indian Affairs schools in the provinces; they allow approximately 50 square feet per pupil.

But, realizing the cost of construction in the north, we had to economize somewhere, and that was one place. That is a very small amount of space for the number of population who will be in attendance. Then the gymnasium in the school will be used for putting on plays and for community dancing and other community activities of that sort. There is no community hall at present.

Mr. NIELSEN: There is no community hall in Inuvik?

Mr. JACOBSON: No.

The CHAIRMAN: How many pupils are in attendance at the schools in Inuvik?

Mr. ROBERTSON: There are 450. I just got the figures.

Mr. NIELSEN: Thank you very much, Mr. Jacobson.

Mr. MCGREGOR: Mr. Chairman, I have a clipping from the *Gazette* of May 28, in which it says there are 10,341 Eskimos and 6,840 Indians in the Canadian north. I take it that is the area that this project covers. How many white people are there in that area?

Mr. ROBERTSON: The total population of the two territories is about 31,000.

Mr. MCGREGOR: How many civil servants does that include?

Mr. ROBERTSON: I would have to get a figure on that. I will try to do that, if you wish.

Mr. MCGREGOR: Are there that many: are there 16,000 whites up in that country?

Mr. HARDIE: In the whole of the Northwest Territories?

Mr. ROBERTSON: I would take Mr. Nielsen's or Mr. Hardie's figures just as soon as my own.

Mr. NIELSEN: In the Yukon, the total is 13,000; 9,000 whites.

Mr. HARDIE: It is 16,000 total, in the Mackenzie District of the Northwest Territories—16,000 or 17,000.

Mr. MCGREGOR: What is the total population with the exception of civil servants?

Mr. ROBERTSON: I would have to get a figure on that. I do not know, offhand.

Mr. MCGREGOR: In the same clipping it says that government spending on northern administration has jumped from $20,400,000 in 1957-58 to $45 million in 1959-60. Mr. Robertson said, "half of this increase, at least, was going into education". Is it $20,000, or is it $45,000?

The CHAIRMAN: Million.

Mr. ROBERTSON: Million. That quotation, incidentally, is wrong in one respect. I noticed it at the time, but I did not think there was any point in raising it. If the figure is checked—I have not checked it, but I am sure it will be found that this is what I said—what I said was that the total expenditures by the Northern Administration Branch had risen from $20.5 million in 1957-58 to $45 million in the year coming up, 1959-60.

I then went into the major factors in the increase, and I said that the main factor in the increase has been the construction program, of which the largest part has been the road program including roads-to-resources. The half on education came a good deal later, when I was talking about the staff increase in the coming year: I said that approximately half of the staff increase was for education.

Mr. MCGREGOR: You still stick, then, to $34 million as the total cost of this project?

Mr. ROBERTSON: The Aklavik figure, yes.

Mr. COATES: Mr. Chairman, before we break up I was wondering if figures were going to be provided as to the cost of the heating and sewer systems.

The CHAIRMAN: They were put on the record before you arrived here this morning, Mr. Coates.

Mr. COATES: Would it be possible to get the figures of the payments to the Montreal Engineering Corporation?

Mr. ROBERTSON: Yes, Mr. Chairman.

The CHAIRMAN: I think a lot of these questions should be directed to the minister, really. We can have him in the afternoon, and I would suggest, again, that we meet this afternoon, after the orders of the day.

Mr. NIELSEN: Mr. Chairman, I have three questions I would like to put to the departmental officials, which will reqpuire some research, so I wonder if I could put them now? May I be informed, please, of the total federal expenditures on federal works (a) in Yukon, (b) in the Northwest Territories, for as far back as you can conveniently go, up to 10 years?

Mr. ROBERTSON: Up to 10 years?

Mr. NIELSEN: Yes.

The CHAIRMAN: You mean, for each year?

Mr. NIELSEN: For each year.

Mr. ROBERTSON: This is capital costs?

Mr. NIELSEN: The total federal expenditures on federal works, capital cost.

The CHAIRMAN: That will be for all departments of government?

Mr. NIELSEN: Yes, all departments—Yukon and Northwest Territories.

Mr. ROBERTSON: Including military expenditures?

Mr. NIELSEN: Including, but separating them, if you do not mind—separating them by departments.

Mr. ROBERTSON: We will see how far back we can go. I doubt if we can get 10 years, without a great deal of pulling things together. But we will try and get as far back as we can.

The CHAIRMAN: I am wondering about military expenditures. That is another section, Mr. Nielsen, and perhaps you will give that some thought, will you?

Mr. NIELSEN: Yes. My second question is: could you give me the total federal contributions on territorial works in (a) Yukon and (b) Northwest Territories? For instance, where the federal government participates in the construction of a road, in conjunction with the territories.

Mr. ROBERTSON: Just for clarification, you do not want included in that the amounts of the annual grants by the federal government?

Mr. NIELSEN: That is my third question. Could you tell me the total federal contributions to make up any territorial deficits, or in the form of grants paid to the Yukon or Northwest Territories, all for a period of 10 years?

Mr. ROBERTSON: The grants will only go back for the first five-year financial arrangement, and the two years they have been on at present—seven years.

The CHAIRMAN: It will not be very difficult to get that information to the last question. I think we should have the minister here for this meeting, and we will adjourn until after orders of the day; we will say, 3 o'clock.

TUESDAY,
June 2, 1959.
3.30 p.m.

AFTERNOON SITTING

The CHAIRMAN: Gentlemen, you will please come to order. We now have a quorum.

Mr. MARTEL: Mr. Chairman, I would like to make a correction to the record of our proceedings. In issue 23 of May 19, at page 659, line 15, the word "Mistassini" should be "Mattagami". The two lakes are about 200 to 300 miles apart.

Mr. AIKEN: Mr. Chairman, Mr. Fleming and I have been discussing the estimates of the Canadian Travel Bureau. Several representative organizations have indicated their intention to be here. I have provided a list to the chairman and the clerk of the committee. It includes: Mr. Roy Corbett, general manager, Hotels Association of Canada; Mrs. Flora Montgomery, managing director, Canadian Restaurant Association; Mr. Charles Smith, secretary-manager, Montreal Tourist and Convention Bureau; Mr. James M. McAvity, president, Canadian Tourist Association; and Mr. John W. Fisher, executive director, Canadian Tourist Association.

The CHAIRMAN: Is it your wish that we have these people appear before the committee on those days, Monday and Tuesday?

Mr. AIKEN: Well, we did agree to the Monday date, but Mr. Fisher and Mr. McAvity both have to be in Montreal for another meeting on Monday. But they would be able to appear on Tuesday morning. So if it is in order we could proceed on Monday with the general estimates, the departmental

statements, and with the people who then appear, following which Mr. Fisher and Mr. McAvity, representing the more or less senior body of tourist associations in Canada might be heard on Tuesday.

The CHAIRMAN: Is it agreed that we hear these witnesses?

Agreed.

The CHAIRMAN: I was going to say before we got into the estimates that as to this proposed trip for some of the members of the committee it was understood of course a year ago that everyone would not be able to go the first year because of the lack of accommodation. But we must not deactivate the committee before the trip is made, as we did last year.

It means also that the estimates of the department cannot come before the house until we make our final report. So if the trip is to be made we have to consider the accommodation in the northland. And due to the Queen's visit and other events, apparently there is some doubt about proper accommodation except at certain times; so perhaps we can discuss this informally and maybe come to some agreement about trying to arrive at a time we can just leave one item open, and if the time can be scheduled for the trip, that item could be "finalized" upon our return. That is something for the committee to consider.

We have the minister with us now. Mr. Robertson has some information which was asked for by Mr. Hardie, I think.

Mr. ROBERTSON: Mr. Hardie asked for the cost per square foot of the schools at Hay River and Cambridge Bay. I might say that the information on this shows the influence of freight on the cost, because the two schools are roughly of the same type and character.

The one at Hay River, if anything, should be higher. But at Hay River the cost per square foot is $25.30; while for the one at Cambridge Bay, the cost per square foot is $32.50.

Mr. MCGREGOR: Do we have the figures for the white population in that district?

Mr. ROBERTSON: I am afraid they have not been obtained.

Mr. HARDIE: I think what Mr. McGregor really wants is the white population at Inuvick.

Mr. ROBERTSON: No, Mr. McGregor wanted the white population and the civil service population.

Mr. MCGREGOR: I want the white population in the district which Inuvik takes care of. I do not know what that is.

Mr. ROBERTSON: For the civil service total it will take a little while, because we would have to go to each department.

Mr. MCGREGOR: Do you know the white population?

Mr. ROBERTSON: I think I could come pretty close to it. The total population of the Northwest Territories according to the last census was 19,000 in round numbers.

Mr. MCGREGOR: That is the total population?

Mr. ROBERTSON: That is right; and of that number the Indian population is 4,100. We will have to get it for you; I think it was 4,100 Indians; and the Eskimo population would be around 8,000; so that, of the 19,000 you first have 12,000 accounted for as Indians and Eskimos, and 7,000 as white.

Do you want me to give you the figures for the Yukon?

Mr. MCGREGOR: I think I saw some figures in a newspaper which indicated 10,840 Eskimos and 6,840 Indians.

Mr. ROBERTSON: Those figures for the Indian and Eskimo population include Eskimos in northern Quebec. But I will check this.

Mr. McGREGOR: In the area that we are speaking of the total population is 19,000.

Mr. ROBERTSON: In the Northwest Territories it is 19,000 and in the Yukon it is about 12,000.

Mr. McGREGOR: The total population is 19,000?

Mr. ROBERTSON: That is right.

Mr. McGREGOR: And we are spending—what did you say? $36 million on a population of 19,000?

The CHAIRMAN: I think you misunderstand the information. The population that Mr. Robertson is giving you in one instance covers all the Northwest Territories, and in another instance it covers part of Quebec, or Labrador, rather.

Mr. McGREGOR: Labrador would not come under this.

Mr. ROBERTSON: No, Ungava.

The CHAIRMAN: The area you are speaking of is the Aklavik area, and the population there was given to the committee several times; but it could be repeated.

Mr. ROBERTSON: The population of old Aklavik would be 700 permanent population, roughly.

The CHAIRMAN: Do you understand? I think that is the point you are referring to. The old village has 700 people; that includes whites, Eskimos and Indians.

Mr. McGREGOR: Let us get it this way: what is the population that is going to be served by this new village on which we are spending $34 million?

Mr. ROBERTSON: It is going to be the administrative centre for all the lower Mackenzie area, for all the western Arctic, the central Arctic coast, and the inland area from there. Perhaps if I might have a map made available I could show you.

The CHAIRMAN: Yes, that would be better.

Mr. MITCHELL: Can you read a map, Mr. McGregor? I know you cannot read a compass!

Mr. ROBERTSON: To give you an idea at the present time, Mr. McGregor; our main administration for the western Arctic is centred on Fort Smith which is just about there. There is also a sub-district administration at Yellowknife, which is there.

In the Yukon the administration is centred at Whitehorse, which is here. There is no administrative centre north of that line.

The purpose of Inuvik was to get an administrative centre that could serve roughly that area and this area down to about the half way line; and it also serves that development which we hope is going on—which we still hope is going to go in there in the oil and gas area. So that Inuvik is seen as the administrative centre, if you like, for the northern half of the Mackenzie valley and the central and western Arctic coast. That is the real purpose of Inuvik. It is the centre for education, hospitalization, and administration for that area.

Mr. McGREGOR: For how many people?

Mr. ROBERTSON: At the present time, 8,000 say.

Mr. McGREGOR: 8,000 people?

Mr. ROBERTSON: I am only guessing; I would not know for sure.

Mr. McGREGOR: Surely you have some statistics of what the population is in different places?

Mr. ROBERTSON: I can get you the population by census districts. This is all divided into census districts.

The point I was trying to make this morning was it is not contemplated that it is just for the population of today, but for the expectation that there is going to be future development.

Mr. McGREGOR: We all know that, and we all hope that, but we are asking for statistics for today.

Mr. ROBERTSON: I can get the populations by census district. I think that is the best basis.

Mr. HARDIE: Following Mr. McGregor's line, you were building a school in Inuvik for 500 residential pupils; is that right?

Mr. ROBERTSON: Pardon me?

Mr. HARDIE: For 500 residential pupils?

Mr. ROBERTSON: At Inuvik?

Mr. HARDIE: Yes.

Mr. ROBERTSON: Yes.

Mr. HARDIE: You said today, I think, in answer to another question, that at the present time in Aklavik there are 450 pupils?

Mr. ROBERTSON: Roughly.

Mr. HARDIE: So you expect the school will be filled to capacity?

Mr. ROBERTSON: The school will certainly be filled to capacity.

Mr. HARDIE: That is right. Now the hospital that is being built is a 100-bed hospital?

Mr. ROBERTSON: It is 120.

Mr. HARDIE: How many patients are now in the two Aklavik hospitals?

Mr. ROBERTSON: I do not know; we would have to find that out. There would be more than 120 at the present time.

Mr. HARDIE: So you expect, on that basis, that the hospital would be pretty well filled to the 120 bed limit?

Mr. ROBERTSON: It could be more than filled. The present Anglican hospital at Aklavik is a 120-bed hospital.

Mr. McGREGOR: You are making arrangements or preparations to teach 500 children?

Mr. ROBERTSON: Yes, 500 in the hostel, and also the local children.

Mr. McGREGOR: How many are there now?

Mr. ROBERTSON: There are 450.

Mr. McGREGOR: There are 450 there now?

Mr. KORCHINSKI: Did I understand Mr. Robertson to say the new site at Inuvik is to house the administrative offices for the Northwest Territories and the northern portion of the Yukon also?

Mr. ROBERTSON: No, not necessarily. The portion of administration that we have here is the lower half of the Mackenzie area, and all this where the oil and gas interest comes.

Mr. KORCHINSKI: The Yukon administration would be centred around Whitehorse?

Mr. ROBERTSON: Yes, Whitehorse.

Mr. KORCHINSKI: There would be absolutely the minimum, just a few offices, I expect, and their centre would be in Inuvik, and their work would centre in the Yukon?

Mr. ROBERTSON: For the northern Yukon?

Mr. KORCHINSKI: Yes.

Mr. ROBERTSON: The only thing in the northern Yukon that would be administered from the Northwest Territories side would be education for the Indians in the north part of the Yukon. That is only from here, simply because it is more convenient than administering it from the south.

Mr. HARDIE: Following up the questions I asked regarding the hospital and the school, was it the department's feeling that the schools in Aklavik in 1954, in old Aklavik, would have to be replaced?

Mr. ROBERTSON: I mentioned at the outset the adverse report we have had from the fire marshal about the existing public school in Yellowknife; and, as I said at that time, the present church schools in Aklavik are far older and far worse fire traps than the public school in Yellowknife.

Mr. HARDIE: The same would be true of the hospitals?

Mr. ROBERTSON: Yes.

Mr. HARDIE: In that event, taking the difference in the cost factor of the building, it would necessarily then have cost more money to build the same type of hospital at Aklavik, because you have to insulate the permafrost much more, than at Inuvik. The same would be true in regard to the schools. At least, the construction cost would be the same, if not more?

Mr. ROBERTSON: The main difference in cost would be the difference in services. It would cost more to put sewer and water services in at Aklavik than it would at Inuvik.

Mr. HARDIE: And three times as much to put in an airport, as we found out this morning?

Mr. ROBERTSON: It would certainly cost more.

Mr. GUNDLOCK: A point I think should be raised is that in the northern allowance one of the main points was the lack of facilities in the north. I wonder if Mr. Robertson would care to point out the facilities that are still lacking, perhaps by way of comparison to the facilities in the new community and, shall we say, the average centre in the north?

Mr. ROBERTSON: The facilities that will be lacking in the new community will not be very many.

These are among the considerations that go into the allowance—I have forgotten all of the factors. I do not know whether Mr. Sivertz knows them; he is not here at the moment. The factors that go in, as I recall them, are remoteness from transportation; remoteness from hospital and school facilities; whether it is inside or outside the tree line; whether there are doctors and so on, available.

Are there other factors, Mr. Sivertz, in the northern allowance? There is, of course, the cost of living.

Mr. SIVERTZ: There are churches; whether there is mail service; retail stores; movie or other recreational facilities.

Mr. ROBERTSON: The result of it all is that at a place like, say, Spence Bay, which has almost no facilities, the northern allowance may be quite high; whereas at a place like Inuvik it would be substantially lower; and at a place like Yellowknife, a good deal lower still. At Whitehorse it is low, and it is in Hay River where we have been getting considerable complaints about the level of the northern allowance. It varies from about $400 a year to a high, in the remote Arctic islands—where there are no facilities and a long period of darkness—of $2,100 for a married man with a family. At Inuvik it is $1,500.

Mr. WOOLLIAMS: I think the deputy minister was getting out some data at the time the question was put by Mr. McGregor, but Mr. McGregor left the impression—and I do not know what the deputy minister's answer to it was—that $36 million was being spent in reference to a population of 18,000; but I understand his answer is that is part of the development process up in that area.

Mr. ROBERTSON: But the deputy minister said the population was not 18,000 but 8,000 at the present time. We are spending $36 million on 8,000 people.

Mr. WOOLLIAMS: We are spending $36 million on the development of the north, are we not?

Mr. ROBERTSON: That is my view, Mr. Woolliams.

Mr. HARDIE: On the question of isolation and northern allowances, has the department made any representations to Treasury Board in regard to the discriminatory allowance that is paid to civil servants in Hay River as compared to civil servants in other parts of the Northwest Territories?

Mr. ROBERTSON: Yes.

Mr. HARDIE: What is the result of these investigations?

Mr. SIVERTZ: This has been referred to Treasury Board, who set the rates of the allowances, and is being considered at this time.

Mr. HARDIE: Did the department give to Treasury Board an idea of the differences in the costs of transportation in the north, or did they leave this up to the persons in the field?

Mr. SIVERTZ: No. Treasury Board have their own sources of examining this information.

Mr. HARDIE: When was the latest report received by the department in this respect from Treasury Board?

Mr. SIVERTZ: The latest communication from Treasury Board?

Mr. HARDIE: Yes.

Mr. SIVERTZ: I cannot answer that.

Mr. F. J. G. CUNNINGHAM (*Assistant Deputy Minister, Department of Northern Affairs and National Resources*): Within the last week we made an inquiry and learned that the investigations made by Treasury Board are not complete but are going on. We expect to have the investigations finished by the end of this month.

Mr. HARDIE: I would certainly hope so. I understand there is a man from D.B.S. who was to go to Hay River last weekend. I hope the department will press them for a decision before the end of this month.

Mr. CUNNINGHAM: That is the investigation I was referring to but did not feel at liberty to mention.

Mr. MARTEL: Was there any allowance paid to contractors for their machinery up north in that area? Was there any allowance paid for machinery and equipment which was taken up north in that area by the contractor in order to do the work?

Mr. ROBERTSON: It was done on a contract price basis.

Mr. MARTEL: Would the people who have the contracts have to get their machinery there by themselves?

Mr. ROBERTSON: I think Mr. Connelly should answer this.

Mr. CONNELLY: The contractors either rent their equipment or bid on a contract price, or firm price, lump sum basis. Consequently any cost of getting their equipment to the site is included in the charges in their tender.

Mr. MARTEL: I understand that some of the equipment was bought by the department. I think we have it here in the answer to the question asked by Mr. Coates.

Mr. CONNELLY: That was government equipment.

Mr. MARTEL: Did you rent some of that equipment to the contractors? Was some of that equipment rented to the contractors in there, or was it used mostly by the government?

Mr. CONNELLY: I cannot answer that. I think so.

Mr. MCFARLANE: Could Mr. Robertson give me any figures on the cost of the school, the hostels and any other facilities in connection with the educational program up there?

Mr. ROBERTSON: We tabled that.

Mr. MCFARLANE: I am looking for the total cost. Could you give me that in round figures?

Mr. ROBERTSON: Do you mean at Inuvik?

Mr. MCFARLANE: All right. Take that as an example.

Mr. ROBERTSON: Those were returned the other day.

Mr. MCFARLANE: I am sorry; I do not mean the total. There were figures of schools and hostels, but there are other facilities also in connection with that.

Mr. ROBERTSON: This is Inuvik. The figure for the school is $1,725,750. One of the hostels is $1,847,600 and the other is $1,842,000.

Mr. MCFARLANE: Mr. Chairman, could I ask Mr. Robertson about what would be the approximate operating cost of the school on a yearly basis? Have you any figures at all on that?

Mr. ROBERTSON: We do not have it at this stage. However, I could give you the figures of the over-all average cost in the territory.

Mr. MCFARLANE: I am looking for a round figure. I do not wish any detailed figure.

Mr. ROBERTSON: The average cost per pupil of operating in the Northwest Territories is about $375 per year.

Mr. MCFARLANE: We received some figures the other day which showed there were 729 children between the ages of 5 to 14 and 937 between the ages of 15 to 19.

Mr. ROBERTSON: That is roughly right.

Mr. MCFARLANE: Have you any idea of what percentage of success you are having with those who are attending school in that area? How many of them go on?

Mr. ROBERTSON: Up until now there has not been a high proportion of Indian or Eskimo children getting education. We are now moving to the point where there is a substantial proportion receiving education; but there are very few who have received education up into the higher grades. A good deal of our experience on this is still to come. However, judging from what there has been so far we have no reason to be at all concerned about the Eskimo children going on to higher education and vocational training. I think they are doing quite well, and I believe the same this also applies to the Indians.

To my mind, actually the Northwest Territories is going to be the first area in Canada where we are likely to see a complete obliteration of racial lines, which have an economic consequence. I suspect that in a few years you will see the Eskimos and Indians are receiving the same kind of education and vocational training and ending up in the same kind of jobs as the others.

Mr. MCFARLANE: In view of the terriffic cost, both of building schools up there and also in the time involved, has any consideration been given to bringing the students out so that eventually they will be absorbed in our Canadian economy. I am going by the Indians in my own area. I realize this is not included in our discussion, but I will use it as an example. We spend thousands of dollars in building beautiful schools there for the Indians, and they go to the schools. Only a small percentage of them ever go on to higher education.

We are segregating them. I feel perhaps there is the same situation up there, and that we might be further ahead if we brought these students out to become absorbed in our Canadian economy.

Hon. ALVIN HAMILTON (*Minister of Northern Affairs and National Resources*): The answer I have is a very short one. The difference between the settled area of Canada and the north is we think, we will need everybody we can to fulfil the economic functions which are coming in the north, not only in the camp phase, but later on in the development of orthodox parts of the economy operating in the north.

It is my opinion, and I believe the opinion of many others, that the Indian and Eskimo are the peoples best qualified to do that type of work. In the case of Rankin Inlet, they have demonstrated their superiority over the white man in working in the mining operations there. It is expected that in the Ungava operation they will also demonstrate their superiority there. Therefore, rather than bring these people out, my thought is, how can we get more people in.

My thoughts have ranged over the type of people most suitable for northern work. To some people it is not attractive. Some of them who are up there for a few years get the love of it and like to stay. Certain people love it in there and others do not. I think it would be to our advantage as a government to provide educational facilities in an area where they live and where they will continue to live. There will be no segregation whatsoever because that is one of the high notes of the report made by the deputy minister, that the whites, Indians and Eskimos go to the same schools and have equal economic opportunities in these jobs. I think we will be setting a precedent for the rest of Canada. But rather than moving them south, I am more concerned with getting people moved in; I think this is best for our economy.

Mr. KORCHINSKI: How much technical training can we possibly afford in the area, as opposed to purely academic training: that is to say, what type of training can we give these Eskimos and Indians in particular that will suit them for these jobs later on?

The CHAIRMAN: That was covered very fully by the minister and deputy minister the other day. He gave many illustrations, and I do not think we need repeat the information. That is on record.

Mr. COATES: In this regard, we have examples of Indian, Eskimo and white children all going to the same school?

Mr. ROBERTSON: Oh, yes.

Mr. COATES: And in those places, what has been the feeling of the teachers who have taught the three different groups: have they found one group is as able to absorb the information taught to them as the other?

Mr. ROBERTSON: The only direct example I can recall specifically at this moment is that I asked a teacher who had Eskimos, Indians and whites in her class at Aklavik, what her reaction was. She said—as I recall it—that she thought in the case of the Indians and whites, they were roughly equal; in the case of the Eskimos, she thought they were better.

Mr. COATES: Further on that line, it would appear that the recent Eskimo group came here and indicated their desire to obtain more education. If the desire is there, then we really have not any worry at all about these people: as long as they have a desire to obtain further education and jobs—vocations—then if we provide them with the facilities, we are going to get them integrated into our type of life without any difficulty at all. Would that be a fair assumption?

Mr. ROBERTSON: I think that is correct. The theme that ran through the Eskimo affairs committee meeting the other day—as I mentioned; I do not know whether you were here at the time—was that what is needed is more education, to give them a chance. This is the thing they all said.

Mr. HAMILTON (*Qu'Appelle*): May I put a word in here, Mr. Chairman? I have not been to all the sessions; but I have one observation to make. One of the things I was struck with was the high costs when I first came into the department. I then learned that all the costs shown here are capital and operating costs combined. When we build a school or a hostel in a community in settled parts of Canada, all you see is the operating cost and maintenance, plus an amount for depreciation to work off the cost of the building over 20 or 30 years.

Here, all the costs are dumped in the year of construction, which gives a very inflated value to the cost. If we could take out all the capital cost, and just take one-twentieth or one-thirtieth of it, we would have a better idea of what these costs are in comparison.

The CHAIRMAN: Gentlemen, the house leader has asked that the committee adjourn; you are wanted in the house.

Mr. HARDIE: You are asking for the Conservative members to adjourn? We can carry on.

The CHAIRMAN: I wish you could, Mr. Hardie, then we might be able to wind up this meeting.

Mr. HARDIE: If I had my way, we could.

The CHAIRMAN: We will wind it up on Thursday morning at 9.30. The meeting is adjourned until Thursday morning at 9.30.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 31

RECEIVED
JUN 15 1959
LIBRARY OF PARLIAMENT

THURSDAY, JUNE 4, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; Mr. F. J. G. Cunningham, Assistant Deputy Minister; Mr. B. G. Sivertz, Director, Northern Administration Branch; G. W. Rowley, Secretary, Advisory Committee on Northern Development; A. B. Connelly, Chief, Engineering Division; and Mr. G. B. Williams, Chief Engineer, Development Engineering Branch, Department of Public Works.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21376-9—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Argue,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

ORDER OF REFERENCE

HOUSE OF COMMONS,
WEDNESDAY, June 3, 1959

Ordered,—That the name of Mr. Argue be substituted for that of Mr. Fisher on the Standing Committee on Mines, Forests and Waters.

Attest

LEON J. RAYMOND,
Clerk of the House.

21376-9—1½

MINUTES OF PROCEEDINGS

THURSDAY, June 4, 1959.
(38)

The Standing Committee on Mines, Forests and Waters met at 9.30 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Argue, Baskin, Coates, Dumas, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, Hardie, Korchinski, Martel, Martineau, McGregor, McQuillan, Murphy, Nielsen, Payne, Roberge, Simpson, and Woolliams. (19)

In attendance, of the Department of Northern Affairs and National Resources: Messrs. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; F. J. G. Cunningham, Assistant Deputy Minister; B. G. Sivertz, Director, Northern Administration Branch; A. B. Connelly, Chief Engineering Division; G. W. Rowley, Secretary, Advisory Committee on Northern Administration; J. V. Jacobson, Chief, Education Division; G. M. Carty, Chief Administrative Officer; D. W. Bartlett, Executive Officer; M. A. Currie and G. H. Montsion, Administrative Officers; and E. R. Stimpson, Northern Administration Branch.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Items 275 to 280 relating to the Northern Administration Branch.

Mr. Robertson produced answers to certain questions which had previously been asked. Copies thereof were distributed and the said answers were ordered to be printed in the record of this day's proceedings.

Mr. Robertson, using maps, made a statement in which he compared northern development in Canada with that in the U.S.S.R.; he was questioned thereon. Certain questions were referred to Mr. Rowley and were answered by him.

Questions were also asked on other matters relating to the said estimates, in particular in regard to education in the North and on road construction.

At 11.30 o'clock a.m. the Committee adjourned until 3.00 o'clock p.m. this day or as soon thereafter as routine proceedings in the House are finished.

AFTERNOON SITTING

THURSDAY, June 4, 1959.
(39)

The Standing Committee on Mines, Forests and Waters at 3.50 o'clock this day resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, and continued on Items 275 to 280 relating to Northern Administration Branch.

Mr. J. W. Murphy, the Chairman, presided at the opening of the meeting; he withdrew from the meeting at 3.52 o'clock p.m., whereupon Mr. Coates assumed the Chair.

Members present: Messrs. Cadieu, Coates, Fleming (*Okanagan-Revelstoke*), Hardie, Korchinski, McGregor, McQuillan, Mitchell, Murphy, Payne, Simpson, and Slogan. (12)

In attendance: The same as at the morning sitting with the exception of Messrs. Cunningham and Carty, and with the addition of Mr. J. I. Nicol, Assistant Chief, Engineering Division, Northern Administration Branch, and Mr. G. B. Williams, Chief Engineer, Development Engineering Branch, Department of Public Works.

The Committee unanimously agreed that Mr. Argue be substituted for Mr. Fisher on the Subcommittee on Agenda and Procedure.

Officials of the department and Mr. Williams of the Department of Public Works were questioned on matters arising out of the said items, in particular in regard to road construction and tenders therefor.

At 4.07 o'clock p.m., the bell having rung to summon Members to the House, the Committee adjourned until 9.30 o'clock a.m. Friday, June 5, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

THURSDAY, June 4, 1959.
9.30 a.m.

The CHAIRMAN: Gentlemen, we now have a quorum. Mr. Robertson has some returns to questions asked the other day. The deputy minister has them now and they will be incorporated in our proceedings.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, these are the returns. The first one is an answer to a question asked by Mr. McGregor for the population of the Northwest Territories in the various administrative census districts.

NORTHERN AFFAIRS AND NATIONAL RESOURCES

POPULATION—YUKON AND NORTHWEST TERRITORIES

Because of the time-lag between censuses, the nomadic character of the native peoples and other similar factors, it is difficult to provide accurate up-to-date population statistics for the Northwest Territories and the Yukon.

A reasonably accurate estimate, however, is as follows:

	Eskimos	Indians	Whites	Total
Northwest Territories	7,781	4,440	7,500	19,721
Yukon Territory	9	1,850*	11,141	13,000

*In addition to the 1850 Indians in the Yukon, there are approximately 750 Indians in northwest British Columbia at Atlin and Telegraph Creek who come under the jurisdiction of the Superintendent of the Yukon Agency, Indian Affairs Branch, Department of Citizenship and Immigration and whose children attend school in the Yukon.

Attached are three tables giving the following additional information:

Table I—Northwest Territories—Total population by registration districts according to 1956 census (D.B.S.).

Table II—Yukon Territory—Total population by registration districts according to 1956 census (D.B.S.).

Table III—Eskimo population by registration districts, including Northern Quebec. April 1959.

NORTHERN AFFAIRS AND NATIONAL RESOURCES

TABLE I

NORTHWEST TERRITORIES

Total population by registration districts according to 1956 census.

District of Mackenzie

W. 1 (pt)	Cambridge Bay	Queen Maud Gulf (pt) or Perry River dist. (pt.)			8
W. 2 (pt)	Coppermine	Coppermine River and Coronation Gulf dist.			462
W. 3 (pt)	Aklavik	Aklavik and dist.	1,445		
		Points on coast from Richards Island to Pearce Point	384		
					1,829
W. 4	Arctic Red River	Arctic Red River	140		
		Fort McPherson and dist.	130		
					270

NORTHERN AFFAIRS AND NATIONAL RESOURCES—*Continued*

W. 5	Fort Good Hope	Fort Good Hope and dist.		309
W. 6	Fort Norman	Fort Norman and dist.	456	
		Great Bear Lake (pt.) or Fort Franklin	196	
				652
W. 7	Port Radium	Great Bear Lake (pt.) or Port Radium and Cameron Bay		477
W. 8	Fort Simpson	Fort Wrighley and dist.	109	
		Fort Simpson and dist.	615	
		Fort Liard and dist.	265	
				989
W. 9	Fort Providence	Fort Providence and Sett.	380	
		Hay River Sett.	942	
				1,322
W. 10	Fort Resolution	Fort Resolution and dist.		799
W. 11	Fort Rae	Fort Rae and dist.	827	
		Yellowknife reserve	120	
				947
W. 12	Reliance	Reliance and dist.		164
W. 13	Yellowknife	Yellowknife Sett. area		3,100
W. 14	Fort Smith	Fort Smith and dist.		1,164
		DISTRICT OF MACKENZIE—TOTAL		12,492

District of Franklin

E. 3 (pt)	Chesterfield	Chesterfield Inlet and dist. (pt.) or Melville Peninsula		88
E. 4 (pt)	Spence Bay	Boothia Peninsula	148	
		North Somerset Island	35	
		Queen Maud Gulf (pt.) including King William Island	66	
				249
E. 5	Pond Inlet	Baffin Island, North coast	433	
		Baffin Island, Northwest coast	582	
				1,015
E. 6	Pangnirtung	Baffin Island, East coast		663
E. 7	Lake Harbour and Frobisher Bay	Baffin Island, south coast (pt)		1,076
E. 8 (pt)	Fort Chimo	Baffin Island, south coast (pt) or Port Burwell		16
W. 1 (pt)	Cambridge Bay	Victoria Island (pt)		889
W. 2 (pt)	Coppermine	Victoria Island (pt)		229
W. 3 (pt)	Aklavik	Banks Island (pt.)		9
	Other parts, or islands situated north of above areas			174
		DISTRICT OF FRANKLIN—TOTAL		4,408

District of Keewatin

E. 1	Eskimo Point	Chesterfield Inlet and dist. (pt)	467
E. 2	Baker Lake	Baker Lake and dist.	450
E. 3 (pt)	Chesterfield	Chesterfield Inlet and dist. (pt.)	822
E. 4 (pt).	Spence Bay	King William Island and North	308
E. 9 (pt)	Port Harrison	Islands in Hudson Bay and James Bay, including Cape Smith	323
W. 1 (pt)	Cambridge Bay	Queen Maud Gulf (pt) or Perry River dist. (pt)	43
		DISTRICT OF KEEWATIN—TOTAL	2,413

SUMMARY

District of Mackenzie	12,492
District of Franklin	4,408
District of Keewatin	2,413
Total population—Northwest Territories	19,313

NORTHERN AFFAIRS AND NATIONAL RESOURCES—*Concluded*

TABLE II

YUKON TERRITORY

Total Population by Registration Districts According to 1956 Census

DAWSON AND MAYO AREAS		
Glacier Creek and Fortymile Areas	36	
Granville, Bonanza Basin, Klondike, Valley and Eldorado areas	519	
Yukon and Stewart River areas	57	
Mayo and Keno areas	959	
		1,571
FORT SELKIRK AND ROSS RIVER AREAS		
Carmacks and dist. and MacMillan River areas	279	
Champagne, Whitehorse and Carcross Areas (pt)	282	
Fort Selkirk and dist., and White River area	198	
Teslin and Ross River areas (pt)	198	
		957
OLD CROW AREA		
Herschel I. and dist.	25	
Other parts	197	
		222
WHITEHORSE, TESLIN AND WATSON LAKE AREAS		
Champagne, Whitehorse and Carcross Areas (pt)	4,999	
Teslin and Ross River Areas (pt)	771	
		5,770
DAWSON CITY		851
WHITEHORSE CITY		2,570
MAYO TOWN		249
Total population—Yukon Territory		12,190

TABLE III

ESKIMO POPULATION BY REGISTRATION DISTRICTS INCLUDING NORTHERN QUEBEC. APRIL 1959

W. 1	Cambridge Bay	Queen Maud Gulf (pt) or Perry River Dist. (pt)	302
W. 2	Coppermine	Coppermine River and Coronation Gulf dist.	725
W. 3	Aklavik	Aklavik and dist. Points on coast from Richards Island to Pearce Point	1,404
E. 1	Eskimo Point	Chesterfield Inlet and dist. (pt)	488
E. 2	Baker Lake	Baker Lake and dist.	393
E. 3	Chesterfield	Chesterfield Inlet and dist. (pt) and Southampton Island	884
E. 4	Spence Bay	King William Island and North	524
E. 5	Pond Inlet	Baffin Island, North and Northwest coasts	1,203
E. 6	Pangnirtung	Baffin Island, east coast	729
E. 7	Lake Harbour and Frobisher Bay	Baffin Island, south coast (pt)	1,129
E. 8	Fort Chimo, P.Q.	Baffin Island, south coast (pt) Port Burwell and Ungava Bay area	855
E. 9	Port Harrison, P.Q.	West coast of Northern Quebec	1,854
			10,490

Mr. ROBERTSON: Another one is in answer to a question asked by Mr. McGregor concerning the 1959 expenditures at Inuvik by all federal departments.

ANSWER TO QUESTION ASKED BY MR. MCGREGOR IN THE COMMITTEE ON MINES, FORESTS, AND WATERS.

Question: What amount will be spent in 1959-60 at Inuvik by all federal departments?

Answer: Provision has been made in the 1959-60 Estimates of the following federal government departments and agencies for capital expenditures in the amounts listed below:

Department of Public Works	$ 1,718,000
Department of Northern Affairs and National Resources	1,524,000
Department of National Health and Welfare	1,250,000
Department of Transport	828,000
Department of National Defence (Navy)	490,000
Department of Justice (RCMP)	290,500
Northern Canada Power Commission	1,000,000
	$ 7,100,500

Mr. ROBERTSON: And a third one in answer to a question asked by Mr. Coates concerning the contract with John A. MacIsaac Construction Company for the Mayo River bridge.

COMMITTEE MEETING ON LANDS, MINES AND FORESTS HELD 1 JUNE, 1959

Question of Mr. R. C. Coates, M.P., re Mayo River bridge

1. The contract with John A. MacIsaac Construction Company was for construction of a 100′ steel pony truss, plus the construction of 400′ of bridge approaches.

2. Contract unit prices are as follows:

Description and Unit	Contract Unit Price
Borrow Excavation cu. yds.	$ 1.50
Common Excavation cu. yds.	5.50
Furnishing 40′ Timber Piles lin. ft.	5.50
	1.00
Driving Timber Piles lin. ft.	2.00
Concrete cu. yds.	75.00
Reinforcing Steel lbs.	.70
Superstructure	96,000.00 Lump Sum
Demolition of Existing Bridge	1,200.00 Lump Sum
Hand Placed riprap cu. yds.	20.00
Gravel Surfacing cu. yds.	2.50
Crib Abutment MFBM	287.00
Backfill for cribs cu. yds.	8.00
Supplying Sheet Piles lin. ft.	9.50
Driving Sheet Piles lin. ft.	7.90
Paint Sheet Pilings per sq. yd.	1.80

The CHAIRMAN: Is it agreed that these answers be printed in our proceedings?

Agreed.

Mr. WOOLLIAMS: In view of the discussion yesterday and of the department spending several million dollars with respect to schools and hospitals for Eskimos and others in the northland, and in view of the recent trip to Russia

by Dr. Cyril James, president of McGill university, and his remarks concerning education in the U.S.S.R., perhaps the deputy minister may have some information as to what the Russians are doing for the Eskimos in the northland, and he might compare it with what they are doing in reference to their schools and their hospitals and other facilities, such as educational facilities in reference to Eskmos.

The CHAIRMAN: I shall ask the deputy minister to reply.

Mr. ROBERTSON: Well, Mr. Chairman, we had notice that Mr. Woolliams might raise this question this morning. As a result we got together as much information as we have, and some maps. I thought it might be of interest to the committee to range a little more widely afield and perhaps to outline something of what we know about what the Russians are doing in the north, more generally.

I do not know if the committee would like to have something of that kind or not.

The CHAIRMAN: I think it would be of value for the committee to have it. Mr. Stearns was also interested in this question. Please go on.

Mr. ROBERTSON: Mr. Chairman, the two maps which you see here are maps which we have prepared in the Department of Northern Affairs to assist us in trying to grasp the Russian situation and to see how it compares with our situation, and what we can learn from Russian experience which would be applicable in our own case in the north.

The reason for looking particularly at what the Russians are doing is that Russia and ourselves are the only countries in the world which have a substantial Arctic and sub-Arctic area for development.

If you put these two maps, one on top of the other, in reverse, they would form a complete polar projection; so you can see from this that Canada and the Soviet Union divide between them virtually all the Arctic and sub-Arctic area in the world. There is a small amount in Alaska, proportionately small; and Greenland, but it is mostly icecap.

In Europe conditions are completely different because of the influence of the Gulf Stream. So that for all practical purposes the Soviet Union and ourselves have all the Arctic and sub-Arctic area for development. Therefore we feel we can learn a great deal from studying what the Russians are doing and what they have done.

These maps are on exactly the same scale; and the first thing that strikes one, of course, is the very much larger area in the Soviet Union north of the 60th degree, which we have taken arbitrarily as the dividing line, than there is Canada, north of the 60th degree.

In actual fact the Soviet area north of the 60th degree is approximately equal to the entire area of Canada. That is the area they are developing at the present time, just as we are setting about to develop the northern part of Canada.

There are a lot of similarities between the two areas, and a lot of differences. On this map, as I say, this is the 60th parallel. You will notice the green line. That green line is the line which marks the point where in July the average temperature is 60 degrees. I mean the average high temperature. In the Soviet Union that green line runs quite far north, but in Canada it runs a long way south. It is south of the 60th parallel, except here, where it ducks up north of it.

The significance of this is that the Soviet Union has a climate which extends farther north and which is suitable for agricultural development, and for commercial forestry development, and you see the result of it somewhat in the location of the tree line. The tree line in the Soviet Union is this thin line

which runs quite far north. But the tree line in Canada dips a long way south, more or less parallel to the 60th degree isotherm. So the Russians probably have possibilities for agriculture and commercial forestry, because of a climate that we do not have.

There is a further factor, a difference that is important, and that is that the northern part of the Soviet Union did not have anything like the degree of glaciation that the northern part of Canada had. I do not think we fully realize that the Canadian shield is almost unique in the world—this vast area where all the soil was scraped off by the glaciers.

In the Soviet Union there is no comparable area of that kind. There is a soil cover for almost the entire northern area there. The result is that between their favourable summer climate and the presence of soil, they have a far greater commercial forestry area in the north and, as I have already mentioned, greater agricultural possibility in the north.

On the mineral side, there is not the same disparity. In our development of the north it has been recognized that transportation is the crucial thing. Development is impossible without getting transportation facilities in, and without getting the costs of transportation down.

In the case of the Soviet Union, exactly the same thing applies and they have been working on transportation in exactly the same way but to a very far greater extent, but for the same reasons that we are working on it.

A good deal has been heard of the northern sea route in Russia. The northern sea route operates mainly out of Archangel and ports on the White Sea. It extends all the way across the Arctic coast of the Soviet Union. We have no precise figures on exactly how many vessels use it per year, but there is a large number of vessels using it and visiting ports at various places along the Arctic coast.

In addition to that they have developed river transportation in much the same way that we have developed river transportation on the Mackenzie. The red line here is the Mackenzie River system, and you will notice we have the rail transportation coming to its upper end at Fort McMurray.

In the same way for the Soviet Union you have an east-west rail system, and you have rail transportation coming to the ends of the main river systems. The principal difference is that we have one Mackenzie, and they have three Mackenzies.

This is the far western river, the Ob; it has contact with rail at two points. Then the Yenisei has contact with road, and there is road connection there, and finally, the Lena, where a new railway was built just a few years ago to link up with it. So there are three river systems which are used in Soviet development. That is one important difference between us.

Our rail-river system is less practicable because most of the rail connection at Waterways navigation is broken by rapids between Fort Fitzgerald and Fort Smith. But in the Soviet Union all these river systems are navigable as lines of transportation through to the Arctic ocean. As a matter of fact, that was the reason this railway line was built.

Previously the river transportation started farther south; but later a rail line was built in here, and now it is free to the sea.

According to information we have, the cost of transportation and of the facilities for transportation by rail and river are much lower, and the facilities are better using rail and river here than they were using the northen sea route. But we do not have completely conclusive information on it.

In addition to the rail-river system, the Soviet Union has done a great deal in the construction of roads as well. Most of them do not show on this map because we could not get too much on it without getting into difficulty. In the Soviet far-east there are substantial road systems that go out from the port of Magadan, on the sea of Okhotsk, and link up the main mining and other industrial areas.

The major rail project that they have carried out in their far north is this rail line from Kirovsk to Vorkuta. This is a very substantial mining area, and also there is some oil in that general region.

Roughly, those are the measures that have been taken, as far as we have information on them, by the Soviet Union for development.

The Soviet Union is a long way ahead of us in northern developments, and we might as well recognize that fact. Part of the reason they are ahead is that they have been living in their north for much longer than we have, in the vicinity of Archangel and on the White Sea—they have been living there since about the eleventh century.

Mr. WOOLLIAMS: This may be an unfair question to ask, but would you have any idea of the population in Russia that exists north of the 60th parallel?

Mr. ROBERTSON: Yes, I was going to come to that in just a moment, Mr. Woolliams.

Mr. WOOLLIAMS: All right.

Mr. ROBERTSON: They are a good deal ahead of us, on the whole. The native population—that is, non-Slav population—north of 60 degrees, is roughly 700,000; whereas our native population north of 60 degrees is, say 20,000—something of that kind. As to the total population—and here we get some indication of the success that they are having with their development program—north of 60 degrees in 1926 the population was 1,900,000, and most of that was in the European part. In the 1930's, really, their major development effort in the north started. In a sense, you can say they have had their backs into it about twenty years longer than we have. In 1939 the population was 3,800,000, so it had doubled from 1926 to 1939. In 1947 the population was 4,200,000.

We have no accurate figures for the population since 1947, but presumably it is somewhere around 5 million or upwards of 5 million.

Mr. COATES: Have you any idea how many of those are there although they do not want to be there?

The CHAIRMAN: Let us leave the questions until the end of Mr. Robertson's statement, gentlemen, please.

Mr. ROBERTSON: Perhaps I might say that our information is that, while there are some people there on the basis of, well, for sins, to a large extent the people are there more or less on basic economic incentives; there are higher wages, and economic incentives make it attractive to move into these areas.

The rate of growth, of development, is shown more clearly when one looks at the population of some of the cities. I can give you a few examples of that. Murmansk, which is a port, in 1926 had a population of 8,777; in 1940 it was 160,000. Kirovsk, the centre of a mining area, in 1930 had a population of 5,000, and in 1944, 150,000. Archangel, in 1926, had a population of 77,000; and in 1959, 281,000. Vorkuta—this is the place I mentioned at the end of the rail line, the centre of a mining area—in 1936 the population was 1,000; and in 1947, 30,000. Igarka—that is a port on the Yenisei river, mainly for lumber shipments—in 1928 the population was 43; and in 1941, 30,000. Norilsk is the sort of dream that everybody hopes for in northern development; it has coal and some evidence of oil, copper, nickel, practically everything you want, in the general area. It was founded in 1935. In 1944 the population was 30,000; in 1956, 92,000; and in 1959, 150,000. That is the population for Norilsk, which is 70 degrees north.

There are other centres one could refer to, to show the growth that has taken place in the last few years under the northern development program there.

For purposes of comparison, in our case north of 60 degrees, as you know, we have only two communities over 3,000, Whitehorse and Yellowknife; and we have only one community in the Arctic circle over 200, namely Aklavik or Inuvik, or as it will be.

For administrative purposes, in their northern development, according to our information, the area is divided for economic administration into nine administrative areas, with corresponding administrative centres. At the present time we really only have two administrative centres, as I mentioned, Whitehorse and Forth Smith; and we are going to establish two more at Inuvik and Frobisher Bay. So we will be increasing our administration scope in a somewhat similar way.

As to resources, up in the Soviet north, they have a much wider range, in large quantity, than we have, as far as we can determine. In the first place, they have substantial commercial fisheries in the west. About one-fifth of the total Soviet catch of commercial fish comes from the Arctic coast region, mainly in the west. As to timber, I have already mentioned they have a larger soil cover area and more equitable summer climate. The figures are staggering. They have 27 per cent of all forest lands of the world, according to our information; and 54 per cent of the coniferous resources, the coniferous forests in the world. Quite a large part of that is in the northern area.

In minerals the resources, again, are very extensive and very wide. I mentioned the Vorkuta area, where there is coal. In addition to that, they appear to have substantial coal deposits in the Lena and Kolyma river valleys, farther east.

With regard to oil, the only area commercially producing oil at the present time is the Ukhta area, but there are oil and gas indications in other areas in the north. Also on the lower Yenisei and lower Lena there are indications of probable commercial production that can be developed.

Of metallic minerals, there is a substantial area around Petsamo and Kirovsk. And the Ural mountains have, again, a wide range of metallic minerals.

In central Siberia, the Yenisei valley is chiefly notable for gold, but around Norilsk they have practically everything—coal, copper, nickel, gold and platinum. They are all more or less in one pocket, and so they have a metals combine at Norilsk, with a nickel smelter, with a very large development. The size of Norilsk, which was founded in 1935, is now about 150,000.

In eastern Siberia there is gold, industrial diamonds, tin and other metallic minerals.

I think that fairly well covers the resource aspect and the transportation aspect.

Perhaps I ought to say something about research. As has been mentioned in this committee earlier, when the Department of Mines and Technical Surveys was under consideration, the amount of Soviet research in the north is exceedingly impressive. They have done far more than all the rest of the world put together.

I came across a quotation in a book by Mr. Terence Armstrong, who is an expert on the Soviet north and has visited there many times. This book is entitled *The Russians in the Arctic*, and this extract is taken from page 175. This was about his concluding comment:

> The overriding impression with which we are left is of an interest in the Arctic exceeding that of any other nation, and competently served by a small army of trained enthusiasts (in 1956 Glavsevmorput employed 35,000 people). It is the preponderance in trained manpower which presents the most striking contrast with the West. Few of the things the

> Russians are known or thought to do in their Arctic are new or incomprehensible to specialists in the West; but they may have five hundred men able to do a particular job where the West has five. Their interest, supported by the trained specialists, is now being extended with apparent success to the Antarctic. In a world in which the importance of the polar regions cannot but increase, this is a major force to be reckoned with.

There is nothing new in this, it simply reinforces what we have known from other sources.

Their scientific work has been exceedingly extensive, exceedingly good, and coordinated and centralized by The Arctic Institute in Leningrad—I think it is that institute—and scientific establishments set up throughout the north. As everyone in the committee knows, they have done very extensive work in the Arctic basin. That is still going on.

They have done extensive work in northern agriculture, and they seem to be shifting their concentration rather away from ordinary field crops to specialty food crops, which is probably economic sense.

On transportation they have done a good deal of research, and it is certainly our feeling that there is probably a good deal that we could learn from Soviet experience, because they have a good deal more experience in the north—in engineering, construction and other things of that kind—than we have. We do not know exactly how much they are spending on this; we do know it is a great deal.

One figure that has been mentioned—and I would not for a moment say it is completely authoritative—is that about 4 per cent of their G.N.P. is going into northern development. If that were applied here, 4 per cent would be $1,300,000,000—something of that kind. We are not doing anything like that, we know. Whether that figure is the correct figure, we do not know for certain. It is very hard to get this kind of information.

Perhaps I can come down to what Mr. Woolliams asked.

Mr. WOOLLIAMS: There is one thing I might ask you, when comparing one with the other. How does our climate, north of the green line, compare with climates north of their green line?

Mr. ROBERTSON: In winter the climate of the Soviet area is more extreme than ours.

Mr. WOOLLIAMS: I take it the climate south of the green line, from what you said on the two maps, in the average month of July is 60 degrees.

Mr. ROBERTSON: This area here is the area where the average in July is 60 degrees.

Mr. WOOLLIAMS: That means the temperature north is mainly below or less than the average?

Mr. ROBERTSON: Yes, a bit less.

Mr. WOOLLIAMS: How does their climate compare wtih ours, north of the green line, particularly in the Arctic part?

Mr. ROBERTSON: I think one has to describe summer climate and winter climate.

Mr. WOOLLIAMS: In July?

Mr. ROBERTSON: Mr. Rowley may know better than I.

Mr. G. W. ROWLEY (*Secretary, Advisory Committee on Northern Development*): I do not know that there is very much difference in the summer temperature, but in the winter the whole region is very much lower in temperature.

Mr. ROBERTSON: The cold pole of winter temperatures in the Soviet Union is here, around Verkhoyansk. For economic purposes the winter temperature is not the important temperature, but the summer temperature is. The winter temperature is just uncomfortable.

Mr. MARTEL: Do they have a dark period as long as the ones we have in the north?

Mr. ROBERTSON: It is just the normal factor of latitude.

Mr. MARTEL: The same thing?

Mr. ROBERTSON: Yes.

Mr. SLOGAN: The ocean current has an effect on the green line?

Mr. ROBERTSON: Yes, the north Atlantic drift—which is really an offshoot of the Gulf Stream—comes up around this area, and as a result the western part has a reasonably moderate climate, and the White Sea is open twelve months of the year. When you get down here, that influence has gone, but there is still a moderating influence of the water, which affects it somewhat.

The CHAIRMAN: Where is Murmansk on the map?

Mr. ROBERTSON: It is approximately here. This is upside down; it is difficult to read it that way; it should be put around the other way. Here it is.

The CHAIRMAN: Yes.

Mr. NIELSEN: I wonder if Mr. Robertson would correct my reading of the proceedings of the 27th Congress of the U.S.S.R. when they said that $100 billion was to be spent in the Arctic, in the northern areas, in their seven-year plan. Is that correct?

Mr. ROBERTSON: I cannot say. I do not recall it.

Mr. HARDIE: How much has been spent?

Mr. ROBERTSON: I do not know that either.

Mr. DUMAS: What about permafrost? Is that the brown line shown there?

Mr. ROBERTSON: No, permafrost would come considerably south of that. As to permafrost in Canada, Dawson is in the permafrost area, also Yellowknife, and Hay River, as you can see is well south of the brown line.

Mr. DUMAS: What about Quebec? I understand it is above the permafrost line?

Mr. ROWLEY: It is pretty much the same as the brown line.

Mr. DUMAS: What about Russia?

Mr. ROWLEY: I believe it extends a great deal farther south.

Mr. MCQUILLAN: Would it go south of the green line?

Mr. ROWLEY: No, I do not think so. You get permafrost where the average annual temperature is approximately below freezing.

Mr. ARGUE: Perhaps Mr. Robertson could give us a statement about the Soviet Union. Apparently the department, and Mr. Robertson himself, have a great deal of information about development in that country. Can you tell the committee just how you get that information, and your sources of information? Do you have an exchange of scientists, or do you obtain it mainly from their material or their publications?

Mr. ROBERTSON: It is obtained mostly from publications. A lot of them are sent here, and it is just a simple matter of getting hold of the material and pulling it together. For example, in November there was a very interesting debate in one of their transportation journals on the merits of the rail-river system, versus the merits of the northern sea route. They were not trying to conceal anything. It was simply one of their experts debating with another of their Soviet experts, and from that we learned a great deal.

Mr. ARGUE: Have you had any exchange of personnel or information at the official or semi-official level?

Mr. ROBERTSON: Not directly, but we would be very interested to have more of that.

Mr. ARGUE: Have there been any Canadian visits by members of your department in the Soviet Union to obtain information on site?

Mr. ROBERTSON: There have been people in forestry and for special things. We want to send a team to the Soviet Union to study northern development there generally.

Mr. NIELSEN: Have the Russians sent similar teams to Canada for the same purpose?

Mr. ROBERTSON: No, there have been people out here for particular reasons, and undoubtedly they had northern interests. There was a group here to study forestry and electrical power, fisheries, and such special things. What we would like to do is to send a team to study northern work generally.

Mr. NIELSEN: If we should send a team, we would be expected to accept a group that the Russians might send.

Mr. ROBERTSON: I think so.

Mr. MCQUILLAN: There was a forestry team over there a few years ago and I happened to know two of the gentlemen on it. I believe before that we had a Russian team studying over here.

Mr. ROBERTSON: Yes, there was a Russian team over here the previous year. There have been people here for special things which sometimes had a sort of northern sidelight to them, but not teams specifically to study northern work.

The CHAIRMAN: I think the members of the committee will recall that two years ago a dozen or more Russians visited various localities in Canada, including some of the farms in western Ontario.

Mr. ROBERTSON: That is right. There was a group studying hydro-electric power or power generally, also a forestry and fisheries group.

The CHAIRMAN: You get a lot of scientific papers from Russia, do you not?

Mr. ROBERTSON: Yes, we do; and a lot of material which is non-scientific.

Mr. ARGUE: Is it made readily available?

Mr. ROBERTSON: It depends; some is and some is not available at all.

Mr. ARGUE: I was interested in your statement to hear that you planned to have a Canadian team visit the Soviet Union. I think it is an excellent idea and I hope you are making some plans. Would you care to tell the committee how far you have gone with it? I think it is an excellent idea and I am quite sure the committee would wish you every success. If you would care to give the committee any further information on what you hope to do, I would appreciate it; but I would not press you.

Mr. ROBERTSON: I would prefer to leave it to the discretion of the minister. I can say that some plans have been made and carried on for quite a while.

The CHAIRMAN: The minister may be here later and you will probably have an opportunity to ask him at that time.

Mr. HARDIE: In the case of a Russian team visiting our Arctic, whom would they get permission from to visit places along the Distant Early Warning Line? I am sure any scientific group would have to visit that area. Would they get that permission from the Canadian government or from the United States?

Mr. ROBERTSON: I do not think I could answer that question.

Mr. ARGUE: You know the answer to it!

The CHAIRMAN: Let us get on.

Mr. DUMAS: On that same subject, I understand that a team of Canadian mining people are getting ready to visit part of Russia. Are any of your people joining this team?

Mr. ROBERTSON: Not our people, no. Most of these groups which come over here to study forestry, fisheries, mining, power, and so on, do not particularly get into the north. They get to see things down in this area. This is where they want to see things.

Mr. MCQUILLAN: The Russians gave forestry maps to the forestry team. Those maps covered the whole of Russia; they go right up to the Arctic ocean.

Mr. ROBERTSON: Yes, they have given us a good deal of information of that kind. In Russia most of their commercial forestry is south of the 60th parallel at the present time. But in our case most of our resources are north of the 60th degree. While there is much development in the Arctic, most of the actual commercial forestry coming out, according to my information, is still coming from south of the 60th degree because of the development that has taken place. However, it is increasing in the north.

Mr. NIELSEN: Is that northern sea route open all the year round?

Mr. ROBERTSON: Oh no.

Mr. ROWLEY: It depends on which part of the northern sea route you have in mind.

The CHAIRMAN: Can you describe the area?

Mr. ROWLEY: The part on this side, practically over here, is open for only about six weeks to two months around here.

Mr. NIELSEN: Are there any comparable routes in our north?

Mr. ROBERTSON: We would have a comparable route, except that we have no area which is open all the year on our far northern coast, while they have an area at the western end which is open twelve months of the year. However, we have no area in the north which is open twelve months of the year. But for the rest of it, I suppose their short navigation period and other problems are roughly comparable to our short period and other problems.

The CHAIRMAN: How about the submarine cargo vessels, either dry or wet? How far would it be from their harbour in the Arctic to Europe? I mean from a harbour in our Arctic?

Mr. ROBERTSON: It is quite a short distance. If you put these maps over the top, you will see those distances are correct. Our Arctic coast would be up about there, and you can see the distance to Europe.

The CHAIRMAN: Have you any idea of what it would be in miles?

Mr. ROBERTSON: About 3,000 miles.

Mr. B. G. SIVERTZ (*Director, Northern Administration Branch*): Those blocks show 300 miles each.

Mr. ROBERTSON: It would be somewhere in the vicinity of 2,000 to 3,000 miles.

Mr. ARGUE: Could Mr. Robertson give the committee any general idea of the general road network across the Soviet Union, and to what extent it is possible to travel across that great country by automobile?

Mr. ROBERTSON: I do not think it can be done all the way across by automobile. There is a rail connection all the way across, and there are road systems which go out from particular rail points. These comparable lines, such as the black line, show the roads. We have only put in the critical roads. We know there is a road going out into this region, and one going out from

Magadan, the Pacific port. It would be going out to these industrial areas which are mainly associated with river basins. For the most part they seem to rely on the basic rail system, and this river transportation, plus the northern sea routes.

Mr. ARGUE: There does not appear to be any move in the Soviet Union to build a trans-Siberian road?

Mr. ROBERTSON: Not that we are aware of. They have however developed air transportation quite substantially. We know there is a large number of air fields in the north. We know that some are civil, some are military, and some are combined. But they do have civilian air services across the polar area.

The CHAIRMAN: The depth of those three main rivers would be what?

Mr. ROBERTSON: I do not know.

Mr. ROWLEY: I think they would be about ten feet.

Mr. ROBERTSON: A maximum of ten feet. Probably they are fully navigable by simple barges, or by a type of freight vessel. As you can see, there are no portages between these rail ends and the sea.

Mr. NIELSEN: Have you any idea of the proportion of their population in the north as between military, civil servants, and civilian?

Mr. ROBERTSON: No, I do not have any information on that.

Mr. HARDIE: In that area on the east, the road goes out from that point to open water all the year round?

Mr. ROBERTSON: That is correct.

Mr. HARDIE: Can you tell me what population there is on the coast above the tree line in the area where they do not have open water all the year round?

Mr. ROWLEY: It is a comparatively small population.

Mr. HARDIE: How would it compare with our population above the tree line?

Mr. ROBERTSON: It would be greater, but what it is I do not know.

Mr. HARDIE: Is Norilsk the only major community in the area north of the tree line?

Mr. ROBERTSON: No.

Mr. HARDIE: In the area where you do not have open water all the year round?

Mr. ROBERTSON: Norilsk and Vorkuta are just north of the tree line.

Mr. HARDIE: At the end of that rail line?

Mr. ROBERTSON: Yes.

Mr. HARDIE: That is where they have the huge deposits of coal and oil?

Mr. ROBERTSON: That is right, or at least metallic minerals, plus coal.

Mr. HARDIE: Have we anything to compare to Norilsk as far as minerals are concerned?

Mr. ROBERTSON: We do not know enough about our minerals yet. In 1935 they did not know about Norilsk.

Mr. HARDIE: But to date we have not?

Mr. ROBERTSON: To date we cannot identify one as far as I am aware. However, I think our Sudbury is the closest place we know of that has a similar complex. Perhaps I should answer Mr. Woolliam's question concerning the facilities for Eskimos.

Mr. WOOLLIAMS: Yes. You have dealt with the general development. I think you might compare their development in that part of the north. What are we doing that is comparable to what they are doing?

Mr. ROBERTSON: As far as Eskimos are concerned, the Soviet Union has a very small Eskimo population. It only has about 1,300 Eskimos. They are all in this little appendage of land over here at the extreme east. There are other native peoples, as I mentioned, which number about 700,000, but they are not Eskimos.

The closest one is Chuckchees, which probably number about 45,000.

I suppose to some extent the Eskimos plus the Chuckchees could be taken as a sort of comparable group to examine, because they are all outside the tree line and in an area which is not open all the year round, or in a sense developed. We do not know too much specifically about this. We know that in 1937 all the Eskimo children of school age were attending school.

We know that they get higher education at about three centres. We know that certain Eskimos have been educated to a stage where they take part in what they call the lower and middle echelons of medical personnel. What this means we do not entirely know; but it sounds as if there were no Eskimo doctors. There are many below that line.

According to another piece of information we have, in the past four years they have built 1,300 houses, four hospitals, and ten schools in this area where the Eskimos and the Chuckchees live. However, as I mentioned, in 1937 all the Eskimos were attending school, so presumably this is mainly for expansion of school population

Mr. HARDIE: There are only 1,300 Eskimos in that area?

Mr. ROBERTSON: Yes.

Mr. HARDIE: Did they build them all a home?

Mr. ROBERTSON: Yes; all the Eskimos in the Soviet Union, according to our information, have individual houses.

Mr. ARGUE: If there are five in a family they have five houses?

Mr. ROBERTSON: I meant families.

Mr. ARGUE: I thought you said there were 1,300 Eskimos.

Mr. ROBERTSON: Yes.

Mr. ARGUE: But they have 1,300 houses?

Mr. ROBERTSON: No; all the Eskimo families have houses, which is not so in our case. They provide houses on a heavily subsidized basis. They are in a somewhat different position to us. I do not have the detailed information here. However, the houses are provided for the Eskimo families at a below cost figure.

Mr. MCGREGOR: What does each one of those Eskimo houses cost?

Mr. ROBERTSON: We do not know.

The CHAIRMAN: This is Russia he is speaking about, Mr. McGregor.

Mr. MCGREGOR: Oh! It is a hell of a long way from home.

The CHAIRMAN: This is a very interesting subject gentlemen, but the reporter must get the notes down.

Mr. ROBERTSON: I do not know, Mr. Chairman, whether I can add anything in answer to Mr. Woolliams' question. We do not have the full information. That is about all we have on it.

Mr. ROWLEY: May I add one thing about the numbers of people living north of the tree line. In the Chuckchee area, which is all north of the tree line, there would be a population of about 45,000. There are only actually 15,000 Chuckchees and 1,300 Eskimos, the remainder probably being Russians.

Mr. NIELSEN: Is there any difference in the economic base of their people up there and our own?

Mr. ROBERTSON: Most of the natives in this area were basically herdsmen. One of the peculiar things in the situation in the north which causes some amusement is the fact that our Eskimo society is basically a communal society; call it communist or communal. In the process of converting the Eskimos to our system, we are converting them to a capital system. Whereas most of theirs are herdsmen who were capitalists and they are being converted to communists.

Mr. NIELSEN: What sort of a basis would the Russians have, which we do not have, which enable them to contribute to a house?

Mr. ROBERTSON: In the first place, 80 per cent of the cost of the house is borne by the government. The Eskimo only pays 20 per cent.

Mr. NIELSEN: He pays something?

Mr. ROBERTSON: Yes.

Mr. NIELSEN: Our Eskimo could not pay anything.

Mr. ROBERTSON: I think they could. I think they could, particularly if we go into the district we are trying to go into. I have forgotten whether it was Mr. Sivertz or someone else who mentioned the Keewatin project on the west coast of Hudson Bay where we are bringing Eskimos in to live by hunting, in accordance with modern techniques, and with capital equipment and so on. We think by developing that and by developing handicrafts and so on we can substantially improve the economy.

It is done much the same way in the Soviet economy. We did not know this until afterwards. They have developed what they call hunting collectives which are supplied with a motor fleet for hunting. They have developed a sort of cottage system and they also have reindeer herding. They have done this far more successfully than we have. They have done a number of things which appear to improve the economy of these people who are still living on the land by applying a kind of advanced technology to their way of life. We think it can be done in our northern area to some extent also.

Mr. MARTEL: It has been stated that there are about 1,300 Eskimos in the Soviet Union and about 10,000 in Canada. Have the Eskimos themselves given any reason for that, or do they prefer the climate on this side? Have you asked them?

Mr. ROBERTSON: The migrations are thought to have taken place from Asia.

Mr. ROWLEY: I think probably one answer is that the rest of Russia is occupied. There is quite a large native population in Russia and there is not so much room there for Eskimos.

Mr. ROBERTSON: A good deal is still being proven by archeology. However, the evidence is that the Eskimo people originated in this area and migrated across to Greenland. They originally came down to Labrador and, I believe, the gulf of St. Lawrence coast and now have retreated in the area along the North American coast.

Mr. KORCHINSKI: Would there be any reason for their shifting back? I understand they were as far south as possible. Why have they shifted back?

Mr. ROWLEY: Eskimos were never found south of about Seven Islands.

Mr. KORCHINSKI: Is there any reason why they shifted back? I understand the concentration is in and around Alaska.

Mr. ROWLEY: They were always fighting with Indians.

Mr. ROBERTSON: I would imagine that Indian hostility and pressure may have been a factor.

Mr. MARTEL: You said that in Russia the government is supplying the Eskimo families with houses.

Mr. ROBERTSON: At an 80 per cent subsidy. The Eskimo pays 20 per cent.

Mr. MARTEL: They have only a small number of Eskimos compared to their population and ours.

Mr. ROBERTSON: I assume they are not doing this just for the Eskimos. I imagine if they were they would have a lot of trouble with the Chuckchees and others.

Mr. WOOLLIAMS: It is really not the Eskimos but the inhabitants who live in an area comparable to Canada?

Mr. ROBERTSON: Yes; they are not all Eskimos.

Mr. MCQUILLAN: We are making comparisons of what we refer to as our northland north of the sixtieth parallel and Russia's land north of the sixtieth parallel; but is it not an unfair comparison when you realize that there is 25 per cent of our northland in which the July isotherm extends north of the sixtieth parallel. Perhaps 25 per cent of our land north of the tree line extends north of the sixtieth parallel and in Russia probably 80 per cent?

Mr. ROBERTSON: That is exactly why I was pointing out these differences.

Mr. MCQUILLAN: There is a vast difference?

Mr. ROBERTSON: Oh, yes; there is a vast difference from the resource point of view in anything which involves what you might call a growing resource, timber or agriculture. This, of course, does not apply to minerals.

Mr. MCQUILLAN: Or oil?

Mr. ROBERTSON: Or oil.

Mr. MCQUILLAN: Are these minerals to a certain extent where the road development is?

Mr. ROBERTSON: Of course roads are not used to a large extent except in the eastern area for mineral development. They have put in rail, or it is based on water. For instance, Norilsk has a railway. They are in the process of electrifying that railway now to connect up with Dudinki.

Mr. MCQUILLAN: Is it not also true that what is developing there in the northern mineral resources has been an economic requirement, whereas in Canada we have not had that.

Mr. ROBERTSON: It is an important factor, I would imagine. Also, self-sufficiency is an important factor.

Mr. WOOLLIAMS: I have read that the Russian scientists believe they can heat the north and change the climate a little. I do not know whether or not there is any actual evidence to that effect.

Mr. HARDIE: Above what is shown on both maps in green, the way I look at it, we have more rail above the green than they have—considerably more. Then you go above the tree line in the area where they do not have open water—during the total twelve months of the year there is very little development percentagewise above that tree line than there is above our tree line. That is in the area that is frozen the greater part of the year. Is the road coming from the east from an open water port twelve months of the year?

The CHAIRMAN: You are speaking of Russia?

Mr. HARDIE: Yes.

Mr. ROWLEY: Magadan is not open twelve months of the year. A guess is that it is open about six months of the year.

Mr. HARDIE: We have nothing comparable to that on the Arctic coast?

Mr. ROBERTSON: No.

Mr. HARDIE: I still would like to know the figures of the population in that area which is frozen the large portion of the year above the tree line.

Mr. ROBERTSON: We probably cannot get it. They do not give us the breakdown exactly the way we want it.

Mr. ROWLEY: There was a very recent census but they have not yet published any detailed figures on it. We will probably get it in a few months' time.

Mr. HARDIE: For instance at Moak lake in our area, we have railways being built which would probably be comparable to, say, this point where those two rail lines connect there.

Mr. ROWLEY: At Vorkuta.

Mr. PAYNE: May I ask for a comparison of the navigation season on the rivers? From what I have seen so far, the population grows or develops on the river and the transportation facilities. Do these rivers have the same navigational seasons as, for instance, the Mackenzie, or are they longer?

Mr. ROBERTSON: Mr. Rowley says he thinks longer, but they would not be a great deal longer.

Mr. PAYNE: Where large centres of population have grown up along these river supply routes, how are they sustained in Russia during the freeze-up period?

Mr. ROBERTSON: I assume they ship in the heavy requirements during the open season which is what is done in our north. They have a pretty well developed commercial airline system. I suppose they carry in the less heavy and less bulky equipment by air; that is, where there are no railways.

Mr. PAYNE: Do you have any idea what the navigable season is on those rivers?

Mr. ROWLEY: I would say about five months at the most. It depends on the part of the river. They run a long distance from the south to the north and they would open earlier in the south. One cannot give a definite figure for the whole river.

Mr. ROBERTSON: It is clear that the period of open water on the river is longer than the period in the open sea route at the east end. They are developing a greatly increased use of icebreakers in the hope of lengthening the northern seaway system.

Mr. HARDIE: Would you again point out the area which is frozen the greater part of the year?

Mr. ROBERTSON: Do you mean permafrost?

Mr. HARDIE: No; I mean the area where the sealanes are not open for twelve months of the year.

Mr. ROWLEY: Only as far as here.

Mr. HARDIE: Is that not right into the mainland.

Mr. ROWLEY: Archangel is usually closed for about six weeks.

Mr. HARDIE: What about east of Archangel?

Mr. ROWLEY: The Gulf Stream stops about here.

Mr. HARDIE: When you are giving me these figures on population, I would like the population of the area, starting from that point on the west above the tree line to the extreme east.

Mr. ROBERTSON: The chances are we cannot get the figures.

Mr. ROWLEY: From there north of the tree line?

Mr. HARDIE: Yes.

Mr. ROWLEY: We can get something but it will not be very accurate.

Mr. HARDIE: There cannot be too many people living in that area except at Norilsk and Vorkuta.

Mr. ROWLEY: There is a scattered population living throughout the area, herding and hunting. There are a number of settlements where there is a concentrated number such as at Igarka and many of these ports along the northern sea route where there is quite a lot of mining for tin and gold.

The CHAIRMAN: Mr. Argue, before you leave I must apologize for not having earlier extended a welcome to you on behalf of this committee. I believe that from what you have heard this morning you will understand why we have a very interesting committee.

Mr. ARGUE: Yes. I enjoyed the session very much and am very glad to be on the committee.

The CHAIRMAN: Mr. Argue is about to leave. Are there any other questions, gentlemen?

Mr. WOOLLIAMS: I would like—and I think I speak for everyone—to thank Mr. Robertson for the trouble he has gone to in giving us the detail which he set out on this particular subject.

The CHAIRMAN: It was an excellent session.

Mr. GUNDLOCK: Mr. Chairman, may I come back for a moment to the educational problem in the Canadian north?

The CHAIRMAN: Yes, Mr. Gundlock, what is the question?

Mr. GUNDLOCK: With reference to our educating Canadian northern people, the other day a remark was made here that Indians compare quite favourably—that is intellectually, I suppose—with white students, and the Eskimos are probably superior.

Mr. ROBERTSON: I was not advancing that as my opinion, but simply quoted a teacher.

Mr. GUNDLOCK: That is all right. Do I understand that the Department of Northern Affairs and National Resources completely administers the educational system, shall we say, in the north?

Mr. ROBERTSON: No, in the Yukon. In both territories, the education of non-Indian and non-Eskimo people—that is other than white or mixed blood—is a territorial responsibility: the Yukon territory handles the Yukon and the Northwest Territories the Northwest Territories. That is as far as financial cost is concerned.

Mr. WOOLLIAMS: That raises a problem.

Mr. ROBERTSON: In the Yukon, the Department of Citizenship and Immigration handles Indian education. In the Northwest Territories I, as commissioner, have entered into an agreement with the Minister of Citizenship and Immigration, under which the territorial government takes over education of the Indians and the Eskimos, but the federal government pays for it. The purpose is to get a unified school system. As a result, there is one school system, whether a person is white, Indian, Eskimo, or of mixed blood. The bill comes to the federal people.

The CHAIRMAN: What department is that?

Mr. ROBERTSON: Northern Affairs.

Mr. GUNDLOCK: I want to get some sort of line on this, on the federal jurisdiction over education.

Mr. ROBERTSON: The Indians and Eskimos are a federal responsibility.

Mr. GUNDLOCK: A federal responsibility?

Mr. ROBERTSON: Yes.

The CHAIRMAN: What about Newfoundland?

Mr. ROBERTSON: That is an exception.

The CHAIRMAN: I have just asked the deputy minister about Newfoundland, and Newfoundland, as he said—he had better say it.

Mr. ROBERTSON: There is an exception with regard to Indians and Eskimos in Newfoundland. Under the terms of union they remain the responsibility of the Newfoundland government, but with a special agreement as to measures which will be carried out by the federal government over a period, I think, of ten years, to assist them.

Mr. GUNDLOCK: Let me put it like this: education in the provinces is strictly a provincial matter.

Mr. ROBERTSON: Not with regard to Indians.

Mr. GUNDLOCK: Generally speaking. Is it different in the north, in the Northwest Territories and the Yukon, than it is in the provinces?

Mr. ROBERTSON: Education in the provinces of Indians is a federal responsibility.

Mr. GUNDLOCK: I understand that.

Mr. ROBERTSON: In the Northwest Territories and Yukon the education of the Indians and Eskimos is a federal responsibility. But the distinguishing feature in the Northwest Territories is, by reason of this special agreement I have referred to, we have a unified education system, but the federal Government foots the bill for the Indians and Eskimos; and the territorial government foots the bill for the others.

The CHAIRMAN: Does that answer your question, Mr. Gundlock?

Mr. GUNDLOCK: Yes, to a certain extent. I think it points up a responsibility that probably we should recognize here, in this committee. There is so much discussion about Indian education these days, to the point that this is a national problem. I think one feels particularly where the federal government has jurisdiction, shall we say, I think there is quite a field for the federal government to enter into—that is, the educational field—with regard to these people.

I think it is an opportunity, to lead the way, particularly if we have exceptional students there. This could be taken more or less as a pattern.

Mr. ROBERTSON: I agree, entirely, Mr. Gundlock. A good deal is being done in that way. The hostels that we have discussed from time to time, and the schools built in connection with them, are for exactly the kind of purpose you have in mind. The hostels provide places of residence for Indian and Eskimo children; and for the most part, also mixed blood.

In these schools the idea is really to provide a good education for all these children, whatever their race is. I think there is an attempt to recognize the point you are making, which is exactly the kind of thing you suggest should be done.

Mr. GUNDLOCK: I will not take too much time over this, but I feel quite strongly about this. I think you should take a firm stand there while we have the opportunity.

As an example, take an average western Canadian centre. For instance, last year out of 200 high school graduates 20 per cent of them, or some 40, actually, passed their grade 12 matriculation. When they wrote their supplementaries it was 18 additional. That is a western community. Actually, it is Lethbridge. I am rather ashamed of that, and I think where we have jurisdiction we should take a firm stand. What stage do you say the educational facilities have reached? Are we just having a good start there?

Mr. ROBERTSON: The way I put it the other day was, we have made a good start. The educational program is really a real extension, and it has been under way for four or five years. In the Mackenzie valley I would think we

are providing education to something in the vicinity of 66.2 per cent of the Indians in the Mackenzie area; they now have education available to them. The figure with regard to Eskimos, I said at one point, was 36 per cent. The precise figure was given the other day as 39.4 per cent; so that somewhere around 39 to 40 per cent of Eskimos are getting education; and 66 per cent of the Indians in the north.

Mr. HARDIE: Is this taking in the new Inuvik school?

Mr. ROBERTSON: This is as of the moment.

Mr. HARDIE: What would be the percentage when the Inuvik school and the Fort Simpson schools are opened, and the other schools you are building along the Arctic coast?

Mr. GUNDLOCK: If I may just sum up what I am trying to say, this educational problem, we have run up against it all the time, and it has become a national problem. Is there nothing we can do about it by way of jurisdiction? Here we have an opportunity of helping exceptional students. I think it would be very good if we could point something up.

The CHAIRMAN: Mr. Gundlock, I think it is an excellent idea. I hope you will cooperate with those who are making up the report, suggest that idea in the report, and have it submitted to the committee. I think it is a good idea.

Mr. GUNDLOCK: Thank you.

The CHAIRMAN: Mr. McQuillan?

Mr. MCQUILLAN: Yes, I was wondering if it would be too much trouble for Mr. Robertson to have small copies of these maps made and distributed to us?

Mr. ROBERTSON: We could do that.

Mr. MCQUILLAN: I think this is one of the best pieces of evidence we have had put before us.

Mr. ROBERTSON: We will be very glad to have that done, Mr. McQuillan.

The CHAIRMAN: Any other questions on this now, gentlemen?

Mr. MCGREGOR: If there are no more questions under that heading, I would like to ask a question on one of these returns we have received today. It is in connection with piling.

The question was asked: "Who supplied piles for Inuvik's site; where were piles obtained?" That was the question I asked some time ago, and the answer given was certainly not an intelligent answer to the question, because it was mixed up in such a way that nobody could understand it, in the first place. It says, "200 logs, 20 feet long,"—I did not ask for how many logs, but "piling".

Then there is a long list of piles here that were supplied by day labour. Then it says again, "81 wooden piles". Then there is another question of "88 logs" and that was not in the item. He then made an answer about some 24,000 feet of piling. What I was trying to get at, to be quite frank, was how many of these piles were shipped from British Columbia?

Mr. ROBERTSON: I do not think any were, Mr. McGregor.

Mr. A. B. CONNELLY (*Chief, Engineering Division*): There were two contractors in British Columbia.

Mr. ROBERTSON: There were some, I am sorry.

Mr. CONNELLY: I am afraid I can not say offhand how many.

Mr. ROBERTSON: We will try to get that information.

Mr. MCGREGOR: Could we not have it here right now? This is the answer to the other question. The answer on this sheet here today is even more confusing: "Piling has been purchased from the following persons"—and then it

gives a list, and goes on: "apart from the purchases from C. Bumstead, of Fort Nelson, B.C., and the Indian band, Jean Marie river, all piles could be considered as coming from the Aklavik area."

It says the price of the piles was $81,660. I ask you, sir, do you consider that an intelligent answer?

The CHAIRMAN: I do not think Mr. Robertson should answer that question, Mr. McGregor. We have been trying to be very fair, and he has been very cooperative. If you asked for the information, as the deputy minister said, he may have misunderstood your question; but he would be glad to give you the information you want. You want to know how much was bought from Bumstead—it sounds like a comic figure to me, from the funnies. Is that the idea, Mr. McGregor?

Mr. MCGREGOR: I want to know how many piles came from B.C. and what they cost; how many local piles there were and what they cost.

The CHAIRMAN: They will get the information for you.

Mr. MCGREGOR: Another question I would like to ask regarding the answer to this question of how much money is to be spent this year: I understood there have been $20,800,000 spent on this site, and $5 million to be spent this year, roughly. That leaves a balance of the total estimate of completion of this job is around $40 million.

Mr. ROBERTSON: $34 million.

Mr. MCGREGOR: All right, $34 million. I would like to know—I understand they have been authorized to spend $34 million?

Mr. ROBERTSON: Yes.

Mr. MCGREGOR: What are the obligations, over and above, say, the $25 million, $26 million, of the next ten millions or the next nine millions? What are the obligations for that $9 million?

Mr. ROBERTSON: They would be completions of a number of the contracts. The Bird Construction Company has a contract that covers a large number of buildings. They will finish part of that this year. They will finish the rest of it next year. So part of what appears in this year's total—and incidentally, there was an omission in this table given to you, an item which the Department of Public Works has left out. The sum of $1,781,000 should be in there for the Department of Public Works, which makes this year's total, instead of $5,300,000 odd, the sum of $7,100,000 odd.

The Bird Construction Company, for instance, has a contract which covers a large number of buidings—the hospital is one, the R.C.M.P. building another, 122 residences and so forth. They will finish those this year, and more of them next year. The amounts here would represent the progress payments for this year, and the rest of the progress payments for next year on those contracts. We could try making a breakdown, but it is a matter of separating the contracts.

Mr. MCGREGOR: In other words, when you let a contract you do not consider that is an expenditure until the money is paid?

Mr. ROBERTSON: Yes, that is correct.

Mr. MCGREGOR: Is that a fair statement? Would you not take over $20,800,000 as already having been spent?

Mr. ROBERTSON: It has not been spent, under our terminology.

Mr. MCGREGOR: It has been let?

Mr. ROBERTSON: It has been committed.

Mr. HARDIE: $20 million has been spent up to this year, and $14 million will be required to complete the job?

Mr. ROBERTSON: Yes, what we were asked is, how much has been spent. $20 million has been spent. We are committed under contract, or the Department of Public Works is, for virtually all the rest of it, under one contract or another.

Mr. HARDIE: $14 million?

Mr. ROBERTSON: Yes, but this is not money already spent; and, therefore, it was not included in that answer.

Mr. MCGREGOR: It is very simple for you to make a statement like that. Could you tell us how much money has been spent, up to this $34 million?

Mr. ROBERTSON: I have done that.

The CHAIRMAN: It is already on the record.

Mr. MCGREGOR: It is?

Mr. ROBERTSON: Yes.

The CHAIRMAN: Yes, it is there.

Mr. Hardie has some questions. Do you want them recorded for answering?

Mr. HARDIE: We can leave them for now, but are you through with Inuvik?

Mr. MCGREGOR: Go ahead.

Mr. HARDIE: But are you through with Inuvik? Is everybody in the committee through with questioning on Inuvik? I want to ask a question about Inuvik and this is it: with regard to the "512" houses, after the job is completed they will be sold to the natives. I think the price that was stated was around $2,500 each. Will any consideration be given to these natives who are buying them, to use the compensation coming to them? Say, if they moved out of the old townsite—

Mr. ROBERTSON: We will have an arrangement under which payments can be made over a period of years, and the down payment, if the man wants it, can be his compensation from his Aklavik property.

Mr. HARDIE: Will these houses be serviced?

Mr. ROBERTSON: In most cases they will not be serviced. The 512's are not designed as serviced houses, but if any of the people want to buy a serviced house, that is their privilege.

Mr. HARDIE: Can one buy a 512 house in a serviced area?

Mr. SIVERTZ: Yes. There is no reason why he could not buy a small house in a serviced area.

Mr. HARDIE: There would be no reason why a 512 house could not go in a serviced area?

Mr. SIVERTZ: There is no reason why it cannot go in a serviced area, but the cost of connecting to the service and paying for this service as used, must be borne by the owner.

Mr. HARDIE: What would be the cost of connecting the services?

Mr. SIVERTZ: I cannot tell you what it would be for connecting the services.

Mr. ROBERTSON: This will have to be worked out.

Mr. HARDIE: This is something that these people will want to know.

Mr. ROBERTSON: It is something which will have to be worked out. It is one point which has not been worked out yet.

The CHAIRMAN: Do you want to put your questions on the record to be answered later, Mr. Hardie?

Mr. HARDIE: I have questions dealing with just about every phase from now until we complete northern administration. Personally I think we should clean up Inuvik and go on now to roads, which subject was started the other day and never completed.

The CHAIRMAN: That is the only way to do it. Is it the wish of the committee to start on roads or education now? What is your wish?

Mr. HARDIE: Let us clean up roads now.

The CHAIRMAN: Very well.

Mr. HARDIE: We will not have to come back and take up this thing again two or three days from now, and if we are going to roads, that means we are through with Inuvik.

Mr. SIMPSON: Are the papers which were passed out this morning to be appendices to the record?

The CHAIRMAN: They are to be printed in the record, Mr. Simpson.

Mr. MCGREGOR: I asked a question the other day about how many civil servants there were in the northern area.

Mr. ROBERTSON: We still have not got the complete return on it. We have all but the Department of Transport.

Mr. HARDIE: Can the deputy minister tell me what new roads have been started in the Northwest Territories since July 1, 1957?

The CHAIRMAN: We shall try to get a map so that the committee can see.

Mr. HARDIE: Either new roads or new road construction or surveys that have been started since 1957?

The CHAIRMAN: Mr. Cunningham will be here in a few minutes.

Mr. ROBERTSON: Mr. Cunningham is the one who handles roads in the department, and he is more familiar with it than I am. But I can try in a general way to go over it for you.

Mr. HARDIE: On this question of roads might we have someone from the engineering section of your department here?

Mr. ROBERTSON: Yes, Mr. Connelly is here. Your question is what roads have been started?

Mr. HARDIE: Or what surveys; what new roads or road construction has been started since July 1, 1957, in the Northwest Territories?

Mr. ROBERTSON: The principal one is the road which the minister referred to the other day, the one from Flat Creek up to Eagle Plain. That is the main one.

In the Northwest Territory the road to Yellowknife is a continuation of a road program earlier begun.

Mr. HARDIE: When was that road started? Was construction of that road started prior to 1957?

Mr. ROBERTSON: Yes, I think so.

Mr. HARDIE: You are just building it?

Mr. ROBERTSON: To Yellowknife at the moment. We have to carry that road as an extension from earlier building, and to carry on with it because of favourable reports concerning minerals, and to carry it out to the east end of Great Slave lake. The surveys have not been done on it yet.

Mr. HARDIE: Is there anything for it in the estimates this year?

Mr. ROBERTSON: I am told there is an item, yes. There is $160,000 to extend the road from Yellowknife to Fort Reliance.

The CHAIRMAN: How many miles would that be?

Mr. ROBERTSON: 250 miles.

Mr. HARDIE: This will be a survey?

Mr. ROBERTSON: The initial cost will be for a survey, yes.

Mr. HARDIE: Was this road included in the presentation you made to the Gordon Commission in 1955?

Mr. ROBERTSON: I would like to see a copy of the report. I do not offhand recall. The answer is yes. The other road which is being developed is a reconstruction to bring it to a much higher standard. That is the road from Fort Fitzgerald to Bell Rock which covers the portage area.

As Mr. Hardie knows, so far there have only been two dirt trails. These are being raised to a higher standard to improve transportation.

The CHAIRMAN: How many miles?

Mr. ROBERTSON: Twenty five. It is 16 to Fort Smith.

Mr. HARDIE: Have any surveys or engineering work been done on this road? When was the survey and engineering work started by your branch?

Mr. ROBERTSON: Last year.

Mr. HARDIE: Did you have any other estimate before that?

Mr. ROBERTSON: No.

Mr. HARDIE: Please go on.

Mr. ROBERTSON: This road, which does not show well on this map, is a road leading from Fort Smith down diagonally to the lower or southwestern corner of Wood Buffalo park. It is intended to connect up with the Alberta highway system from Vermilion Crossing.

Mr. HARDIE: When was the survey started on that road?

Mr. SIVERTZ: It was started in the winter of 1957-58.

Mr. HARDIE: The survey?

Mr. SIVERTZ: Yes.

Mr. HARDIE: The estimates of 1957-58 included a survey of that road?

Mr. ROBERTSON: I would have to check back to see.

Mr. HARDIE: Did they or did they not?

Mr. ROBERTSON: We would have to check our estimates for that year to be certain.

Mr. HARDIE: We will leave that road for new.

The CHAIRMAN: How many miles was it? Would you put the miles on the record each time? I do not think you did so for the last road.

Mr. ROBERTSON: I do not have that right with this material.

The CHAIRMAN: Oh well.

Mr. ROBERTSON: I will get the mileages. It is 75 miles. That road is still contingent on Alberta bringing its connection up to the Wood Buffalo park.

Mr. HARDIE: Is there anything in the estimates for this?

Mr. ROBERTSON: Yes.

Mr. HARDIE: This year?

Mr. ROBERTSON: Up to a point on the west boundary of Wood Buffalo park, $160,000.

Mr. HARDIE: How many miles of road do you expect to construct?

Mr. ROBERTSON: We expect to construct 74 miles.

Mr. HARDIE: The total is 74 miles?

Mr. ROBERTSON: We will try to get the mileage for you. I do not seem to have it at the moment. We also have in the estimates this year an item for surveys in the amount of $100,000, without its being tied down to particular roads.

Now, the highest priority I think apart from The Yellowknife to Fort Reliance road will be road which will run in general up to the east end of Great Slave lake and down southwesterly towards Fort Smith. According to the reports from the Department of Mines and Technical Surveys, the mineral possibilities in that area south and east of Great Slave lake are very good, and it is regarded as high priority for surveys. So probably a substantial amount of that $100,000 will be used for preliminary survey of that road.

Mr. HARDIE: How many claims have been staked in that area which will be served by that road?

Mr. ROBERTSON: I cannot tell offhand. We will find it out for you.

Mr. HARDIE: How many exploration companies are working in that area and also, on the road from Yellowknife to Fort Reliance, how many exploration companies are working in that area?

Mr. ROBERTSON: I will try to get that information.

The CHAIRMAN: Could you give the committee the total estimate for the Northwest Territories for roads, including surveys?

Mr. ROBERTSON: For the coming year?

The CHAIRMAN: Yes.

Mr. ROBERTSON: It is $6,895,600.

Mr. HARDIE: When you speak of all roads in the Northwest Territories, does that include the Mackenzie highway on the Alberta side?

Mr. ROBERTSON: No, not on the Alberta side. That would appear in the roads-to-resources vote. We could get this for you if it is desired.

The CHAIRMAN: Not unless you want it, Mr. Hardie.

Mr. HARDIE: Yes, I would like to have it.

Mr. ROBERTSON: The Mackenzie highway, Enterprise to Yellowknife, that is a continuation, that portion around the west end of Great Slave lake; $4,110,000.

Mr. HARDIE: Will that be spent this year?

Mr. ROBERTSON: That is the intention.

The CHAIRMAN: How many miles is that?

Mr. ROBERTSON: The total road?

The CHAIRMAN: That is right.

Mr. HARDIE: The total that this amount will cover?

The CHAIRMAN: That is it.

Mr. ROBERTSON: It is 81 miles.

Mr. HARDIE: Do you say 81 miles?

Mr. ROBERTSON: I am sorry, that was the wrong item. We do not appear to have the mileage here but we will get it.

Mr. HARDIE: In 1955 or 1956 when the road was started the original intention was to go from Enterprise to Yellowknife. What is the total distance of that one?

Mr. ROWLEY: It is 281 miles.

Mr. HARDIE: And how many miles have been completed to date?

Mr. ROBERTSON: It is completed to the south shore of the Mackenzie river. I do not think any part is actually completed between there and Rae. Is that correct?

Mr. SIVERTZ: No.

Mr. ROBERTSON: No part is completed.

Mr. HARDIE: Some work was done on it 50 miles out?

Mr. ROBERTSON: Yes; on the north end we started at Yellowknife.

Mr. HARDIE: How many miles are completed now on the whole thing?

Mr. ROBERTSON: 140 miles are completed.

Mr. HARDIE: 140 miles have been completed?

Mr. ROBERTSON: Yes, and work is to be done on the additional amount.

Mr. HARDIE: So it is 141 miles for this year then?

Mr. ROBERTSON: Not for completion, but it is going to be completed in the summer of 1960. This will not complete it.

The CHAIRMAN: Mr. Robertson, you are going to give a breakdown at Mr. Hardie's request?

Mr. ROBERTSON: I think I have only given the first item. Mackenzie highway, $4,110,000. Approaches and landings for ferry, the initial work on the ferry crossing the Mackenzie River, $355,000; the Marion river road, which would connect from Rae in the direction of Marion River—which is regarded as the first stage of an ultimate road to reach up towards Great Bear Lake, $300,000.

Mr. SIMPSON: At what point does this ferry cross the Mackenzie?

Mr. ROBERTSON: At Providence, upstream a short distance from Fort Providence.

Reconstruction and widening the Mackenzie highway, from the Alberta boundary to Hay river, $100,000.

Mr. MCGREGOR: How many miles is that?

Mr. ROBERTSON: It is 84 miles. This is only a start to it. The road Yellowknife to Fort Reliance—this is survey only—$160,000.

Mr. HARDIE: That is for survey?

Mr. ROBERTSON: Yes, that is correct. The road from Fitzgerald to Bell Rock, $1,022,000. Fort Smith to Pine Lake, which is in Wood Buffalo Park, $75,000. From Peace Point to the west boundary of Wood Buffalo Park, which would connect to the Alberta system, $160,000; Wood Buffalo Park secondary roads, $80,000; Fort Simpson road to connect airport and community, $30,000; from Fort Fitzgerald to Hay Camp, which is south in this direction, $175,000.

Frobisher Bay—this is the first one in the eastern Arctic, and it is not on the map—the road there from the docks and landing sites, to serve the town, $200,000. General item for surveys, $100,000. And then there are minor items, Mr. Chairman, to make up the balance of $6,895,000.

The CHAIRMAN: That makes a total of?

Mr. ROBERTSON: $6,895,000.

The CHAIRMAN: That is the total of 13 projects you have under way?

Mr. ROBERTSON: Plus minor ones.

The CHAIRMAN: Yes, plus minor ones.

Mr. ROBERTSON: Yes.

Mr. HARDIE: A great deal of which is serving Wood Buffalo Park, as far as items go?

Mr. ROBERTSON: Yes, as far as items go, but not in terms of cost.

Mr. HARDIE: No, not in terms of cost, just items?

Mr. ROBERTSON: Yes.

Mr. SIMPSON: Is Wood Buffalo Park south of the 60th parallel?

Mr. ROBERTSON: It is both north and south; it runs from approximately that point, north of it, to about 200 miles south of it.

Mr. HARDIE: I wonder if I could ask Mr. Connelly in regard to this road the former administration started and the present administration are trying to complete: What type of contract was let last year for Providence north? Was it on the unit price basis, or on a rental price basis?

Mr. CONNELLY: On a unit price basis.

Mr. HARDIE: On a unit price basis?

Mr. CONNELLY: Yes.

Mr. HARDIE: Who got the contract?

Mr. CONNELLY: I think it was MacNamara.

Mr. HARDIE: No, it was not.

Mr. CONNELLY: Either Mannix or MacNamara.

Mr. HARDIE: No, that is not the contract. That is the contract for the Mackenzie River to Providence North. That is the section built last year and not this year. Was it let on a unit price basis?

Mr. CONNELLY: Yes, I understand so. I will check that though.

Mr. HARDIE: I wonder if we could have a witness who could tell us these things as we go along?

Mr. CONNELLY: I will get Mr. Williams.

Mr. ROBERTSON: These are handled by Public Works, and perhaps we should have Mr. Williams back.

Mr. HARDIE: Mr. Cunningham is here, and perhaps he could answer on what type of contract the work was let last year on the section north of Providence.

Mr. F. J. G. CUNNINGHAM (*Assistant Deputy Minister*): I am sorry, I cannot.

Mr. ROBERTSON: We work out the requirement and lay down what we want, and Public Works handles the contract.

The CHAIRMAN: Would it be helpful if we had Mr. Williams back this afternoon?

Mr. HARDIE: All right.

The CHAIRMAN: Any other questions you would like to ask?

Mr. HARDIE: There is a general question I could ask Mr. Robertson. When he presented this brief to the Gordon Commission in 1955, he made representations for the building of roads in the Northwest Territories. I wonder what the total mileage of those roads was that he mentioned?

Mr. ROBERTSON: I cannot answer that from memory. I would have to get my brief and check on the figures. I have not a copy here, and I have not looked at it for about a year or two.

Mr. HARDIE: Have you any plans in your repartment to finish this network of roads within the next five years?

Mr. ROBERTSON: You say, "to finish the network of roads"?

Mr. HARDIE: Yes, these roads, within the next five years?

Mr. ROBERTSON: Not all of those will be finished in five years, but a very large part will be done in the next five years. We have a planned program.

Mr. HARDIE: That will finish these roads in the next five years?

Mr. ROBERTSON: No, it will not finish them, but it will carry out a very large part of the program.

Mr. HARDIE: We will wait until we get the total mileage. On the road to Bear Lake, you mentioned a moment ago that you intended to go north with this road to Bear Lake. I am wondering if you now have the information I asked for the other day, with regard to the ore body at Eldorado mine at Great Bear Lake?

Mr. ROBERTSON: I did not remember that this had been asked for.

Mr. HARDIE: Yes, I asked for it the other day.

Mr. ROBERTSON: It must have been when the minister was here.

Mr. HARDIE: Yes, the minister was here.

Mr. CUNNINGHAM: We have information, but I do not think we are able to disclose it to the committee.

Mr. HARDIE: It was made public two years ago and was printed in the *Financial Post*.

Mr. CUNNINGHAM: We have the information and the statement of account of what is going on now on.

Mr. SIVERTZ: From mile 31 to mile 83, Providence to Rae, awarded to MacNamara Construction Limited, $941,600.

Mr. HARDIE: Which contract is that?

Mr. SIVERTZ: From mile 31, that is from Providence, to Rae, mile 83.

Mr. HARDIE: But from mile 0 to mile 31, I asked for Providence North. You are going from mile 31 above Providence. I want to know who got the contract and what type of contract it was from mile 0 to mile 31.

Mr. ROBERTSON: How would it be if you wait for Mr. Williams?

Mr. HARDIE: Could Mr. Cunningham tell me what the life of the ore body is at Rayrock, which is north, in the Marion River area, where they say the road is going this year?

The CHAIRMAN: That would be for Mr. Williams.

Mr. ROBERTSON: I do not think we should answer this; this is private property.

The CHAIRMAN: I think I can understand Mr. Hardie's reason for asking the question, basing it no doubt, on the necessity for roads and expenditures of money and so on; but I think we should be careful about anything in respect of uranium.

Mr. HARDIE: Well, I can tell you.

The CHAIRMAN: Let us not put it on the record.

Mr. HARDIE: I am going to put it on the record. I read it in the *Financial Post* two or three years ago, that the life of Eldorado mine on Port Radium, was five years from that date, which would leave it now with two years of ore ahead of it.

Mr. MARTEL: They have developed new ore.

Mr. HARDIE: They are running out of ore, and are now working on a big area of something like 250,000 square miles, to try and pick up something.

The CHAIRMAN: You are not suggesting that the minerals are not worth building a road for?

Mr. HARDIE: I am not suggesting anything of the kind. I am asking my questions, and am directing my questions through you to the officials from whom I want the answers. I do not think you know the answers, and I do not think that you have any right to comment on the questions.

Mr. ROBERTSON: I do not know whether I should comment in general, Mr. Chairman.

Mr. HARDIE: All I want to know is, the life of the ore body at Ray Rock and at Port Radium.

The CHAIRMAN: I will not ask the witness to answer that question.

Mr. HARDIE: In the area that the road or, at least, the survey is going to be done this year, to Ft. Reliance, have you had any request from the only people I know of that are doing any development work in that area—Taurconis Mines Limited—for a road, or can you tell us what type of request, if any, they have made—whether for roads or airstrips?

Mr. ROBERTSON: As far as Taurcanis is concerned there is no intention to have a road to the vicinity of Taurcanis—which is, for the information of the committee, north a bit, and east of Yellowknife. An airstrip has been built with assistance from government to serve Taurcanis.

As far as the rest is concerned, the main roads system to open the area is not posited on requests by any companies. It is posted on overall advice as to the resource potential and mineral possibilities in the area. So requests may come in and are answered in the negative. On the other hand, if resource potential looks very good, without any request at all, it may be decided a road should be built into that area.

Mr. HARDIE: Will the federal government maintain that road?

Mr. ROBERTSON: Fifteen per cent of the maintenance is territorial, and 85 per cent federal.

Mr. SIMPSON: When was federal assistance given on this airstrip at this mine of which you are speaking?

Mr. SIVERTZ: In 1957-58.

Mr. SIMPSON: Can you give me the amount of the federal assistance?

Mr. SIVERTZ: I cannot give you that figure at this moment. I have it.

Mr. HARDIE: When did the government decide to give assistance to Taurcanis and Rae Rock is building airstrips? When was the decision made they should give assistance?

Mr. ROBERTSON: We would have to check to find out when the first payment was made. But the amount paid last year was $18,756.

Mr. HARDIE: What about the decision to enter into a policy such as this?

Mr. ROBERTSON: We will have a representative of the Department of Public Works here this afternoon.

The CHAIRMAN: Gentlemen, it is now 11.30 and I hope it is agreeable to everyone that we have as a witness Mr. Williams from the Department of Public Works this afternoon.

We have made a commitment for Monday and Tuesday to go on with the estimates of the Travel Bureau. On behalf of the committee I told Mr. Argue that we would start on Wednesday with the estimates of the National museum, as he has to be out of the city later on that week and for some time. I hope that is agreeable to the committee.

So if you gentlemen think it is agreeable, we will now adjourn until this afternoon after the orders of the day. Might I suggest that the department put these significant lines on the maps?

Mr. ROWLEY: Would it be acceptable if we had two separate maps, because there is too much on that map to get on one map alone. Hence I propose to place the isotherms and the tree line on one map and the communications on another.

The CHAIRMAN: Very well.

AFTERNOON SESSION

THURSDAY, June 4, 1959.
3.30.

The CHAIRMAN: Gentlemen, we now have a quorum. I am sorry we are late in starting.

Mr. Argue has been substituted for Mr. Fisher as a member of our committee. It is necessary for us to consider substituting the name of Mr. Argue in place of that of Mr. Fisher on our steering committee. Is it agreed?

Agreed.

Mr. FLEMING (*Okanagan-Revelstoke*): There is one matter arising out of Mr. Robertson's report this morning on the comparative figures between the Soviet Arctic and the Canadian north. Would it be possible to have photographic reproductions made of the two maps, and have them made available to the members of the committee? Would that be feasible? I think they would be useful for reference.

Mr. SIVERTZ: Photographic reproductions could be made and we would gladly make them if the committee members wish to have them.

The CHAIRMAN: If it is the wish of the committee, they could be prepared.

Mr. COATES: Photographic reproductions of the two maps, the Canadian and the Russian sides?

Mr. FLEMING (*Okanagan Revelstoke*): I meant reproductions of that map, but not necessarily photographic ones.

The CHAIRMAN: The department will take care of it but they will not be in colour. However, the lines will indicate what they mean and there will be an interpretation.

The department has replies to be incorporated in the proceedings, to Mr. Hardie's questions about roads started since July 1, 1957.

Mr. CONNELLY: The question was: what new roads have been started since July 1, 1957.

Mr. HARDIE: That was not already surveyed.

Mr. CONNELLY: Perhaps if I read the ones that have been started, Mr. Williams could say whether they were surveyed previously to that.

1. The road from Peace Point to the west boundary of Wood Buffalo Park.
2. Resurfacing of the Yellowknife to the airport road.
3. The Fort Fitzgerald to Bell Rock road.
4. Reconstruction, Fort Simpson to airport road.
5. Road from Fort Smith to Pine Lake.
6. Survey and clearing of road from Yellowknife to Marian Lake.
7. Survey of road from Yellowknife to Fort Reliance.
8. Fort Fitzgerald to Rocky Point.

The second question was with respect to the road from Peace Point to Wood Buffalo Park, first as to the mileage. This is 81 miles.

When was the survey started? That was in 1957-58.

(*At this point Mr. Coates took the chair as acting chairman.*)

Mr. HARDIE: That is on the road from Fort Smith to Wood Buffalo Park.

Mr. CONNELLY: From Peace Point to Wood Buffalo Park.

Mr. WILLIAMS: Peace Point to the west boundary.

Mr. HARDIE: That is an extension of the road from Peace Point. The road from Smith to the west boundary starts at Smith, not at Peace Point. I asked when the survey of that road from Smith to the west boundary of the park was started, in what year?

Mr. CONNELLY: The only part that has been properly surveyed is from Peace Point to Wood Buffalo Park.

Mr. HARDIE: There was no survey made before that?

Mr. CONNELLY: There was a survey done in the winter of 1957-58 from Smith to Pine Lake.

Mr. HARDIE: Not to Peace Point?

Mr. CONNELLY: No.

Mr. HARDIE: Does that complete all the answers?

Mr. CONNELLY: You asked about the road from Providence to Rae, mile 0 to mile 31, and what type of contract was let, and to what company.

Mr. HARDIE: Yes.

Mr. CONNELLY: The contract was a rental of equipment contract, and the company was Linton-Reimmer; it was a joint contract.

The total mileage of roads constructed in the last five years was approximately 270 miles of major roads, and 197 miles of secondary dirt roads. And when did we assist Taurcanis? That was in 1958-59.

Mr. HARDIE: And the discovery at Rae Rock?

Mr. CONNELLY: That was at the same time.

Mr. HARDIE: Are we through with these answers now? If so, before we go on, I asked for the total mileage of the roads shown in the brief that the department presented to the Gordon Commission, what the total mileage of those roads was and how many miles have been completed to date.

Mr. SIVERTZ: Mr. Robertson said this morning that he would have those put together, but it would be necessary to add up the various parts in his report. That has not yet been done.

Mr. HARDIE: I would like to ask some questions in regard to this contract for mile 0 to mile 31 on the notrh side of the Mackenzie, which was let as stated a moment ago on a rental-equipment basis.

How does the cost per mile of this section compare with the cost per mile of the section immediately north of mile 31 which I think MacNamara or Mannix did last year?

Mr. CONNELLY: That is this year's contract. They did from mile 0 to mile 31 last summer, and they now have a contract for 31 to 85 and from 85 to 138.

Mr. HARDIE: They told me this morning they had 81 miles completed. I asked about from mile 0 to mile 31.

Mr. CONNELLY: Did you say south of the Mackenzie?

Mr. HARDIE: No, north of the Mackenzie.

Mr. CONNELLY: You are talking about Providence North?

Mr. HARDIE: Yes.

Mr. WILLIAMS: There are 31 miles completed.

Mr. HARDIE: How did this cost per mile on the rental equipment basis compare to the unit price cost that has been contracted now to Mannix?

Mr. WILLIAMS: There is one to Mannix and one to MacNamara.

Mr. HARDIE: How did they compare on a mileage basis?

Mr. WILLIAMS: The rental contract for the work done—and there is still some surfacing to do on it—runs about $15,000 per mile.

Mr. MCGREGOR: On a rental basis?

Mr. WILLIAMS: Yes; and on the unit price basis, with our quantities and the tenders we have in now, it is about $19,000. But you particularly will appreciate that the two jobs are not exactly comparable, because at the north end we ran into those boulder ridge conditions.

Mr. MCGREGOR: On the end from mile 31 to mile 80 the same conditions exist.

Mr. WILLIAMS: No, once you get up to about mile 55 or 60, around Caen Lake, you start hitting into those boulder regions which is difficult, and which do not exist on the southern end. Actually from the standpoint of quantity and class of material there is not much of a spread, not as much as I thought there might be.

Mr. HARDIE: You would not call for a contract where you thought there was going to be a big spread?

Mr. WILLIAMS: No, I thought we would shave even more than we did.

Mr. HARDIE: Both of them were comparable?

Mr. WILLIAMS: Yes.

Mr. HARDIE: I gather that the unit and the rental price bids were comparable.

Mr. WILLIAMS: There is one factor we cannot evaluate. I will be able to tell you about it around this time next year.

Last year, based on the equipment we called for and the operation we anticipated, we thought we could get 50 miles done, but we only got 31. As you realize, the disadvantage of a rental contract, and there is not the same incentive —but we are hoping to get better mileage, out of this unit price.

Mr. HARDIE: You are expecting to finish this whole stretch of road by November of this year?

Mr. WILLIAMS: That is right.

Mr. HARDIE: Was it a local contractor who did it on a rental basis?

Mr. WILLIAMS: Linton is local; Rimmer is from somewhere north of Edmonton, at High River.

Mr. HARDIE: In any event why did you call for these contracts for such long stretches of road?

Mr. WILLIAMS: Well, actually, it was to get what we thought would be the the best price. If you break it down into too small pieces, the cost of your overhead, or of your move, which are fixed for the mileage you will do under the contract, there are fewer miles to spread it over, so that it costs you more. Therefore the more miles you can include, the thinner you can spread your overhead and fixed charges.

Mr. HARDIE: So, to go back to this road from Flat Creek into the Peel Plateau which you have let on a rental basis this year, you expect that the cost will be higher this year than when you start to call for unit price bids?

Mr. WILLIAMS: I hope it will.

Mr. HARDIE: You mean that the rental price will be higher?

Mr. WILLIAMS: No, I hope we will get very much better unit price bids as a result of the work we are doing this year than we would have, had we started out in mid-winter this year and called for a two year unit price contract.

Mr. HARDIE: On the north end of that road you started out from Yellowknife to Rae.

Mr. WILLIAMS: Yes.

Mr. HARDIE: What was the amount of the contract given to the MacNamara Construction Company? That was the original contract in 1957, I think, in the spring of 1957?

Mr. WILLIAMS: Yes.

Mr. HARDIE: For mile 0 to mile 20 out of Yellowknife? What was the original contract price?

Mr. WILLIAMS: Just a minute—it was $695,172.

Mr. HARDIE: You say $695,172?

Mr. WILLIAMS: Yes.

Mr. HARDIE: What have you paid to MacNamara on this contract to date for mile 0 to mile 20?

Mr. WILLIAMS: I am guessing a bit on this, but I will give you the last one I have a record of here, which is 1958; it was $939,212.

Mr. HARDIE: You say $939,212?

Mr. WILLIAMS: That is right.

Mr. HARDIE: In answer to a question I put on the order paper some time ago. The question is:

> What was the total amount paid to MacNamara Construction Company Limited from April 1, 1958, to January 31, 1959, for work done on the road between Yellowknife ....

and so on

> Does this amount cover the total contract?

and the answer to that is:

> No. The total amount of the contract is $1,072,684.24.

Mr. WILLIAMS: That is what is authorized, but not necessarily paid. I would have to check that.

Mr. HARDIE: Is that stretch of road completed?

Mr. SLOGAN: I move we adjourn for a division in the house.

The VICE CHAIRMAN: Is the committee agreeable to meeting tomorrow at 9:30?

Agreed.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 32

RECEIVED
JUN 15 1959
Library of Parliament

FRIDAY, JUNE 5, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources; Mr. B. G. Sivertz, Director, Northern Administration Branch; Mr. A. B. Connelly, Chief, Engineering Division; Mr. G. M. Carty, Chief Administrative Officer; Mr. G. B. Williams, Chief Engineer, Development Engineering Branch, Department of Public Works; and Mr. E. W. Humphrys, Chief Engineer and General Manager, Northern Canada Power Commission.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21407-2—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Argue,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Greton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

CORRIGENDA (English Edition only)

Minutes of Proceedings and Evidence No. 29, June 1, 1959.

Page 849, 7th paragraph: for "Mr. NIELSEN" substitute "Mr. HARDIE".

line 35: for "is" substitute "of".

Page 859, line 17: for "waul" substitute "would".

Page 861, line 8: delete "they are within"; and after "season" insert "have been lost".

MINUTES OF PROCEEDINGS

FRIDAY, June 5, 1959.
(40)

The Standing Committee on Mines, Forests and Waters met at 9.50 o'clock a.m. this day.

Members present: Messrs. Argue, Cadieu, Coates, Dumas, Fleming (*Okanagan-Revelstoke*), Gundlock, Hardie, Korchinski, Martel, McQuillan, Nielsen, Payne, Simpson and Slogan—(14).

In attendance, of the Department of Northern Affairs and National Resources: Messrs. B. G. Sivertz, Director, Northern Administration Branch; A. B. Connelly, Chief, and J. I. Nicol, Assistant Chief, Engineering Division; G. M. Carty, Chief Administrative Officer; D. W. Bartlett, Executive Officer; M. A. Currie and G. H. Montsion, Administrative Officers; and E. R. Stimpson, Northern Administration Branch: *and of the Department of Public Works:* Mr. G. B. Williams, Chief Engineer, Development Engineering Branch.

Neither the Chairman nor the Vice-Chairman being present at the opening of the meeting, on motion of Mr. Slogan, seconded by Mr. Korchinski.

Resolved,—That Mr. H. C. McQuillan be acting Chairman of this meeting.

Thereupon Mr. McQuillan assumed the Chair.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Items 275 to 280 relating to the Northern Administration Branch.

Officials were questioned on matters relating to the said items, in particular concerning road construction and tenders therefor.

At 10.20 o'clock a.m., the Committee having lost its quorum, it recessed until 10.35 o'clock a.m., at which it time it again had a quorum.

The Committee continued its questioning of officials on the aforesaid matters.

At 11.00 o'clock a.m. the Committee adjourned until 3.00 o'clock p.m. this day.

AFTERNOON SITTING

FRIDAY, June 5, 1959.
(41)

At 3.50 o'clock p.m. this day the Standing Committee on Mines, Forests and Waters resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Items 275 to 280 relating to the Northern Administration Branch.

Mr. J. W. Murphy, the Chairman, not being present, by agreement, Mr. Robert C. Coates took the Chair.

21407-2—1½

Members present: Messrs. Baskin, Cadieu, Coates, Fleming (*Okanagan-Revelstoke*), Korchinski, Martel, Muir (*Cape Breton North and Victoria*), Nielsen, Payne, Simpson, Slogan and Smith (*Calgary South*)—(12).

In attendance: The same as at the morning sitting with the addition of Mr. R. G. Robertson, Deputy Minister of Northern Affairs and National Resources, and Mr. E. W. Humphrys, Chief Engineer and General Manager, Northern Canada Power Commission.

Mr. Nielsen recorded certain revisions to be made to Issue No. 29 of the Minutes of Proceedings and Evidence of the Committee of June 1, 1959 *(For detail thereof see Corrigenda on the inside cover page of this issue)*.

Officials were again questioned on matters concerning Items 275 to 280, in part in regard to the construction of roads and on tenders therefor.

Items 275 to 280 were approved.

Items 476 and 477 were called; the said items relate to advances to the Northern Canada Power Commission and advances in accordance with agreements pursuant to the Atlantic Provinces Power Development Act.

Mr. Robertson explained the purpose of the said items. Questions thereon were asked of Messrs. Robertson and Humphrys.

Items 476 and 477 were approved.

At 4.15 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Monday, June 8, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

FRIDAY, June 5, 1959
9.50 a.m.

Mr. SLOGAN: Gentlemen, in the absence of the chairman and the vice chairman, I should like to nominate Mr. McQuillan to take the chair, seeing that we have a quorum.

Agreed.

The ACTING CHAIRMAN (*Mr. McQuillan*): Gentlemen, we will come to order and proceed from where we left off yesterday.

Mr. HARDIE: Perhaps Mr. Connelly has the information that I asked for. I do not want all the information I asked for yesterday at this time; but when we ended up I was asking questions in regard to a contract from mile 0 to mile 20 out of Yellowknife towards Fort Rae. If they have that information, I can go ahead. But I do not want all these answers grouped into one now. I want to keep on this one contract first; we can get the other answers later. Have you that information on the contract?

Mr. A. B. CONNELLY (*Chief, Engineering Division*): You were asking the unit prices, were you not?

Mr. HARDIE: No; I asked Mr. Williams yesterday about the original contract, the McNamara contract, from mile 0 to mile 20 out of Yellowknife to Fort Rae. He gave me an answer that the original contract was for something like $695,000. I asked him what had been spent to date on the road, and I think he gave me a figure of $939,000.

The ACTING CHAIRMAN: May I interrupt? I understand Mr. Williams has this information, if you will await his return. Here he is.

Mr. HARDIE: Mr. Williams, yesterday we were at the point where I had asked what the total contract price is, as of now, on the contract of McNamara construction from mile 0 to mile 20 out of Yellowknife.

Mr. G. B. WILLIAMS (*Chief Engineer, Development Engineering Division, Department of Public Works*): Yes: yesterday I gave a figure of $939,212. I wish to change that figure. That was the last progress estimate I had listed as paid. What you want is the total cost of this contract to completion?

Mr. HARDIE: That is right.

Mr. WILLIAMS: The job is complete, with the exception of some trimming which they could not get done; and we have a hold-back which has not been paid to them but is owing when they complete this. It will be done this summer.

The total value of the contract, on the basis of the measurements now made—which are still subject to our own audit in headquarters—is $1,056,856.88.

Mr. HARDIE: May I ask Mr. Williams this: this figure for completion of this section from mile 0 to mile 20. There is another contract for—

Mr. WILLIAMS: For the gravelling.

Mr. HARDIE: Yes. Does this include the gravelling?

Mr. WILLIAMS: No.

Mr. HARDIE: Why is there a difference in the original contract, which was based on a unit price bid? The low tenderer, I presume, got the contract?

Mr. WILLIAMS: That is right.

Mr. HARDIE: For something like $695,000?

Mr. WILLIAMS: $695,172.

Mr. HARDIE: Before you go any further—when was that contract let?

Mr. WILLIAMS: March 13, 1957.

Mr. HARDIE: Could you give me the reason why there is a difference now of something like $350,000 to $400,000 in this price?

Mr. WILLIAMS: Yes; their contract is from mile 0 to mile 20. In the winter of 1957-58 we extended their contract for brushing and grubbing as winter work, for the brushing portion of it, from mile 20 to mile 40. This is added into the contract.

Mr. HARDIE: How much did that brushing cost for those 20 miles?

Mr. WILLIAMS: $150,000.

Mr. HARDIE: How much an acre is that?

Mr. WILLIAMS: Roughly, $300.

Mr. HARDIE: $300 an acre for brushing?

Mr. WILLIAMS: That is brushing and grubbing where necessary.

Mr. HARDIE: Did you call for tenders on this winter work?

Mr. WILLIAMS: No, this is an extension of the contract.

Mr. HARDIE: You just gave an extension?

Mr. WILLIAMS: Yes. But, mind you, it was at their contract unit price which had been established by a public tender call.

Mr. HARDIE: But their contract on the unit price would not necessarily be the lowest tender for that type of work?

Mr. WILLIAMS: Not necessarily, no.

Mr. HARDIE: Well, was it the lowest price that was offered on the original tenders?

Mr. WILLIAMS: I do not know.

The ACTING CHAIRMAN: Mr. Hardie, are we not getting into the field of the public accounts committee?

Mr. HARDIE: Mr. Chairman, we have heard members of your group—

The ACTING CHAIRMAN: Not my group, I am chairman here now.

Mr. HARDIE: —for three deys on Inuvik, on the same line of questioning. At that time I raised the same point of order, that I was willing to leave it to the public accounts committee. Since this questioning has gone on, with regard to Inuvik, for three days, I thought I was within my rights to carry on the same type of questioning on another item.

The ACTING CHAIRMAN: I do not necessarily, as chairman, approve of what went on before. I would appreciate it if you would make this kind of questioning as short as possible.

Mr. HARDIE: Well, I will make my questions just as short as I possibly can.

The ACTING CHAIRMAN: Thank you.

Mr. HARDIE: So then, Mr. Williams, the brushing and grubbing was actually an extension, or negotiated—

Mr. WILLIAMS: An extension.

Mr. HARDIE: An extension of the contract at the unit price?

Mr. WILLIAMS: That is right—established by public tender.

Mr. HARDIE: But that was not necessarily the lowest tender price you had received in the original contract?

Mr. WILLIAMS: Not necessarily.

Mr. CADIEU: It is quite common for such a thing to be entered into—the fact that McNamara Construction Company would be the company that would have the equipment on the job.

Mr. HARDIE: What was the lowest price of other companies on grubbing and clearing?

Mr. WILLIAMS: Grubbing was one increase. You did not get the rest of it. I would like to give you that.

Mr. HARDIE: Yes, in 1957-58, what was the the rest?

Mr. WILLIAMS: There is approximately $25,000 involved in the installation of a structural arch culvert at mile 20, whereas in the preliminary design we had contemplated a bridge. When we had constructed that far we found we could put in a culvert installation.

Mr. HARDIE: It will cost $25,000 more than what you estimated for the bridge?

Mr. WILLIAMS: No. We had a bridge estimated for, and a separate contract which would have been much more. It was not in the McNamara contract. We were going to call a separate contract to put in a bridge.

As you know, it is a little tough to get around that country, and we had no experience to go by. We found we could put in a culvert; and as this is just a case of purchasing an installation, which we did as an extra to the contract.

There are some minor extras for construction, but by and large the balance of the increase represents increased quantities after the contract was called for. That is, the tentative design we had for the job, the quantities we had estimated, were not sufficient for the project.

Mr. HARDIE: Your estimate of quantities on that job was under?

Mr. WILLIAMS: Yes.

Mr. HARDIE: When you called for the contract?

Mr. WILLIAMS: That is right. I might say, this is the purpose of using unit price contracts in highway construction. You speak of a contract amount of $695,000. That figure never even appears in the actual contract with the contractor. What appears in the contract is the common excavation at so many cents per cubic yard, the rock excavation at so many cents per cubic yard. That item of $695,000 is a control figure which is exercised by Treasury Board on us when dealing with the contract.

Mr. HARDIE: What do you estimate the rock at, how many yards?

Mr. WILLIAMS: I do not know.

Mr. HARDIE: The other $170,000 then, or whatever it was, was due to an under-estimate in the original called for tender of the amounts?

Mr. WILLIAMS: Actually you estimate you are going to get excavations from area A, and when you get to it area A happens to be under about a foot of water, so you go to area B and have a longer haul for your material. Or you estimate you are going to have 50,000 yards of a certain type of fill, and by the time you get that fill up enough, it has gone down below, and so you use 70,000 yards. That experience certainly is not uncommon.

Mr. HARDIE: I think I am through with that question. I would like to have your own opinion of this extension from Enterprise to Yellowknife, with regard to the Mackenzie River crossing. Do you think that this road can serve the area north of the Mackenzie River?

The ACTING CHAIRMAN: I think that question is out of order under the circumstances. I do not think you can ask Mr. Williams to answer questions like that, asking him to express an opinion.

Mr. HARDIE: They have done it around here during the other committee meetings, but I will not do it myself.

I want to ask a question with regard to the Mackenzie. Have you an estimate of what it will cost to bridge the Mackenzie?

Mr. WILLIAMS: Yes.

Mr. HARDIE: What is that estimate?

Mr. WILLIAMS: Approximately $6 million.

Mr. HARDIE: It is $6 million?

Mr. WILLIAMS: Yes.

Mr. SLOGAN: This item 280, this $9 million, is that just for roads in the Yukon and Northwet Territories, or for the province a well? I notice it says "to the provinces".

Mr. WILLIAMS: That is just the provinces, only.

Mr. SLOGAN: Could you tell me how much of the amount of $9 million is being spent in the province of Manitoba?

Mr. G. M. CARTY (*Chief Administrative Officer*): Perhaps I could deal with that question.

The ACTING CHAIRMAN: Yes, Mr. Carty?

Mr. CARTY: The roads-to-resources program should not be confused with the territorial roads. This is entirely a program for the construction of roads within the provinces.

In February 1958, the federal government offered each province assistance amounting to $7½ million over a five-year period for the construction of roads which the provinces would not otherwise build, and which would lead into areas with resource development potential. In the case of Manitoba a program has been agreed to with the province that will result in the eventual expenditure of the entire $15 million.

Mr. SLOGAN: This is on a 50-50 basis?

Mr. CARTY: Yes, the federal government will pay $7½ million; that is correct.

During the present year the expenditure will not be $1½ million, because originally the offer had been that the program would be on a five-year basis. We realized that it was a little difficult from a budgeting point of view for some of the provinces, to limit them to five years. It would have meant that, if they did not keep construction up to schedule some of the money would go down the drain. As a result, the policy was changed so that the term of the program could vary from province to province; in one province it would be five years, in another six years, and in another seven; it goes as high as 11 years in the case of Newfoundland, and Manitoba will be a seven-year program.

Mr. SLOGAN: Can you tell us what roads are under consideration in that province?

Mr. CARTY: The minister has given an under-taking to the premier of Manitoba and to the ministers concerned in all provinces that he will not announce details of the program until the agreements have been formally signed. The agreement with Manitoba is just about to be signed, but it has not been signed as yet.

Mr. SLOGAN: Does the province determine where the roads are going to go, or is that done in consultation with the federal government?

Mr. CARTY: The province makes the initial proposal; and it is then negotiated in consultation with the federal government.

In the case of Manitoba, as you know, the government has changed in that province. A program had been negotiated as early as last June, and then, with the change of government, we reopened the negotiations and the program now agreed to is slightly different from that agreed to originally.

In answer to your question, it has been a case of negotiation and consultation between us.

Mr. SLOGAN: Could you make public what roads were negotiated with the former government?

Mr. CARTY: I do not think I can do that, in the light of the minister's undertaking to both governments in Manitoba that he would not reveal the details, and they would not, until the agreement was signed.

Mr. SLOGAN: In other words, this is still in the planning stage, and there is no road construction under that program begun in Manitoba?

Mr. CARTY: Yes, the minister authorized each province—once a program had been agreed to in principle, even though the formal agreement was not signed—to commence construction of the agreed roads, subject to eventual signing of an agreement and subject always, of course, to the conditions and terms of the agreement. Any expenditure made on or after the date on which he gave that authorization will qualify for federal assistance.

Mr. SLOGAN: Even though the provinces started building the road we cannot make public what roads are being built?

Mr. CARTY: That is so. That may not appear to make much sense. If a person wanted to find out what roads were being built, all he need do is to drive around Manitoba and find them.

On the other hand, it was anticipated the agreements would have been signed sooner than they are. The reason for the delay, as I have stated, is as a result of representations from several provinces in respect to the time schedule. The government decided on this stretch-out in the program, whereby they would not be required to do all the work in five years.

The original formula was quite rigid, and if the province did less than $3 million worth of work in any given year, it had to, in the next year, do that full year's work plus what they were behind. They could only carry it over one year. If they did not make up the deficit in the second year, the money would go down the drain.

The present formula is based on a realistic estimate of what they can spend in each of a given number of years; and that number of years varies from province to province.

Mr. SLOGAN: I could not ask you then about any specific roads that are being planned, or anything like that?

Mr. CARTY: I am afraid I could not give those details.

Mr. SLOGAN: Perhaps I could give you some recommendations, so they can be taken into consideration when you are budgeting.

Mr. CARTY: I think that is in order.

The ACTING CHAIRMAN: I do not think they are in order as far as this committee is concerned.

Mr. CARTY: In fairness to the hon. member, I should say that that program is already agreed to and the mere signing of the agreement is really a legal formality. We have agreed on the program and on the terms of the agreement, but we have not signed the formal agreement.

Mr. HARDIE: Mr. Chairman, I do not think Mr. Williams cares to be here all day. If no other members have any other questions for Mr. Williams in regard to roads in the Northwest Territories, which we started dealing with yesterday, I wonder if I could ask him a few more questions and possibly let him go, rather than have him sit here, because as far as roads-to-resources program is concerned I do not think that he would be questioned.

The ACTING CHAIRMAN: All right.

Mr. HARDIE: Could Mr. Williams tell me on this Yellowknife to Fort Rae portion—and I am now speaking of the completed road, of the gravel surface—what will the cost per mile be?

Mr. WILLIAMS: I would say on section mile 0 to mile 20, the McNamara portion, I think it will run around $62,000 a mile. On the other portion, it will run an average of about, pretty close to $50,000 a mile.

Mr. HARDIE: Is there any reason for a difference of $12,000 a mile? It is pretty well the same type of country.

Mr. WILLIAMS: Yes, but they are a year apart in tender calls. I think a lot of it is strictly—

Mr. HARDIE: Decreased costs?

Mr. WILLIAMS: Once you get a program started in the area you get more competition, and the more competition you have, the more knowledge you have of conditions, and the more advantageous your price is.

Mr. HARDIE: How many contractors bid on this section you called this year, from mile 20 to Fort Rae?

Mr. WILLIAMS: Actually that was last year.

Mr. HARDIE: All right, last year?

Mr. WILLIAMS: Offhand, I cannot give it to you, but from our standpoint it was a very good tender call—there were 7 to 10 tenders received.

Mr. HARDIE: Were there not seven or eight tenders received in the original mile 0 to mile 20 contract?

Mr. WILLIAMS: Six, we are going back to our discussion of a couple of days ago, about taking a bit of a risk. On the first one, there had not been a highway contract awarded in this area, in that portion going west from Yellowknife.

Mr. HARDIE: So the experience of the first year has actually reduced the cost?

Mr. WILLIAMS: Yes, that is what I was harking at the other day, creating good competition.

The ACTING CHAIRMAN: I see we have the deputy chairman here, Mr. Nielsen.

Mr. NIELSEN: If the committee is agreeable, please carry on, Mr. McQuillan.

Item agreed to.

Mr. HARDIE: Your department has done considerable work in investigating over the Hay River, on the Mackenzie highway—the crossing there. Could you tell the committee whether or not a spillway could be built across the river there to allow for, say, just a couple of days at break-up, where you could not use the road? Could a spillway be constructed there, in your opinion, from the investigations you have done?

Mr. WILLIAMS: You are getting into an engineering opinion of my own on a subject which is now under an over-all study as a result of a series of—

Mr. HARDIE: No; from the investigations your department has carried out over the years— and they have carried out considerable investigation?

Mr. WILLIAMS: You are quite right. On the basis of the conditions as we knew them; on the basis of information we had collected from our own staff, plus staff of Northern Affairs and National Resources, we had an idea that a spillway was perhaps the answer. You know the flooding condition there varies from year to year, depending on the break-up condition.

The opinion we had developed looked like the answer, and we were going ahead making designs and everything else on the basis that it was the answer.

Then we had the spring break-up—I think it was in 1957—where the condition of flooding developed in Hay River townsite and up on the airport, which was just as serious as we were trying to defend against, and yet the spillway condition as it existed then was similar to what we had planned.

So, in the circumstances we felt our proposal just was not sound, and we really felt that what was needed was a more thorough study. The key to the whole thing is the break-up of the ice into the river channel and out into the mouth of the river. We went back to Northern Affairs and said we thought this was more than a question of flow at the crossings. Once break-up took place, it was more than the size of channel; it was a study of the break-up of the ice. We suggested that this be gone into pretty thoroughly by the Water Resources Branch, or someone should be called in to take a look at this other approach that we had not covered too well.

Mr. HARDIE: How would the spillway affect flooding?

Mr. WILLIAMS: The idea of the spillway was, that if you kept the fill down across the channel and had a big enough culvert so you always got some flow through; when you had an ice jam down at the mouth that was going to pile up the water and flood it over the airport or into the town, the excess water, instead of flooding into the town, would go down the spillway.

We felt it could go over the top, or go through the spillway, and you would have a minor interruption in service, but not a serious one. In the spring of 1957, I think it was, we had that situation with a very low fill: certainly the crestline was not any higher than what we were going to put in on a spillway. Even with that condition, all the water that could get down the channel went over that crest and still flooded in the town and the airport. So obviously the solution we had was just not good enough.

Mr. HARDIE: I just do not see where the spillway has caused the flooding.

Mr. WILLIAMS: No, the spillway has not caused the flooding; that is my point. But we had serious doubts that it would be an effective solution, and the real thing we thought was, was there any way you could get the ice out of that channel and prevent the jams. If you could reduce the jams, the other part became easy. That is what Northern Affairs has asked for a study on now.

Mr. HARDIE: Is the flooding condition then the first factor that should be looked after?

Mr. WILLIAMS: It is the ice jam situation that is to be studied, and then we will get the other solution.

Mr. HARDIE: Have you ever had an estimate on what a bridge would cost?

Mr. WILLIAMS: Yes, we had estimates. The first year we made an estimate was in 1955, I think. The trouble with a bridge is this: if you are going to build a bridge, you have to go the whole way, because if you have an opening there, all the ice is going to try to get down that channel and will take out any bridge you put in, unless it is really substantial and open.

Mr. HARDIE: Unless you anchor it back?

Mr. WILLIAMS: Well—

The ACTING CHAIRMAN: I think we are getting into petty—I will not say "petty", but into too much detail on this one particular project. We cannot begin to examine the engineering aspects of every project that we are concerned with.

Mr. HARDIE: This committee took 15 meetings of Mines and Technical Surveys on personal opinions and everything else.

The ACTING CHAIRMAN: I am sorry, but I do not think we will ever make any progress in that way. You would like to make some progress, as much as the rest of us, I am sure.

Mr. HARDIE: I have wanted to make some progress ever since the start. As far as I am concerned, if I cannot continue the line of questioning the rest in this committee have carried on, they can stick this committee.

—At this point, Mr. Hardie retired from the meeting.

Mr. DUMAS: Mr. Chairman, I think this is very unfair. This question is related to his constituency, and is very important.

The CHAIRMAN: I do not think—

Mr. NIELSEN: On a question of order, Mr. Chairman; there is no longer a quorum.

Mr. DUMAS: I think this is a very bad mistake.

—The committee recessed for lack of quorum.

—Upon resuming.

The ACTING CHAIRMAN: Gentlemen, we have a quorum again. Shall we continue?

I am sorry for what happened, but I felt that I was right in calling Mr. Hardie's attention to the fact we were getting into details of a specific construction project; and I did not feel that was this committee's purpose.

Shall we continue, and does anybody have any questions on these items 275 to 280?

Mr. CADIEU: Mr. Chairman, on item 280, roads-to-resources, I think the federal government share this with the province concerned, on a 50-50 basis?

The ACTING CHAIRMAN: That is the answer that was given.

Mr. CARTY: That is correct.

Mr. CADIEU: Has the federal government ever advised the provincial government on this work, that this work be done by contract on a unit price basis rather than a rental basis?

Mr. CARTY: The agreements with the provinces provide that all work has to be done by contract rather than by day labour, unless the minister gives specific approval for the use of day labour.

As to the nature of the contract, I think Mr. Williams is in a better position to answer that.

Mr. WILLIAMS: You are inquiring the way in which the work is now being done?

Mr. CADIEU: Yes. I was wondering if the federal government has perused the possibility of having it done by tender on a unit price basis rather than a rental basis?

Mr. WILLIAMS: Yes, they have done that.

Mr. CADIEU: They have?

Mr. WILLIAMS: Yes, they have asked the provinces to do this, and the minister has indicated what his preference is for contract work.

Mr. KORCHINSKI: What is the situation in Saskatchewan, then?

Mr. WILLIAMS: They have started these projects.

Mr. KORCHINSKI: Are there any private contractors, who have any contracts whatever?

Mr. WILLIAMS: Yes, I think only on the bridges.

Mr. KORCHINSKI: Not on the actual road work?

Mr. WILLIAMS: There are private contractors, but not on the unit price contract basis; it is all on rental.

Mr. KORCHINSKI: I wonder if it would be possible to find out—and this may not be a fair question, Mr. Chairman—but I wonder if it would be possible to find out how many private contractors are working on roads in Saskatchewan?

Mr. WILLIAMS: This would only be on the project under roads to resources?

Mr. KORCHINSKI: Yes.

Mr. WILLIAMS: Do you mean private contractors who have equipment on rental?

Mr. KORCHINSKI: Yes.

Mr. WILLIAMS: Yes, I think we could get that. We would have to go to Saskatchewan for it—or, we have a supervising engineer who is up there, and he will have to take the list off the accounts that are coming through.

Mr. CADIEU: Are there any private contractors who are in charge of any specific project on these roads-to-resources, or are they all being controlled by the provincial government?

Mr. B. G. SIVERTZ (*Director, Northern Administration Branch*): The latter.

Mr. WILLIAMS: The provincial government.

Mr. CARTY: Are you thinking only of Saskatchewan?

Mr. KORCHINSKI: I was thinking of Saskatchewan, yes.

Mr. SIVERTZ: In all cases they would be under the control of the provincial government.

Mr. KORCHINSKI: This job is being done on a rental basis; and it is being supervised by the contractor's crew, or any one of these private contractors? Does any one of these private contractors have one of these cost rental jobs that he is in charge of?

Mr. WILLIAMS: They are all sent to us as day labour projects on the equipment rental schedule.

The ACTING CHAIRMAN: Mr. Korchinski, have you another question?

Mr. KORCHINSKI: How much has been contributed by the federal government under the roads-to-resources program in Saskatchewan?

Mr. CARTY: To date, $750,000.

Mr. KORCHINSKI: Has the agreement been signed between the provincial government and the federal government?

Mr. CARTY: Not as yet.

Mr. KORCHINSKI: Under what authority have the contributions been made?

Mr. CARTY: Under authority of a Treasury Board minute. Saskatchewan represented to us that they had made very substantial expenditures and had recovered no money from the federal government, and they asked if a token payment could be made to them. We said that no payments could be made until the agreements were signed, unless we got special authority. In the circumstances, Saskatchewan had been ready to sign the agreement, but the agreement had been delayed because of the change in the term of years. So we felt they had a case, and we got Treasury Board authority under which payment of $750,000 was made.

Mr. KORCHINSKI: When could we expect this agreement to be signed?

Mr. CARTY: Very, very soon.

Mr. SLOGAN: Mr. Carty, this is a supplementary question. Was there a similar payment made to the province of Manitoba?

Mr. CARTY: No, there was no representation from Manitoba.

Mr. SLOGAN: No money has been advanced to Manitoba, as yet?

Mr. CARTY: No.

Mr. KORCHINSKI: For our information, I wonder if it would be possible to have maps compiled indicating where these roads have been built to date?

Mr. CARTY: The minute the agreements are signed we can do that, but I am afraid that until the agreements are signed what I said earlier—about revealing details of the roads—must apply. I have seen maps in newspapers of the Saskatchewan program, but that information was not revealed by the federal government. I do not know where that information came from.

Our minister has given an undertaking to all provinces that there will be no announcement of details of programs until the formal agreements are signed.

Mr. KORCHINSKI: Can you tell us how much has been spent on roads-to-resources in Saskatchewan?

Mr. CARTY: Expenditures up to March 31, 1959 are indicated as $2½ million.

The ACTING CHAIRMAN: Mr. Martel—Mr. Simpson?

Mr. SIMPSON: My question is supplementary.

Mr. CARTY: I should say, that includes the provincial share, that $2½ million. That is the total expenditure; that is not only the federal contribution.

Mr. SIMPSON: That is what I was going to ask. That is the total expenditure, provincially and federally?

Mr. CARTY: Yes, we have received actual claims for $986,000, and we have paid $750,000, which was that special payment I mentioned earlier.

Mr. SIMPSON: In view of the answers given to Mr. Korchinski, I guess that any questioning in regard to any specific road in Saskatchewan would have to receive the same answer as that regarding any specific road in Manitoba?

Mr. CARTY: Yes, I am afraid it would.

Mr. SIMPSON: I am particularly interested in the road from The Pas to Hudson Bay, and the one from Flin Flon to connect up with highway 35.

Mr. CARTY: I am afraid we cannot comment at all on the details of the roads. The moment the agreements are signed there will be a joint announcement by the two governments with all the details. As I said earlier, the agreement should be signed very, very soon.

Mr. SIMPSON: Thank you.

The ACTING CHAIRMAN: Mr. Martel?

Mr. COATES: I have a supplementary question, Mr. Chairman.

The ACTING CHAIRMAN: Are you on the same subject, Mr. Coates?

Mr. COATES: Yes. Has an agreement been signed with Nova Scotia?

Mr. CARTY: No, not as yet, but we are also hoping it will be signed very soon.

Mr. COATES: Has there been any change in the over-all program?

Mr. CARTY: Yes, the Nova Scotia program is now a seven-year rather than a five-year program.

I could, for the information of the committee, give the term of years for each province, right across the country—if it is of interest?

The ACTING CHAIRMAN: Would the committee like that?

Mr. COATES: I think so.

Mr. CARTY: The terms are: British Columbia, five years; Alberta, six years; Saskatchewan, seven years; Manitoba, seven years; Ontario, eight years; Quebec—there has been no interest shown in participating as yet; New Brunswick, ten years; Nova Scotia, seven years; Prince Edward Island, eight years; Newfoundland, eleven years.

Mr. NIELSEN: That is right across the southern part of the country, you are speaking about?

Mr. CARTY: There are no roads-to-resources in the territories. That is another program altogether.

The ACTING CHAIRMAN: This is strictly provincial?

Mr. CARTY: It is a strictly federal-provincial arrangement. I might add, that in all cases it is possible there could be an additional year. There is a clause in the agreement which provides that if for any reason—such as bad weather conditions—the province gets behind schedule, they have a year of grace, as it were.

These periods have been worked out individually with each province, on the basis of the best estimates they could provide as to the progress they could make, and also they take account of their individual budget positions.

I think it is agreed by all that this is a much more satisfactory arrangement than the original, rigid five-year schedule.

Mr. SIMPSON: I assume that in this roads-to-resources program the initiative is taken by the provinces?

Mr. CARTY: Yes, that is correct.

Mr. SIMPSON: Then, once a province comes up with a plan for a road, do they have the full responsibility of deciding the route of that road?

Mr. CARTY: No. What happens is that the province makes an initial proposal, generally by letter, and then the federal government gives its initial reaction. In almost every case I think it was necessary for a group to come down to Ottawa from the province to discuss it. Once the federal government indicates that the proposals look reasonably good and seem to come within the concept of the program, the detailed program is then submitted to an interdepartmental committee, to which Mr. Cunningham referred. On the interdepartmental roads appraisal committee are experts from Mines and Technical Surveys, our Forestry Branch, the Department of Fisheries and the Canadian Government Travel Bureau in the case of the Atlantic provinces where the tourist resource enters the picture. This committee assesses the proposals and as a result of that assessment many of the programs have been changed. I think in every case the program which has been finally agreed to is quite different from the initial proposals put forward by the province. It is a matter of negotiation.

Mr. SIMPSON: Then when that decision has been made, do the provinces take over the responsibility of letting out the contracts?

Mr. CARTY: Yes, but under the terms of the agreement the federal minister must approve the tender call, the form of tender and the actual award of contract.

Mr. MARTEL: Is the contract signed by the provincial government?

Mr. CARTY: Yes.

Mr. MARTEL: And the federal government contribute a share?

Mr. CARTY: Yes. It works in exactly the same way as the Trans-Canada highway program.

Mr. MARTEL: Do you have a resident engineer on the job?

Mr. CARTY: The Department of Public Works has a regional engineer in each province who supervises it from the federal standpoint.

Mr. MARTEL: And do they also look after the roads-to-resources program in each province?

Mr. CARTY: Yes. They are the same men who do the Trans-Canada highway work. I might say that through the use of the administrative machinery which the Department of Public Works has already in existence, the program is carried out with a minimum of expense from the federal standpoint.

Mr. MARTEL: From the answer you gave previously, almost every province, with the exception of Quebec, is participating.

Mr. CARTY: Yes.

Mr. MARTEL: What provinces have come to an agreement?

Mr. CARTY: The formal agreements have been signed only with British Columbia, but the remaining eight provinces, other than Quebec, have reached agreement on the roads and on the terms of the agreement; it is just the formality of signing.

Mr. MARTEL: Have you approached the government of Quebec?

Mr. CARTY: Yes, the same offer was made to Quebec, as to all provinces, on February 8, 1958.

Mr. MARTEL: And there was no answer?

Mr. CARTY: There was no answer to that letter. A follow-up letter was sent in April and no reply was received.

Mr. MARTEL: I would imagine you understand the point of view that Quebec has; is it not true that national resources in Quebec come under provincial jurisdiction?

Mr. CARTY: I do not think it would be appropriate for me to comment on your question.

Mr. MARTEL: In connection with the Ontario program, has the Ontario government given their program? Has it yet been announced?

Mr. CARTY: No. The agreement has not been signed but we expect it to be signed in the very near future.

Mr. MARTEL: I have read certain articles in the paper in that connection and you mentioned some reports have appeared in the papers. Is there not a program concerning roads-to-resources in Ontario in connection with the Moosenee and James Bay area?

Mr. CARTY: I think that is another matter; that does not concern roads-to-resources. That is another project which they have in mind.

Mr. MARTEL: It is a provincial project?

Mr. CARTY: Yes.

Mr. SIMPSON: When the roads are eventually completed on this roads-to-resources program, what is the plan in regard to maintenance?

Mr. CARTY: It is entirely a provincial responsibility. There is a provision in the agreement that the province undertakes complete responsibility for maintenance and that the federal government has no proprietary rights whatever in connection with the roads, and no legal liability.

The ACTING CHAIRMAN: Gentlemen, are you ready for the question?

Mr. NIELSEN: Before the item carries, Mr. Chairman, I cannot support the item in the detail of estimates at page 379, which reads as follows:

> Grant to the B.C. and Yukon Chamber of Mines to assist in the operation of Prospectors' Training Courses and the maintenance of permanent building offices for the purpose of educating and assisting all persons interested in searching for mineral deposits.

I have discussed this matter with the minister, the deputy minister and others in the department and I believe I have succeeded in showing them

that for many years there have been extremely active mining organizations in the Yukon who offer these courses at the present time. All that is required to bring it within the provisions of the terms of the grant that is being made is to strike out the words "B.C. and".

I therefore move that the words "B.C. and" be struck out of the description as it now reads so that the grant will go to the Yukon Chamber of Mines, the existing mining organization in the Yukon, which has been there for many years.

Mr. MARTEL: Is that their name?

Mr. NIELSEN: Yes, the Yukon Chamber of Mines.

Mr. MARTEL: How is it they have in here the B.C. and Yukon Chamber of Mines?

Mr. PAYNE: I think it is fitting that I should say something in this connection from the other side of the picture.

The B.C. and Yukon Chamber of Mines has been in existence a great many years. I am not quarrelling with the functions of the Yukon association. I do not know the details in connection with their operation and it could be said they might be considered.

On the other hand, I think the hon. member for the Yukon is overlooking the fact that the association which is now receiving this grant has actively, over many decades, provided a valuable service, and continues to do so, in the field of promoting mines in British Columbia.

I think they are still very active in the territories today. This organization is a historic one. They have been very instrumental in development in western Canada generally, and the motion appears to me to be grossly unfair.

Mr. NIELSEN: I might say, Mr. Payne, that we are all very grateful for the work the Vancouver Chamber of Mines has contributed in the Yukon. However, the federal government has no direct responsibility to assist in the development of resources which are a provincial affair, and in making this grant the federal government would be setting a dangerous precedent. They have a responsibility in the Yukon and we have an active organization up there.

The purpose of the grant could be met by making it to the Yukon chamber, and as grateful as we are for the work the Vancouver chamber has done for us, it is time that this work was assisted in the Yukon.

Incidentally, I believe this is the first time such a grant even has been considered to a provincial organization.

The ACTING CHAIRMAN: Could you give us the motion in writing?

Mr. NIELSEN: Strike out the words "B.C. and".

The ACTING CHAIRMAN: Gentlemen, I do not know exactly what to do about this motion. Although I am the acting chairman, I must say that I am not in an entirely impartial position. I did my best to influence the government to make this grant to the B.C. and Yukon Chamber of Mines and I am rather hesitant about us striking out the words "B.C. and" at this stage of the proceedings.

Mr. SLOGAN: Mr. Chairman, could we have a vote on the motion at this time?

Mr. PAYNE: Mr. Chairman, before you vote I suggest that a full discussion is in order. Certain members from other parts of Canada have little understanding or knowledge of this matter.

The ACTING CHAIRMAN: Would you be willing, gentlemen, to have the committee recommend to the house that this change be made?

Mr. NIELSEN: Quite so.

Mr. SIMPSON: Maybe the committee would not want to recommend it, Mr. Chairman.

The ACTING CHAIRMAN: That is, if the committee so decide to recommend it.

Mr. KORCHINSKI: Could we not leave it until the next sitting?

Mr. NIELSEN: I will withdraw my motion, Mr. Chairman, and leave my views on the record so I can bring it up in the house when it is under discussion.

Mr. MARTEL: That brings up another point, Mr. Chairman. It has been mentioned that the grant is for a regional or provincial area.

I recall last year asking the minister for a grant to a chamber of commerce that was looking after a tourist organization and the minister said they had no appropriation to cover that.

The ACTING CHAIRMAN: I think we would have to have the minister here, Mr. Martel, in order to get his views on that point.

Mr. MARTEL: I am not against the B.C. and Yukon Chamber of Mines, but, Mr. Chairman, we have chambers of mines elsewhere.

The ACTING CHAIRMAN: Yes, but we are dealing with this specific grant. In this particular case we are dealing with items 275 to 280. Gentlemen, are you satisfied that we have discussed them sufficiently?

Mr. KORCHINSKI: I have two more questions, Mr. Chairman.

The ACTING CHAIRMAN: You have additional questions to ask?

Mr. KORCHINSKI: Yes.

Mr. SLOGAN: Mr. Korchinski, which are the items on which you wish to direct further questions? Maybe we could pass the others.

The ACTING CHAIRMAN: Gentlemen, the bells have gone, so we will adjourn until 3 p.m. this afternoon in room 238-S. At that time you will be given a further opportunity to continue with this discussion.

AFTERNOON SITTING

FRIDAY, June 5, 1959
3.50 p.m.

The ACTING CHAIRMAN (*Mr. Coates*): I see a quorum, gentlemen.

Mr. SLOGAN: Mr. Chairman, this is the 41st sitting since this committee was organized, and I believe that it would be true to say that members of this committee of all parties have worked conscientiously and hard to bring to the public view aspects of policy and purpose pursued by the Department of Mines and Technical Surveys, and now the Department of Northern Affairs and National Resources. I think this committee has served the purpose admirably.

It is, therefore, with particular regret that I witnessed the melodramatic Russian type walkout of this committee by the Liberal members this morning. As a member of the committee, may I say that I feel that action was childish, irresponsible, selfish and publicity-seeking, especially in view of the fact that the particular member protesting had monopolized questioning in the last few committee meetings, often being out of order, but being tolerated. I am not criticizing that fact; but I feel that such an action, especially by the fact that it broke our quorum, showed irresponsibility of those members to their duty in this committee.

We all feel the hardship of the frequent sittings of this committee—twice daily of late—but may I say that it is our inquisitiveness which is prolonging these proceedings. Therefore, I hope that we will show a measure of responsibility, so that we might end these sittings before the added sittings of the house begin.

The ACTING CHAIRMAN: Mr. Slogan, I am not quite sure of the reason for the statement, unless it was on a point of order.

Mr. SLOGAN: Mr. Chairman, as a member of the committee I just wanted to express my feelings towards the action that occurred in this committee this morning.

Mr. PAYNE: Mr. Chairman, before the adjournment this morning there was a proposed amendment brought forward by the member from Yukon.

Mr. NIELSEN: I withdrew it: I withdrew the motion I made.

Mr. PAYNE: There are, however, two points I would like to make in that connection. One is, if I may ask the member from Yukon, in withdrawing the motion, it was my understanding that it was on the proviso that a recommendation be submitted. In view of that request from the member from Yukon that there be a proviso, I wish to state the firm opposition of myself to a recommendation of that nature being included in the report; and I have been asked to couple with that a similar expression from the member of Okanagan-Revelstoke and the member from Comox-Alberni, both of whom are unable to attend this meeting.

The ACTING CHAIRMAN: I do not think that the member from Yukon withdrew the motion on the basis of the fact that the committee would recommend that in their report: it was that the committee could recommend it in their report to the house, if the committee considered that it should be recommended.

Mr. PAYNE: Well, I say that in view of the fact that this request has been made for a recommendation in the report, and is recorded; certainly on behalf of myself and the other two members of this committee we wish, at the same time, to go on record as objecting to the request for the inclusion of that in the report.

I would like to say, further—and on their behalf as well—that there was one statement made which may have been misunderstood. That was, the member for Yukon stated that, in fact, the association mentioned in the estimates was named erroneously. That is not correct, Mr. Chairman. It is the Yukon and British Columbia Chamber of Mines. It is a name they have maintained and operated under for a great many years and, I might add, they have been, over the past 47 years—and still are to this day—the only body other than government itself which has, in a sizable and major way, contributed to the geological studies which this country has made in the Yukon Territory.

It is also a very important factor that this association retains and maintains one of the most complete mine museums and offices in the North American continent. It is at those offices that most investment capital interested in mining operation and other technical data for the Yukon area make their contact.

With this in mind—and I say that advisedly, because the three of us have jointly discussed the matter—we wish forcibly to bring to the attention of this committee the value that association's work has had in the past, and in the present, as well as it will have in the future, in the logical, practical, useful promotions of development in Canada's Yukon territory.

Mr. NIELSEN: Mr. Chairman, if Mr. Payne has finished, I have before me a certified copy of the articles of incorporation of the Vancouver Chamber

of Mines. They are certified as filed and registered on the 22nd day of January, 1915, with H. G. Garrett, registrar of joint stock companies for the province of British Columbia. Paragraph 1 of these articles states that the intended corporate name of the society is the Vancouver Chamber of Mines. I will say, however, that I believe this organization has appropriated to itself the name of British Columbia and Yukon Chamber of Mines. But, as far as I can determine by my own searches, this name has no legal status as such in so far as its being incorporated as such in the statutes of the province of British Columbia. They do, in fact, entitle their by-laws as the By-laws of the British Columbia and Yukon Chamber of Mines.

But, going back to the main submissions of Mr. Payne, I quite agree that the Vancouver Chamber of Mines—to give it its proper name—has done a considerable amount of work and has contributed substantially to the work of development in the mineral field, both in British Columbia and in the Yukon. They have over many years assisted prospectors and mining companies in their activities in Yukon, and no one is in any way attempting to diminish the large amount of assistance which this chamber has given to us in Yukon over the years, and we in Yukon are certainly grateful for it.

But there is a deeper matter of principle involved here. The way that the blue book reads at page 379, is that the grant is to be made to the British Columbia and Yukon Chamber of Mines to assist in the operation of prospectors' training courses and the maintenance of public offices for the purpose of educating and assisting all persons interested in searching for mineral deposits. I think it is admitted that there is no direct federal responsibility for the development of minerals in the provinces.

We are all very keen to see that occur but there is no direct responsibility in that regard in the provinces. There is, however, a direct responsibility for the development of the resources of both the Yukon and Northwest Territories.

If I am not mistaken, I believe the intention of the grant in the first instance was that these moneys would be directed toward the responsibility in the federal field, namely in the Yukon Territory, and it was because of the use of the word "Yukon" in the name that was utilized in the initial application by the B.C. and Yukon chamber of mines that the grant was even considered.

Now, if the grant is to be used for the assistance and the operation of prospectors' training courses, surely these courses, if it is going to assist the Yukon at all, should be held in the Yukon in order to give the advantage of attending the courses to the prospectors of the Yukon. Vancouver is a distance of 1,500 miles away and it would be difficult for a Yukon prospector to travel to Vancouver to take advantage of these courses.

I take issue with Mr. Payne when he says the Vancouver chamber of mines is the only chamber that ever has done any work in the Yukon Territory. This is not so, I live in the Yukon and have lived there a number of years. I can assure the committee that there are a number of extremely active organizations there who are conducting prospectors' courses within their own resources. They maintain libraries, sketchy as they might be because of a lack of funds to support them.

The ACTING CHAIRMAN: Mr. Nielsen, may I have one thing to say in connection with this matter at this time?

It would appear that you stated this morning you would be taking this up in the committee of the whole house when the estimates of the department are before it. I allowed Mr. Payne leeway in making a statement and I have now allowed you some leeway in answering him. However, it would appear we are having a debate on a subject on which we can reach no conclusion and, in any event, it is something on which the officials of the Department of Northern Affairs and National Resources are not being consulted.

If some questions are to be asked of the officials with regard to the grant, I feel those would be in order; but the making of statements back and forth between members is not in order and I do not feel we are accomplishing anything in committee by this course of action.

Mr. NIELSEN: May I then put one question to the deputy minister?

The ACTING CHAIRMAN: You may do so.

Mr. NIELSEN: Having regard to what I have said about the federal responsibility in the field of resource development, will the deputy minister inform me whether or not he thinks that it is a proper thing to direct this grant to a provincial, indeed a municipal, organization?

Mr. PAYNE: I object strenuously, Mr. Chairman—strenuously—to the statement contained—

Mr. NIELSEN: It was a question. Let us strike "municipal" out.

Mr. PAYNE: Mr. Nielsen has stated that it is strictly a provincial, indeed a municipal, affair. I would take great exception to that statement and I would point out that perhaps the only two active organizations in the Yukon Territory are members of the B.C. and Yukon Chamber of Mines.

Mr. NIELSEN: That is not so.

The ACTING CHAIRMAN: Perhaps we should ask the deputy minister what his views are in connection with this question.

Mr. PAYNE: I would not care to ask the deputy minister, not with any sense of indecency in so doing, but this is basically a policy matter that alone should be discussed with the minister. My statement, while you have been kind enough to allow me to make it, was made to correct the erroneous opinions that resulted from this morning's meeting. I thank you, and, frankly, I would not care to impose on the committee further.

The ACTING CHAIRMAN: The deputy minister informs me that, because of the way the question is worded, he considers this a policy matter, which should be answered by the minister.

Mr. NIELSEN: Mr. Chairman, Mr. Payne has stated that the reason why he has made his statement just a moment ago was to clear up certain erroneous opinions which were advanced at this morning's meeting, and I was attempting by my statement to do exactly what he feels he has already accomplished, but which I do not feel I have yet accomplished.

I feel there are erroneous opinions in regard to the non-existence of extremely active mining organizations in the Yukon. There are those organizations there; they are active, and have been for a number of years. They held prospectors' courses this year financed out of their own resources. There is a newly incorporated Yukon chamber of mines which recently has been organized for the very purpose of furthering this independent action in the Yukon.

There are a number of other facts I could advance but I too, like Mr. Payne, do not wish to impose any lengthy statement on the committee. However, I do ask the deputy minister, quite apart from a question of policy, whether it is the intention to go ahead with this as it stands.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Perhaps I can say what I understand to be the minister's intention, because I have consulted him on this matter as it was raised informally before the committee meeting.

The item, as it stands in the estimates, was inserted after approval by Treasury Board last December. Since that time there has been a new organization established in the Yukon Territory and Mr. Hamilton did indicate that he would give this fact of the new organization further consideration, and

be in a position to know what he is prepared to recommend when the estimates reach the floor of the house. That was his advice to me.

Mr. NIELSEN: That satisfies me.

Mr. KORCHINSKI: I wonder, Mr. Chairman, if I could not go back to some of the questions that I had been trying to follow up before the morning sitting adjourned.

The ACTING CHAIRMAN: Will you proceed, Mr. Korchinski.

Mr. KORCHINSKI: I wonder, Mr. Chairman, if we could not have some cost comparisons in connection with construction of roads-to-resources in Saskatchewan, I understand the provincial construction is done by the provincial government. I wonder if we could not have some comparisons of road construction done by some private firms under similar conditions. Would it be possible to get this information?

Mr. WILLIAMS: I cannot give you a comparison. You realize that to have any kind of valid comparison you would have to have side by side jobs, one by contract, to exactly the same standard as you were going to do one by day labour.

Mr. KORCHINSKI: Are you then satisfied that the cost per mile is not in excess of what might be termed reasonable?

Mr. WILLIAMS: Are you referring to Saskatchewan?

Mr. KORCHINSKI: Yes.

Mr. WILLIAMS: All the work that has been done has been satisfactory.

Mr. KORCHINSKI: Well, it is the feeling of the department, then, that it is satisfactory?

Mr. WILLIAMS: Yes.

Mr. KORCHINSKI: Well, although I have no costs before me, I do not share the same view, Mr. Chairman, and for this reason: that in the province of Saskatchewan we have quite an extensive road program in the municipalities. Many of the municipalities have road building equipment of their own. The provincial government is quite insistent on many of the municipalities going out of the road building business and is asking them to call for tenders so that private contractors could do the work. Yet, on the roads-to-resources project they insist on building them themselves. Now it seems to me quite inconsistent to follow one course as far as the roads-to-resources program is concerned and then ask private contractors to build them in other areas for the reason that it is too costly where a municipality undertakes the road construction. They feel the private contractors do a better job at a lower cost. It seems to me the same reasoning follows in the roads-to-resources program.

There is another objection which I think the Saskatchewan Roadbuilders' Association has made. That is, that they are not given enough opportunity to do any work under such projects. As far as I understand it, the negotiations are still going on with the province. I would like some assurance that this will be taken into account and that there will definitely be a stipulation in the agreement so that we have some assurance to that extent.

Mr. WILLIAMS: Speaking of your first point in respect of the relation between the province and the municipalities, and now the federal government and the province, I am not attempting to defend or say this or the other is more efficient. Obviously I cannot do so. You would have to be sure the roads are of the same standard. I know a contractor would say he could do it cheaper but the engineer because he is paying for it will not insist on the same degree of trimming for rental work as he will insist on if it is on a cubic yard basis.

The factors which I am assuming may be involved in the recommendation of the province of Saskatchewan, and which certainly were considered by the

federal government in accepting the proposal which the Saskatchewan government put forward, would be that in the province of Saskatchewan they were, at the time this program came forward, in a very minor way, building these roads-to-resources. This, was being done by their own equipment under rental agreements; also they had built up a supervisory staff to handle this class of work which they might feel was not available within the individual municipalities. This is probably one of the factors they had considered in their representations to the federal government.

Mr. Carty read you the stipulation in the agreement that says it is to be done by contract unless they have the express approval of the Minister of Northern Affairs. The arguments put forward by the province at the time were to the effect that this program was brought forward and the emphasis was on getting something going. They could get this work under way much faster under equipment rental than they could by going into the detailed surveys which they would require on a unit price contract. They also contended they were not in a position to do the necessary engineering and that the engineers costs would make the unit price much more expensive. These are the arguments which were advanced.

While these were approved in the initial stages for these rental agreements, the minister has subsequently written to the provinces pointing out to them that, while he was prepared to accept this in order to get this program going, he did not want it as a general practice, and that he was referring it back to the province for reasons as to why they could not go forward on some form of calling tenders, not necessarily on a unit price basis.

Mr. CADIEU: I am sure there were many private contractors left idle who were well equipped to perform a good deal of this work.

Mr. WILLIAMS: This is the reason he has gone back to the provinces.

Mr. KORCHINSKI: I think I read an article in *Construction World* that the reason given by the government for putting on their own crew was that they were making the fields in the south available to private contractors. I think that has not been the case. The case has been that the government has gone out and purchased a lot more equipment and did not use a lot of these private contractors. I feel, since the federal government is contributing a good proportion towards construction that some consideration should be given to these private contractors and not leave them, so to speak, out on the limb.

At the moment I also feel if these costs are too high that the federal government is, so to speak, over a barrel. We have almost committed ourselves to pay a portion—50 per cent—of the cost. If this cost gets too high, what assurance have we that all these costs will be met? Just what is the limit the department will be prepared to go in such cases?

Mr. CARTY: There will be a section in the agreement with each province which defines the items of cost which can be shared. There will be another section which will define the items not shared by the federal government. One of the provisions in each of the agreements, in that portion dealing with the items we cannot share, will read as follows: amounts paid which in the judgment of the minister exceed—

Mr. NIELSEN: On a question of order; is this witness, or any witness, entitled to discuss the content of these agreements which have not yet been tabled in the house? I do not believe so.

Mr. CARTY: Perhaps I might just say it in a general way, rather than quoting.

Mr. NIELSEN: In view of the minister's statement in the house to the effect that he is going to table these agreements when they are signed, I do not think we should go into them in a general or a specific way until this is done.

Mr. ROBERTSON: Perhaps I might say that this question of policy—and it is a question of policy—is one which has been engaging the minister's attention for some time. He is aware of the points Mr. Korchinski raised. I do not think there is much more any of us here can say on this point because it is specifically a policy matter. I do know, however, that it is very much in the minister's mind.

Mr. KORCHINSKI: Is there any area of disagreement, as far as Saskatchewan is concerned, in respect of signing the agreement?

Mr. CARTY: No.

Mr. KORCHINSKI: I wonder if it would be possible to give us an indication of how many mineral deposits are within 100 miles of the proposed road in the province of Saskatchewan.

Mr. CARTY: Bearing in mind what was said a moment ago about refraining from revealing details of the routes, I think I could say that each of the roads in the Saskatchewan program, and in the other programs, has been very carefully examined by the roads appraisal committee, which I mentioned earlier, comprises experts from the Department of Mines and Technical Surveys, our own department, the Department of Fisheries where fisheries are involved, and other departments as needed. This committee has recommended to the minister the acceptance of these roads on the basis that they will go through a highly mineralized area, an area which, on the basis of the various proposals the province has put forward, is the most favourable for mineral development.

Mr. KORCHINSKI: Thank you.

Mr. SIMPSON: Mr. Chairman, could the deputy minister say whether, at the present time on the Saskatchewan roads-to-resources program, the work is being done solely by the Saskatchewan government?

Mr. ROBERTSON: You mean rather than by contract?

Mr. SIMPSON: Yes.

Mr. WILLIAMS: No.

Mr. SIMPSON: There are some contracts?

Mr. WILLIAMS: There are contracts for bridges, and there is privately owned contractors equipment working on these projects on a rental basis.

The ACTING CHAIRMAN: Are there are any other questions?

Mr. MARTEL: There is no comparison; can you give us a comparison in price between the cost per mile between Saskatchewan and another province, such as Manitoba?

Mr. WILLIAMS: We have the cost per mile and we can average it off for you at different places, but they are not relative unless location or the standard of road being constructed is taken into consideration, because they vary greatly.

Mr. KORCHINSKI: Might I ask for a comparison of the Otosquen road of which there is a proportion in Manitoba and a proportion in Saskatchewan?

Mr. WILLIAMS: No. Here again I am making known the roads-to-resources program.

Mr. KORCHINSKI: Well, the road is there.

Mr. MARTEL: Do you have different standards of roads? I would think in that case that the Manitoba portion was practically completed before the agreement was entered into, although there might have been a section of a mile or so remaining.

Mr. WILLIAMS: I can go so far as to say that there is no section of the Ostosquen road in Manitoba under the roads-to-resources program.

Mr. KORCHINSKI: Is there not something like 18 miles of it in there?

Mr. WILLIAMS: No.

Mr. KORCHINSKI: How does it connect up to The Pas?

Mr. WILLIAMS: The road in Saskatchewan under the roads-to-resources program might well tie into a road in Manitoba, and for reasons of their own choice Manitoba would not bring it under the roads-to-resources program.

Mr. KORCHINSKI: My understanding is that there is a small area in there which has to be connected up.

Mr. WILLIAMS: It may be, but it may not come under this program.

Mr. ROBERTSON: They might do it themselves, 100 per cent provincially.

Items 275 to 280 inclusive, agreed to.

We will now turn to items 476 and 477 at page 86 in the blue book, under Loans, Investments and Advances.

Item No. 476. Advances to the Northern Canada Power Commission for the purpose of capital expenditures in accordance with sub-section (1) of section 15 of the Northern Canada Power Commission Act .....$ 6,050,000

Item No. 477. Advances in accordance with agreements entered into pursuant to the Atlantic Provinces Power Development Act .....$ 11,627,000

Mr. NIELSEN: What page is that, please?

The ACTING CHAIRMAN: Would you like to have a statement from the deputy minister with regard to these items?

Mr. ROBERTSON: Mr. Chairman, items 476 and 477 on page 86 are both loans and advances to the Northern Canada Power Commission. The difference is that under item 476 the loans and advances are in respect to the Northern Canada Power Commission's normal business, that is, the establishment of power sources in the northern territories, while item 477 is for loans and advances under the Atlantic Provinces Power Development Act.

The Northern Canada Power Commission is the federal agency designated by the federal government to carry out the federal part of the power developments that are undertaken in the Atlantic provinces.

Dealing first with item 476, that is the normal Northern Canada Power Commission's operations in the north, the purpose of establishing the commission was to have an agency to provide sources of power in areas in the north where private operators for one reason or another were not prepared to set up, and to make power available for communities, mines, and other development industries on a fully self-liquidating basis.

The power is in all cases sold on a basis that fully covers amortization of capital and other costs, and the purpose and objective of the policy is to sell power roughly at cost. In other words, the rates are kept down to as low a point as possible while still meeting all capital and operating charges.

The commission at the present time has a plant at Snare river in the Northwest Territories which is about 90 miles northwest of Yellowknife. That plant is being increased in capacity from 8,350 h.p. to 17,000 or roughly 17,000 h.p.

There is a smaller plant at Fort Smith, which is a diesel electric plant. And I should have said that the plant at Snare River is hydro electric.

At Fort Smith it is a diesel electric plant. At the present time it is of 1,640 h.p.; and one of the items to be covered in this year's appropriation is for a transmission line to increase the power capacity at Fort Smith.

Then there is a small plant at Fort Simpson in the Northwest Territories; it is diesel electric. Then there is a plant at Inuvik, which was discussed at an earlier point in the discussions here.

In the Yukon Territory there are two plants, both of which are hydro electric. One is at Mayo River. It is of 6,000 h.p. It provides power for the mines in that area and also for the communities of Keno, Elsa, and Mayo. And

there is a new plant which just came into operation this year on the Yukon River just above Whitehorse. It is of 15,000 horse power.

Under contemplation is a new plant at Frobisher Bay. Actually we have taken over the operation of that plant, which was formerly operated by the Department of Transport there, and also a new power plant will be established as Frobisher Bay is developed.

Another one that is under contemplation is at Cambridge Bay where we have not definitely decided whether it would be economic for the Northern Canada Power Commission to take over or not.

We shall also establish outside the territory a plant in the Yoko Park in British Columbia because it is purely a federal operation and no British Columbia power agency is prepared to establish a plant there.

Most of the operations are in the territories, apart from the Atlantic provinces, matters which are quite separate. Perhaps I could deal with them when we come to that vote unless you prefer I do so now.

The ACTING CHAIRMAN: Has the committee any preference?

Mr. SIMPSON: What size of plant do you contemplate at Frobisher?

Mr. ROBERTSON: We do not know yet. We will have to ascertain what size the community is going to be. Consideration has been given to a number of different possibilities both as to scale and as to method, but they have not been settled on yet.

Mr. NIELSEN: I have one or two questions about the Whitehorse plant. The total annual revenue of that plant at Whitehorse will be how much?

Mr. ROBERTSON: We cannot tell until we know what the number of customers will be.

Mr. NIELSEN: What is the estimated total revenue of that plant?

Mr. E. W. HUMPHRYS: (*Chief Engineer and General Manager, Northern Canada Power Commission*): Around $400,000.

Mr. SIMPSON: Does that plant service the town of Whitehorse?

Mr. HUMPHRYS: This supplies power wholesale to the local distributor in the town of Whitehorse. We do not supply the town consumers directly.

Mr. ROBERTSON: We wholesale power there.

Mr. SIMPSON: What did they have previously?

Mr. ROBERTSON: There was a small hydro electric plant there supplemented by a diesel electric plant. The army had quite a substantial diesel electric plant and both the diesel electric plants are going out of operation under this new arrangement.

Mr. NIELSEN: What rate will the Northern Canadian Power Commission be charging to the distributor for distribution to purely civilian consumers?

Mr. HUMPHRYS: It is 2½ cents per kilowatt hour, at the present time, estimated rate.

Mr. NIELSEN: What rate will the Northern Canadian Power Commission be charging for distribution to consumers at the new hospital at Whitehorse?

Mr. HUMPHRYS: We are not supplying power directly to the new hospital. That will be for electrical heating purposes, and that will be 0.5 cents per kilowatt hour.

Mr. NIELSEN: What rate will the Northern Canadian Power Commission be charging for power for heating the electrical boilers being installed in the new hostels being built for Indian Affairs at Whitehorse?

Mr. HUMPHRYS: The same rate, 0.5 cents.

Mr. NIELSEN: And what is the civilian rate to the distributor?

Mr. HUMPHRYS: Two and one-half cents.

Mr. NIELSEN: What rate will the Northern Canadian Power Commission be charging for power for consumption in government owned houses occupied by civil servants in Whitehorse?

Mr. HUMPHRYS: We do not supply them directly. The only power that is used for that purpose is sold through the Yukon Electric Company.

Mr. NIELSEN: They are the distributor?

Mr. HUMPHRYS: That is right.

Mr. NIELSEN: Am I correct in saying that the distributor will be supplying power to the government owned houses that are occupied by civil service personnel in Whitehorse at 2½ cents?

Mr. HUMPHRYS: No.

Mr. NIELSEN: I am sorry—not distributors supplying it to the homes at that, but that the Northern Canadian Power will be supplying to the distributor at that rate?

Mr. HUMPHRYS: Yes.

Mr. NIELSEN: At 2½ cents?

Mr. HUMPHRYS: Yes.

Mr. NIELSEN: So, in effect, the government owned houses will be on the same rate as the civilian houses?

Mr. HUMPHRYS: I would think so. This is a matter for the Yukon Electric Company, under the terms of the franchise they have.

Mr. NIELSEN: What rate will the power be supplied by Northern Canada Power Commission to the R.C.A.F. and army installations in Whitehorse, and the D.O.T.?

Mr. HUMPHRYS: It will be 2½ cents per kilowatt hour.

Mr. NIELSEN: This is direct supply?

Mr. HUMPHRYS: This is being handled through the Whitehorse Electric Company. The Yukon Electric Company have entered an agreement with the Department of National Defence to take care of the distribution lines, but we supply the Yukon Electric Company, who in turn charge the Department of National Defence the same rate that we charge them.

Mr. NIELSEN: Are you certain there has been an agreement negotiated for the maintenance of distribution lines?

Mr. HUMPHRYS: I do not know it has been signed yet, but I know it is in process.

Mr. NIELSEN: Could you advise the committee why the hostels and the hospital at Whitehorse should be provided power at 0.5 cents as opposed to 2½ cents to the remainder of the consumers?

Mr. HUMPHRYS: Yes, the power that is being supplied for this purpose, for consumption in electric boilers, is at a special rate so it is competitive with oil firing. It was found the magnitude of the development at Whitehorse Rapids was such that we could instal the additional capacity, which would allow us to supply an additional amount at a competitive rate, at less cost than the increased cost of equipment. We thereby got more revenue into the system and were abled to reduce the rate for primary power supplied to the consumer.

Mr. NIELSEN: That plant provides how much power?

Mr. HUMPHRYS: 15,000 horsepower installed right now.

Mr. NIELSEN: How much of that is utilized by government installations in Whitehorse?

Mr. HUMPHRYS: Can you define that "government installation"?

Mr. NIELSEN: Except the hospital.

Mr. HUMPHRYS: At a guess, I would say the hospital load for heating is about 4,500 kilowatts, say 6,000 horsepower.

Mr. NIELSEN: 4,500 kilowatts. Let us keep it in kilowatts. How much would be consumed by the civilian populations, the civilian consumers in Whitehorse?

Mr. HUMPHRYS: In total?

Mr. NIELSEN: Yes, in kilowatts.

Mr. HUMPHRYS: Roughly 3,000.

Mr. NIELSEN: So the hospital heating plant utilized 4,500 kilowatts, and the whole civilian population 3,000 kilowatts?

Mr. HUMPHRYS: Yes.

Mr. NIELSEN: The remainder would be the government, army, D.O.T. and air force installations?

Mr. HUMPHRYS: That is correct.

Mr. NIELSEN: Is there any firm commitment in the future for supplying that power for the heating of the Whitehorse hospital and these two hostels, in the event this power is required by an increase in demand made by the civilian users in Whitehorse?

Mr. HUMPHRYS: With the exceptions that we have given an assurance we can continue to supply power at the hostels for a period of five years, as far as we can tell, but one of the conditions was they should have oil fired equipment that could be put into service, if electric power were to be withdrawn.

Mr. NIELSEN: If electric power was required by the civilian users, the chances are the heating units now in the hospital and hostels, after five years, might be converted to oil fired equipment?

Mr. HUMPHRYS: Yes. Oil fired equipment could be substituted; it is not a case of conversion, because you cannot convert the equipment. But they have oil fired equipment, in addition to electrical equipment, and they could swing over to the oil firing.

Mr. SIMPSON: Do I understand the civilian users of power would be paying at a rate of 2½ cents or is that the price at which the Northern Canada Power Commission supply it?

Mr. ROBERTSON: That is the price at which we sell it to the utility that has a local franchise.

Mr. SIMPSON: Can you say what the civilian would be paying?

Mr. HUMPHRYS: The rate varies according to consumption. It is somewhere around 10 to 12 cents down to 4 or 5 cents. I am speaking from a very vague memory now.

Mr. ROBERTSON: The franchise is one given under the territorial legislation, and there is provision for a review of the rates at certain periods. I have forgotten what the periods are. This is a territorial matter, and I think there is a revision coming up this year.

Mr. HUMPHRYS: It is a three-year provision.

Mr. SIMPSON: The rates are under review this year?

Mr. ROBERTSON: Yes.

Mr. MARTEL: Do you charge 2½ cents per kilowatt to the Yukon Electrical Company, let us say on the daily consumption basis, or on the peak load?

Mr. HUMPHRYS: On the daily consumption, straight kilowatt hour basis.

Mr. NIELSEN: I have one question. At $400,000 roughly, per annum income, within what period do you expect the plant at Whitehorse to be amortized?

Mr. HUMPHRYS: A 40-year amortization period.

Mr. NIELSEN: Is that 2½ cents rate reviewable by the Northern Canadian Power Commission and the Yukon Electric?

Mr. HUMPHRYS: Yes, it is a provision of the Northern Canada Power Commission act that our rates be reviewed annually.

Mr. NIELSEN: Do you see any likelihood of reduction in the rates as the plant becomes amortized?

Mr. HUMPHRYS: Yes, 40 years away.

Mr. ROBERTSON: Or as the consumption increases. I hope this will be a long time in advance of 40 years.

The ACTING CHAIRMAN: Any further questions on item 476?

Item agreed to.

The ACTING CHAIRMAN: We are now on item 477.

Mr. ROBERTSON: Item 477 covers the loans and advances for the forthcoming year by the federal government for projects in the maritime provinces—that is, for the present purposes, it is New Brunswick and Nova Scotia, undertaken under the Atlantic Provinces Power Development Act.

This includes thermal power stations and high voltage transmission lines.

The ACTING CHAIRMAN: Any questions on item 477?

Mr. MUIR (*Cape Breton North and Victoria*): I have one question: what has been done so far?

Mr. HUMPHRYS: At the present time we have an agreement with the province of New Brunswick which covers the construction of transmission lines, high voltage inter-connecting transmission lines, extending to the Nova Scotia-New Brunswick border, and connecting their future thermal power plant at east Saint John to the main distribution centre in Fredericton and other transmission lines which will eventually form part of the high voltage network, and high voltage terminal substations which will make it possible to bring the lines into the grid.

In the province of Nova Scotia there has been an agreement which will cover a similar type of program, the construction of high voltage transmission lines and terminal substations and a thermal power plant at Trenton.

Mr. MUIR (*Cape Breton North and Victoria*): This plant at Trenton—what is the state of the construction there now, the addition they are making there now?

Mr. HUMPHRYS: I believe it is pretty well advanced. I have not detailed information as to what the status is right at the moment.

Mr. MUIR (*Cape Breton North and Victoria*): What are the plans at the moment for other construction throughout the maritimes?

Mr. HUMPHRYS: There are no other thermal plants, as far as I know, which have been submitted to us for consideration in this program. Their plan is largely a continuation of their present high-voltage transmission lines to tie these systems together, and an inter-connecting tie between the provinces of Nova Scotia and New Brunswick to connect the systems at the high-voltage level.

Mr. MUIR (*Cape Breton North and Victoria*): With regard to east Saint John, has any decision been reached by the provincial government, as far as the federal government is aware, with regard to the type of fuel that is to be used in east Saint John?

Mr. ROBERTSON: Not that we are aware.

Mr. MUIR (*Cape Breton North and Victoria*): There is no further development on that yet?

Mr. ROBERTSON: No.

Mr. MUIR (*Cape Breton North and Victoria*): My understanding is that if they do not use coal, Mr. Deputy Minister, they will lose the possibility, or opportunity of participating in the sharing arrangement.

Mr. ROBERTSON: This is a question of policy, Mr. Chairman, which I think should be left to the minister.

Mr. MUIR (*Cape Breton North and Victoria*): I am sorry.

The ACTING CHAIRMAN: Are there any questions on item 477? Shall item 477 carry?

Item agreed to.

Mr. NIELSEN: I have some corrections to make in the record, Mr. Chairman.

The CHAIRMAN: Yes. On Monday we will be discussing the estimates of the Travel Bureau and we will be having the following witnesses here before the committee: Mr. Roy Corbett, General Manager of the Hotels Association of Canada; Mrs. Flora Montgomery, Managing Director, Canadian Restaurant Association; and Mr. Charles Smith, Secretary-Manager, Montreal Tourist and Convention Bureau.

Mr. NIELSEN: For the record, there are the following revisions to Printing No. 29 of June 1, 1959, page 849: the seventh paragraph ascribes to me a certain statement which was not made by me. I believe it was made by Mr. Hardie. *(It was later learned that it was made by Mr. Hardie.)*

Page 859, line 17: the word "waul" should read, of course, "would". Page 861, line 8: delete the words "they are within"; and, after the word "season", insert the words "have been lost".

I think there may have been a mix up in the transcript on page 849, because there are one or two things that appear to be wrong about the transcription there.

Mr. SLOGAN: Mr. Chairman, I wonder if at future meetings, in view of the fact it is so difficult to get a quorum, and so forth, we could not arrange our business so that if we do come to the conclusion of an item of business, such as this, we could continue with a further consideration of another part of the estimates? I believe there is just the museum and the tourist bureau left.

The ACTING CHAIRMAN: Yes. Arrangements had to be made for the witnesses to appear at a certain time, and therefore that is the reason I feel we should adjourn now, and discuss the items under the Travel Bureau after we have heard the witnesses.

Mr. SLOGAN: The only point I wanted to bring out was this: it takes up about half an hour of a sitting here, being out of the house, to get a quorum; and after a quorum we have approximately half an hour's meeting and then adjourn, which I think is wasting the time of many of the officials and ourselves.

The ACTING CHAIRMAN: On Monday the meeting is at 11 a.m., so I do not think there will then be any difficulty in getting a quorum.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 33

MONDAY, JUNE 8, 1959

RECEIVED
JUN 17 1959
Library of Parliament

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. E. A. Côté, Assistant Deputy Minister of Northern Affairs and National Resources; Mr. Alan Field, Director, Canadian Government Travel Bureau; Mr. E. di Tomasso, President, and Mrs. Florence Montgomery, Managing Director, Canadian Restaurant Association; Mr. Charles Smith, Secretary-Manager, Montreal Tourist and Convention Bureau; and Mr. Gérard Delage, Legal Adviser and Executive Secretary, Province of Quebec Hotelkeepers Association.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21429-6—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,
and Messrs.

Aiken,
Argue,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

MONDAY, June 8, 1959.
(42)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Argue, Aiken, Baskin, Cadieu, Coates, Dumas, Fleming (*Okanagan-Revelstoke*), Gundlock, Korchinski, Martel, McGregor, Murphy, Nielsen, Payne, Simpson, Slogan and Smith (*Calgary South*).—(17)

In attendance, of the Department of Northern Affairs and National Resources: Messrs. E. A. Côté, Assistant Deputy Minister; M. A. Currie, Administrative Officer; Alan Field, Director, Canadian Government Travel Bureau; R. D. Palmer, Chief, Travel Information and Publications; and H. L. Crombie, Research Section: and Mr. Howard St. George, Member, Hotels Association of Canada and Provincial Director; Mr. E. di Tomasso, President, and Mrs. Florence Montgomery, Managing Director, Canadian Restaurant Association; Mr. Charles Smith, Secretary-Manager, Montreal Tourist and Convention Bureau; Mr. Gérard Delage, Legal Adviser and Executive Secretary, Province of Quebec Hotelkeepers Association; and Mr. Erwin E. Kreutzweiser, Research and Publication, Canadian Tourist Association.

Mr. H. W. Herridge, M.P., not being a member of the Committee, by agreement, sat at the table and took part in the questioning.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Item 293, relating to the Canadian Government Travel Bureau, was called.

Mr. Côté made a statement on the tourist industry in Canada and the responsibilities and operations of the Canadian Government Travel Bureau in relation thereto. He and Mr. Field were questioned thereon.

Mr. Tomasso was called; he presented a brief of the Canadian Restaurant Association. Mr. Tomasso, Mrs. Montgomery, Mr. Charles Smith and Mr. Côté were questioned on matters arising therefrom.

Mr. Charles Smith spoke on the operations of the Canadian Government Travel Bureau in relation to the tourist industry and the problems faced by the said industry.

At 1.25 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m. this day or as soon thereafter as routine proceedings in the House are finished.

AFTERNOON SITTING

MONDAY, June 8, 1959.
(43)

The Standing Committee on Mines, Forests and Waters at 3.30 o'clock p.m. this day resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, and continued on Item 293 relating to the Canadian Government Travel Bureau.

21429-6—1½

Members present: Messrs. Aiken, Cadieu, Fleming (*Okanagan-Revelstoke*), Granger, Korchinski, Martel, Martineau, McGregor, Murphy, Nielsen, Richard (*Saint Maurice-Laflèche*), Simpson, Slogan and Smith (*Calgary South*).—(14)

In attendance, of the Department of Northern Affairs and National Resources: The same as at the morning sitting with the addition of Mr. G. M. Carty, Chief Administrative Officer: and Mr. Gérard Delage, Legal Adviser and Executive Secretary, Province og Quebec Hotelkeepers Association; and Mr. Erwin E. Kreutzweiser, Research and Publication, Canadian Tourist Association.

Mr. H. W. Herridge, M.P., not being a member of the Committee, again being present, sat at the table and took part in the questioning.

Mr. Côté produced answers to certain questions which had been asked at the morning sitting this day; the said information was ordered to be printed in the record of this day's proceedings.

Mr. Delage was called; he read a short brief of the Province of Quebec Hotelkeepers Association. Mr. Delage, Mr. Field and Mrs. Montgomery were questioned on matters arising therefrom.

Questions were asked of Mr. Côté regarding the possibility of efforts being made along certain lines to increase tourism in Canada, especially from the U.S.A.

At 5.05 o'clock p. m. the Committee adjourned until 11.00 o'clock a.m. on Tuesday, June 9, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

MONDAY, June 8, 1959.
11.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. We are now on item 293, at page 57 of your estimates book, relating to the Canadian Government Travel Bureau.

CANADIAN GOVERNMENT TRAVEL BUREAU

Item No. 293. To assist in promoting the Tourist Business in Canada, including Grant of $5,000 to the Canadian Tourist Association .....$ 2,319,342

The CHAIRMAN: If I may be permitted to say so, gentlemen, I hope, when you are discussing the estimates for this particular branch of the department, you will not hesitate to be outspoken and critical, because that is the responsibility of the members of this committee. That is the only way in which we can, perhaps get to the root of the difficulties this branch has been experiencing.

I am going to say, to start the committee off this morning, that I have never been satisfied with the results of the Canadian Government Travel Bureau, since its inception in 1934. Since that time it has been treated as a Topsy, and has been bandied about from one department of government to another. I think that during that period it has had eight different ministers. No minister has been able to answer questions in the house regarding the tourist industry, but has had to rely on the deputy ministers or other assistants.

As you know, from the figures that are revealed by the department, and are available, the tourist industry in Canada, instead of going ahead, is actually behind. Instead of getting more American dollars it is getting fewer; and if you take into consideration the comparative value of our dollar, this Canadian Government Travel Bureau is in a pitiful state.

I think you will have to consider what your recommendations will be as to what should be done to bring it to a more active state, so that the Canadian Government Travel Bureau can be a very, very important factor in our economy. There is no reason why we should be satisfied with some $300-odd million a year from the tourist industry coming into this country, with all we have to offer to the tourists from any country. Years ago I said that it should be a billion-dollar industry instead of what it is today.

You may want to consider whether or not there should be a deputy minister, responsible to raise the level of the administration in order that, probably, there might be more recognition of it. But I hope that at this meeting you will go right into the problems and make an objective approach to what we are facing in this country—and that is a decrease in the tourist industry. We are only getting about a quarter of what we should be getting.

The meeting is open for any further suggestions.

Mr. SMITH (*Calgary South*): Are we going to hear some evidence this morning, to begin with?

The CHAIRMAN: Yes.

Mr. SMITH (*Calgary South*): I suggest we proceed on that line.

Mr. AIKEN: I wonder if I might make some amendments or corrections in the list of people who are here today, to the one that was given previously?

Mr. Roy Corbett, general manager of the Hotels Association of Canada has just wired and stated that he had weather trouble with his aircraft and also had automobile trouble in getting to the airport; and so he is represented today by Mr. Howard St. George, a member of the Hotels Association of Canada.

Mrs. Flora Montgomery, of the Canadian Restaurant Association is here, and with her, also, is Mr. E. di Tomasso, the president of the Canadian Restaurant Association.

Mr. Charles Smith, of the Montreal Tourist and Convention Bureau, is here, as was listed, as also is Mr. Gérard Delage, of the Province of Quebec Hotel Keepers Association.

In addition, Mr. Gerwin E. Kreutizweiser, the research and publications director of the Canadian Tourist Association, is sitting in, although he will not be giving any evidence today.

The CHAIRMAN: All right, gentlemen. We have present, Mr. Côté, the assistant deputy minister of the department, and he will make some observations this morning. We will start from there.

Mr. SMITH (*Calgary South*): Mr. Chairman, do we have copies of any of the submissions that are going to be made to the committee?

The CHAIRMAN: Some of the witnesses have submissions.

Mr. SMITH (*Calgary South*): Do we have copies?

The CHAIRMAN: The minute they start copies will be distributed.

Mr. SMITH (*Calgary South*): I realize that, but do we have copies of the assistant deputy minister's statement?

Mr. E. A. CÔTÉ (*Assistant Deputy Minister of Northern Affairs and National Resources*): I have notes only, Mr. Chairman.

The CHAIRMAN: The copies of the other submissions will be distributed to the members.

Mr. Cote, please?

Mr. CÔTÉ: Mr. Chairman, the minister regrets that he is unable to appear before the committee this morning, because he has been called to a cabinet meeting. I am sure that he and the department will welcome a frank discussion on the activities of the Canadian Government Travel Bureau.

As your chairman has indicated, the travel bureau was established in July, 1934. Its main purpose is to promote foreign travel to Canada and to aid in the coordination of travel promotional activities within Canada, so far as that is possible.

The bureau conducts an extensive advertising campaign in the various newspapers and magazines of the United States. It maintains very close liaison with the provincial travel bureaus, with the industry and the Canadian Tourist Association.

Its staff this year under the projected estimates is 92 persons all told, which, as you will see from your estimates, seems on the face of it to be a reduction of four from last year. In point of fact, however, there were ten persons who were formerly employed by the Travel Bureau for the production of a good deal of the printing material.

This section of ten has been taken over by the Queen's Printer and is operating within the travel bureau, doing, I should judge, probably 95 per cent travel bureau work and another 5 per cent of other work for the Queen's Printer; so, in point of fact, the net increase has been seven persons. Therefore, in the current estimates we consider we shall have a net actual increase of seven persons working for the travel bureau.

Mr. MCGREGOR: For what period of time is that?

Mr. CÔTÉ: This year. The positions have been provided under this year's estimates and, as I have been informed by the director of the travel bureau, they have been filled.

The travel bureau, apart from a head office in Ottawa, has two offices in New York and in Chicago. Throughout the United States in the five consulates maintained by the Department of External Affairs, that department assists in answering inquiries, as does the embassy in Washington.

In the year 1958 the Bureau in its offices in Chicago, New York and Ottawa, received something over three-quarters of a million inquiries for literature or general tourist information. This is a record year and shows an increase of 109,000 inquiries over the 1957 period.

So far as advertising is concerned, of the total estimates of $2,300,000 for the bureau, $1.46 million has been allocated for direct advertising in United States magazines and newspapers. This is a modest increase of $68,000 this year, and it is a modest attempt to take into account the increased cost of advertising space.

So far as other publicity is concerned, Mr. Chairman, the bureau distributed last year something of the order of 8,700 photos in black and white and 1,800 colour transparencies. It has issued a number of press releases and letters to promote Canada's travel attractions, and also it has published a large number of small leaflets which are very attractive, as well as other pamphlets of a more important nature.

You have in front of you this morning a sampling of the pamphlets which the travel bureau has issued and is issuing. Such pamphlets overlay the largish posters we have had in the past years.

Apart from directing those efforts mainly to the United States market, which is our biggest and most important one, during the past year publicity material has been placed in Europe and in various countries as far away as Australia and Japan.

In the field of films the bureau has, in cooperation with the National Film Board network, 485 travel film outlets in the United States. It is estimated that over 5 million Americans saw these films in the year 1958. In connection with television, the bureau estimates that more than 60 million United States citizens saw Canada's travel films in 1958.

A further example of promotional activity in which I think the committee would be interested was an intervention on the part of our minister last year when he was able to arrange with the president of the A.B.C. network for the viewing in the United States of the National Film Board's "Trans-Canada Summer." This film was shown in two parts on August 29 and September 5 over 32 television stations, and it is reckoned that between 5 million and 10 million people saw the film.

In our view the travel bureau has attempted since 1957 a rather successful experiment in its promotion of the Atlantic provinces tourist possibilities. Since that year a special tourist promotion campaign has been run by the travel bureau in consultation with the four Atlantic provinces. A total of $300,000 was included in the estimates for direct advertising in connection with this special campaign and the advertising in the United States was placed in the high potential area such as New England, the middle Atlantic states, New York, Pennsylvania and so forth.

So much, Mr. Chairman, for the activities of the bureau in a somewhat sketchy form.

Your chairman has touched upon a point which I should like now to turn to, and that is the tourist deficit for 1958. Canada's income from travel spending in that year was still the second highest in Canada's history. The year 1957 was a boom year, and during that time Canada received $363 million from the tourist trade. The 1958 revenue was $352 million. This is a decline of $11 million or about 3 per cent. The former record was in 1956 when $337 million was received from the tourist trade.

Now, although the trend for travel spending in Canada over the past years by foreign tourists has shown a steady increase, we in the department and travel bureau are not at all happy about the 3 per cent decrease.

Another factor which has appeared in the travel account balance in Canada has been the increased spending by Canadians abroad. More Canadians than ever are taking trips to the United States and Europe. Last year expenditures by Canadians in foreign travel increased by 4 per cent. So that according to the Dominion Bureau of Statistics estimates, the deficit in 1958 on U.S. travel account increased by $30 million; that is to say $11 million less received from American tourists, and $19 million more spent by Canadians overseas.

Naturally, the committee, Mr. Chairman, and we have been pondering as to what were the reasons for this decline in the American tourist traffic to Canada. We believe that the tourist industry has been affected partially by the recession in the United States. On the other hand, Canadians do not appear to have felt the effect of such a recession as much as in the United States. This probably came about by the sort of phasing of the recession. It seems from what we can see that the recession hit Canada first and we were relieved of the effects a bit sooner than in the United States. The entries to Canada by ship showd the largest decline, that is, a decline of 10 per cent, or a decrease of 20 per cent in spending.

The shipping strike on the west coast materially affected the tourist traffic to the Island. Mr. Chairman, the bureau, faced with this situation, decided that it must try, within the budget allotted to it by the government, to institute a more vigorous campaign to increase the tourist spending in Canada. The bureau is attempting to reach markets in the United States with its message of Canada's travel attractions.

In 1959 the bureau is giving a good deal of emphasis to the spectacular nature of the attraction which Canada has to offer this year. The royal visit for example; the opening of the St. Lawrence Seaway, are getting very prominent advertising—as well as festivals such as that of Stratford, the Vancouver Music Festival, the Calgary Stampede and other attractions are being played up. Another way where we are attempting, through the travel bureau, to attract more United States tourists to Canada is by a diminution of the black and white advertising and an increase of the colour advertising—and by a bit more concentration. There is more colour advertising this year than last year. Atractive resorts, hotels, the trans-Canada highway now being completed, the great variety of recreation facilities available in the national parks and the provinces are being featured more than ever this year.

We are trying to show that Canada is not only a wilderness with lovely spots in that wilderness, but really a country of warm welcome. We are trying to depict it as an exciting country to have a holiday in, a place where the family can really enjoy a holiday in this unmatched scenery.

I am sure, Mr. Chairman, the members of the committee would like to see examples of this advertising, and we have folios of the advertising being used this year, which could be distributed. Mr. Chairman, in the past two years there has been this constant endeavour to improve the image of Canada in the United States. I think that the effectiveness of this campaign can be judged by the increase in interest in travel to Canada. The increase in inquiries from prospective tourists to Canada since 1956 has gone up by almost 50 per cent. We acknowledge that the mere clipping of coupons in magazines and a request for information is no sign of how many tourists come to Canada. There is a correlation—a statistical correlation—it appears between inquiries and the number of visitors to Canada; but that has not been established as scientific evidence. On the other hand, the increase in the number of persons who write

to the travel bureau for specific information has gone up very materially in the last year—about 45 per cent—and in this particular year it has gone up very considerably also. It is the tourist who writes to the travel bureau for information who we feel fairly certain will come to Canada.

The travel bureau, Mr. Chairman, also, in the discharge of its functions, has worked very closely with the Canadian Tourist Association. One thing it proposes to do this year, in concert with the Canadian Tourist Association, is the launching of a national poster contest throughout Canada. Some of our posters are somewhat dated, and we believe that we should have a good prestige poster for Canada abroad. The travel bureau does another thing, Mr. Chairman: it holds an annual meeting between federal and provincial officials and officials of the Canadian Tourist Association and the tourist industry. By this means we have a very close interchange of views from year to year and are able to develop that close liaison, not only for international travel to Canada, but also to increase the intra-provincial tourist trade.

These, Mr. Chairman, are the opening remarks that I wanted to make for the department, and possibly there might be questions to be asked, or you may wish to hear other witnesses as we go along.

The CHAIRMAN: Thank you, Mr. Côté. Before you start asking questions, gentlemen, Mr. Herridge is here on my invitation. He is interested in the tourist industry, and I know you will be glad to have him with us. I suggest that, if he wishes to ask questions, he be permitted to do so.

May I say that, if any of the other members of any party would like to participate in this discussion, they would be most welcome to do so.

Mr. SMITH (*Calgary South*): Mr. Chairman, I wonder if I might open by asking the witness this question: with regard to the 3 per cent drop, you have said you do not consider it too serious, and I am thinking of the chairman's opening remarks. Have you any comparable figures to show whether this reduction has been commonplace in other countries; otherwise, has this been a trend at all which has been established? For instance, has the United States experienced an equally similar drop for the current year?

Mr. CÔTÉ: Mr. Chairman, I would not like the committee to believe that a 3 per cent drop is not a serious one. In the Department's estimation, in the Bureau's estimation, we are concerned about that drop of 3 per cent. If one considers the devaluation of the dollar it makes a greater percentage than that.

Mr. SMITH (*Calgary South*): That is right.

Mr. CÔTÉ: We have not got, I think, detailed figures of how the other countries have been affected by the recession. We may have figures on how the United States has been affected; but I would like to ask, with your permission, Mr. Chairman, that the Director of the Travel Bureau answer that particular question, if he has the figures.

Mr. Alan FIELD (*Director, Canadian Government Travel Bureau*): A number of the domestic areas in the United States were actually affected by the recession last year. The National Association of Travel Organizations—NATO—which corresponds with our own Canadian Tourist Association, has estimated that in certain places the drop was as large as 10 per cent. This is directly the effect of the recession. There were areas in Europe that were affected. France lost a little ground last year; Italy made it up; the United Kingdom was up a little bit.

American spending in Europe has increased—that is, in a period of 10 years—the amount of spending by Americans going to the 23 countries in Europe, has increased. I will give you an example.

Mr. SMITH (*Calgary South*): I think, unless you wish, I have the information I was seeking. I wanted to determine whether or not there had been a similar experience and you say there had been.

The CHAIRMAN: Only in a certain area. Even in the United States I think their tourist industry is away up.

Mr. FIELD: I can obtain those figures for you. The domestic spending in the United States did not go up the amount expected last year.

Mr. SMITH (*Calgary South*): We have discussed the attitude of the tourist bureau. Could the officials of the travel bureau in Canada give me any indication what percentage of the budget is spent in this attempt to interest the American tourists in coming to see Canada and what is the comparison in respect of interesting Canadians in seeing Canada?

Mr. FIELD: The terms of reference of the bureau over the years have been interpreted as indicating that our job is to bring Americans into Canada. For that reason our efforts are almost entirely devoted towards publicizing, promoting and advertising Canada's travel attractions in the United States. That is the way the terms of reference have been interpreted.

Mr. SMITH (*Calgary South*): May I ask the deputy minister, recognizing the fact that this deficit could be reduced by having more Canadians spend more money in Canada rather than spending it in the United States, and bearing in mind that less than one in ten Canadians have seen the other parts of Canada, if there should be a reassessment to see how we might encourage Canadians to see Canada first?

Mr. CÔTÉ: There has been in the last two or three years a campaign of "Know Canada Better" worked out in conjunction with the other provinces. In the central province of Canada it has been known as the "Know Ontario Better" campaign. While the general policy has been for the Travel Bureau to have its major effort directed towards bringing Americans to the border of Canada wherever they may be, the policy has been that it was up to the provinces to take the tourists to their particular area, and encourage them to see their particular area.

One of the outstanding examples of interprovincial cooperation has been in the Atlantic provinces where they have pooled a good deal of their advertising in the United States and within Canada in a "Get to Know the Atlantic Provinces" campaign. The western provinces have been doing some work in that respect, not so very much in Canada as in the United States. Alberta and British Columbia, for example, have a small office in San Francisco.

Mr. SMITH (*Calgary South*): I wonder whether or not Mr. Field feels there should be reassessment of policy in view of what has been said of the interpretation by the official government representative of the Canadian Government Travel Bureau of the terms of reference, that really their only job is to bring United States tourists into Canada. I think a reassessment should be made.

Mr. FIELD: That has been the role assigned to the bureau in its interpretation of the terms of reference. The bureau can undertake almost any task assigned to it by the government in the field of travel promotion, but we are confined by our terms of reference. It has grown over the last twenty-five years and grew up as a matter of division of responsibility. It was felt that the federal government could make the general invitation throughout the United States to come to Canada and to bring American tourists into the various provinces, and then it was deemed the responsibility was that of the individual provinces. The provinces are spending a lot of money on travel promotion. Provincial budgets have gone up but not as much as we would like to see them go up.

Mr. SMITH (*Calgary South*): Do you have the figures as to the number of Canadians who have seen any other province other than their own? I think the figures would be startling.

Mr. FIELD: I have heard it said that only one in four has visited other provinces. We have no statistics on this.

The CHAIRMAN: In answering your question, Mr. Smith, would you like to have Mr. Field include the revenue, say, of Mexico over the last ten years? That is available.

Mr. SMITH (*Calgary South*): It would be very useful.

The CHAIRMAN: And he might also put on the record that they are now establishing a ministry of tourist business. At the same time it might be helpful to have the information—since there has been $300,000 allotted each year to the maritime provinces—as to what the income from the United States tourist business has been to the Atlantic provinces for the three years prior to the 1957 grant, and since then.

Mr. SMITH (*Calgary South*): Yes. I had a number of other questions but I felt that some of the other members might like to ask some questions at this time.

Mr. HERRIDGE: I am very interested in the mention of what the provinces are doing in this regard. Could you inform the committee what form this cooperation with the provinces takes in respect of the planning of publicity in other countries and the prevention of duplication, and so on; that is, the form it takes in cooperation with the tourist industry as a whole?

Mr. FIELD: Mr. Chairman, in answer to the question, there already has been mention made of the more effective means of cooperation, that is the calling of the federal-provincial tourist conference which takes place each year here in Ottawa. The basic reason for calling this conference is to coordinate as much as possible our advertising and promotion efforts so that we will avoid expensive or wasteful duplication as much as possible. One of the first jobs I have to do when that conference convenes is to present to each delegate a basic schedule of our advertising in newspapers and magazines for the coming year. They know how much we propose to spend, in what markets we will spend it, and the day and date the advertisement will appear. In this way they can build their budgets around, alongside, or above our advertising program. We do not ask the provinces or the transportation companies to make their schedules available to us, for obvious reasons. We feel, however, that the federal government provide this information, because we are laying down the base for the promotion of Canada abroad and feel that they should have this information.

Mr. FLEMING (*Okanagan-Revelstoke*): The officials of the department are available to us, whereas the witnesses who are here have come a considerable distance. I wonder if we might hear the witnesses first and then we could hear the officials of the department later at their and our convenience. I feel we should hear the presentations of the witnesses first.

The CHAIRMAN: That is very good; but before we do that, are there any questions on government policy which you would like to ask the assistant deputy minister? I think that is important.

Mr. SMITH (*Calgary South*): I have a number of questions, but I think the suggestion is a good one.

Mr. AIKEN: I do not want to divert the proceedings, but might I point out that all this information which is being requested, and all that in respect of Mexico, was provided last year at pages 311 to 321 of our reports, and there is also a good deal more. I have no objection to its going in again, if it will assist the committee.

I was going to suggest that this committee last year took a good deal of time looking into the breakdown of the spending. I, for, one, would like to see us expand the type of discussion, go into something entirely different and broaden the discussion into methods of promoting the tourist industry and what we can do to increase it, beyond by simple advertising.

The CHAIRMAN: That is a good idea.

Mr. AIKEN: I do not want to cut this off by any remarks, but the figures are all there from last year, and I think it will be quite simple.

Mr. SMITH (*Calgary South*): I have no objection. What we are asking for is an up to date summary for the past year with which to make comparisons.

The CHAIRMAN: It will be brought up to date.

Mr. HERRIDGE: I have one question on policy before you call the other witnesses. Does the tourist bureau keep in contact with other departments of the federal government so as to be fully informed of great developments which might attract tourist travel, such as the developments on the Columbia, where we are getting increased water travel?—the number of boats coming up from Portland last year approached 100—and also from reading about developments on the Columbia, and the creation thereby of more and more interest? What is the cooperation between the tourist bureau and other departments of the government?

Mr. CÔTÉ: Mr. Chairman I think the answer to that is that there is very close cooperation with other government departments. In fact there is an interdepartmental committee on information, and all these aspects are brought there, apart altogether from the contacts which individuals have with the Director of the Travel Bureau or with the Deputy Minister of the Department.

One example of that has been, so far as the central Canadian part is concerned, that this year the opening of the seaway has resulted in a good deal of cooperation between the departments on this subject. It was a question, for example, whether the publicity for the St. Lawrence Seaway opening should be done by the St. Lawrence Seaway Authority or not. It was decided in this particular instance that the publicity should be directed mainly to the Americans to attract them to the St. Lawrence Seaway, that is, to the Canadian section of the St. Lawrence Seaway, and that such publicity should be done by the Travel Bureau. There is this pamphlet which is just coming off the press now, on the St. Lawrence Seaway.

Another example is the royal tour. The publicity material has been done pretty much for the United States market to bring Americans to Canada in this year particularly, and there has been close cooperation with all the provinces.

The director of the travel bureau has constant contact with the directors of the provincial travel bureaus. There is an exchange of publicity material, including a great deal of federal publicity material which is sent to the provincial tourist bureaus so that they may distribute it when they receive inquiries, whether those inquiries come from the United States or from Canada. And the provinces send their material to the federal travel bureau. In fact, a tremendous amount of material is received here, and the travel bureau distributes it to Americans who may inquire, or to anybody who inquires about travel to Canada or within Canada.

I think Mr. Field has a point to add to that.

Mr. FIELD: Mr. Chairman, another point that is very important to the provinces and the transportation companies is that the bureau maintains a continual daily referral system which is sent out to all the provinces and transportation companies, listing in some detail the inquires that we have received

each day. And the provinces, the transportation companies and the regional organizations can follow up those inquiries to try to get additional business.

Mr. SMITH (*Calgary South*): We have heard the expression that we are attempting to improve Canadian interest in American tourists, and to impress them that Canada is a pleasant place to spend a vacation. But the impression I get from Americans coming up is that they are surprised to see that we are rid of Indians, cowboys, and so on. Do we go too far to create this impression of wilderness? Do we show in our advertising media enough modern conveniences? I suppose this really comes within the field of the Department of Trade and Commerce. But are we bending over backwards to show that we have excellent fishing?—and that is subject to debate in certain sections!

Mr. HERRIDGE: Not in the Kootenays!

Mr. SMITH (*Calgary South*): Have we created the impression that we are a wilderness and that is exactly what they are going to be placed in? Have we done anything on the other side of the coin?

Mr. CÔTÉ: I would like it to be clearly understood from the statement I made a moment ago that we are trying more and more to show that Canada is not a wilderness of lonely lakes. I think those were about the words I used, referring back to my notes; but rather a place where United States citizens and their families can come and enjoy it just as they would at home, but there is still something exciting and spectacular in Canada which may not be available to them in the United States—that there is the difference.

I agree that there has been for too long this idea of a Canadian wilderness and of Mounties. We are trying to get something much more attractive over to the tourist, the point of view of comfort and enjoyment.

Mr. SMITH (*Calgary South*): The average American thinks we are responsible for cold weather, ducks, and mounted policemen.

The CHAIRMAN: And also for snow.

Mr. SMITH (*Calgary South*): And I think to some extent our advertising tends to increase this illusion.

Mr. FIELD: I would like to say that one of the reasons I have brought along the folio of our advertising which has been placed on the desk in front of you is to show that we are endeavoring to do exactly what we are talking about—to create a new image of Canada and to correct the old image of ice, snow, cold weather and mounties. Useful as that has proven in the past, I think it is important now to improve and upgrade the image of Canada in the mind of the average American.

The CHAIRMAN: We have not had much luck on that. Would you like to call your witnesses, Mr. Aiken?

Mr. AIKEN: Might I suggest that Mr. Tomasso and Mrs. Montgomery are here from the Canadian Restaurant Association and they have a short brief to present, after which they would be pleased to answer questions.

The CHAIRMAN: Is the brief available for distribution?

Mr. AIKEN: Yes.

Mr. SLOGAN: How does the tourist industry stand in comparison to other industries as a dollar earner in Canada? Could you give us the top ones?

Mr. FIELD: The tourist industry is now considered to be the third in dollar value to the Canadian economy. Newsprint and wheat are the only two other product that precede it.

Mr. CÔTÉ: I have the figures here. In 1957, Canadian export commodities, according to the Dominion Bureau of Statistics, showed as follows: newsprint yielded $715 million; wheat, $380 million; and travel, in 1958, $352 million.

Mr. SLOGAN: What are some of the others which follow that?

Mr. CÔTÉ: Pulp, $292, million; lumber, $282 million; aluminum, $230 million; iron ore, $152 million; petroleum, $141 million; and uranium, $128 million.

Those are 1957 figures except the travel figure of $352 million which is dated 1958.

Mr. GUNDLOCK: I have a short question which relates directly to policy. Have you any breakdown of figures related to tourists and the national parks, and the number who come to them? And supplementary to that, I wonder what cooperation there is between your department, the Canadian Government Travel Bureau and the National Parks Branch, in the way of contacting the park superintendents and employees with a view to their being super salesmen, shall we say, for the travel bureau for tourists?

Mr. CÔTÉ: Mr. Chairman, we have figures concerning the attendance to parks. Last year there was something over 4.5 million persons who visited Canadian national parks. We can give a breakdown on that. We have not got a breakdown, however, apart from the individual national parks, as to the types of tourists who visit the Canadian national parks.

The CHAIRMAN: Or the origin?

Mr. CÔTÉ: We have not got the origin of them at the parks; that is very difficult. We could do a sampling, but we have not general statistics on them.

Mr. GUNDLOCK: In order to save time, if there is something you could put on the record, I would like an answer to the second part of that question: what is done by way of cooperation between these two bureaus?

The CHAIRMAN: Would you repeat that question later, Mr. Gundlock?

Mr. CÔTÉ: Maybe I could answer it now, Mr. Chairman, merely to say, that there is the closest cooperation between the travel bureau and the National Parks Branch. The publications of the National Parks Branch, which are educational or promotional, are worked out between both branches. The travel bureau does the distribution of a good deal of the national parks publications. The remainder of the publications, which are from an educational viewpoint, are distributed within the parks. So far as the national parks are concerned, the National Parks Branch is very much aware of the value of the parks as a tourist attraction. It is a point which the director of the parks branch has always in mind when in contact with his parks superintendents.

We have in the parks branch a section that is being established from an educational and an information viewpoint, which we hope, within the parks, as it develops will do a good deal more to bring the attention of Canadians and Americans who visit the parks to what is the purpose of the parks, and the information there is about Canadian facilities.

Mr. COATES: Mr. Chairman, I wonder if at a future meeting Mr. Côté could give us an idea of what his duties are as assistant deputy minister, so that we can better appreciate that?

The CHAIRMAN: Do you mean with respect to the tourist travel bureau?

Mr. COATES: Yes; not only with respect to his duties with regard to the tourist travel bureau but his duties in the department as a whole.

The CHAIRMAN: We are on the travel estimates. Let us call a witness, as was suggested, and maybe we can proceed. Whom would you like to call first, Mr. Aiken?

Mr. AIKEN: Mr. Tomasso, the president of the Canadian Restaurant Association.

Mr. E. di TOMASSO (*President, Canadian Restaurant Association*): Mr. Chairman and gentlemen, the Canadian Restaurant Association is a chartered non-profit organization and is recognized as the national trade association of Canada's food service industry. Incorporated in 1944, its membership is now nearing the 2,000 mark. Members represent all types of food service—restaurants, cafeterias, hotel dining rooms, drive-ins, industrial and social catering, hospitals, schools, and the armed services.

The restaurant industry of Canada, through our association, would like to present certain suggestions relating to promotion of the tourist trade in Canada, and more particularly the leading role which food plays in this very important industry.

First of all, however, we wish to emphasize that it is the opinion of the leaders in our industry all across Canada that the Canadian Government Travel Bureau, under the direction of Mr. Alan Field, has been doing a tremendous job for the industry, both inside and outside Canada.

In fact, during the last two weeks I was making a tour through the maritimes, and Alan Field and I ran across one another eating lobster, more times than I can count; and I must say that he gave a terrific address to our association convention at Amherst.

From the information available to us, we would say that the budget allocated to the promotion of this all important industry is much too modest.

Here are a few points we would like to make in the interest of improving our reception and services to tourists and also in increasing promotion:

(a) Economic survey—An economic survey of the entire food service industry is very much needed. Such a survey would enable food service operators of all types to plan objectively for the future and should be of equal value to the many departments of government concerned.

(b) Capital Loans to Food Service Operators—The recognition which the government of Canada has given to the financial problems of many segments of small business has not been extended to well established restaurants and dining rooms serving in equal measure the domestic and the tourist trade.

The need for the expansion and renovation of many food service operations—and thus attracting return business from tourists to this country—is almost self-evident. The stumbling block, to date, has been the inability of restaurant operators to borrow money at a reasonable rate of interest.

In 1958 a presentation was made to the Honourable Donald Fleming, Minister of Finance, by the Canadian Tourist Association, requesting government support for such loans. We would suggest that the Department of Northern Affairs and National Resources, under which the Canadian Government Travel Bureau operates, should lend support to such a program of assistance for Canada's food service industry. This, in our opinion, would be a most practical and positive approach towards improving services for Canada's tourists.

(c) Greater Promotion Needed—Opinions expressed by members of our association from all parts of Canada indicate the need for greater stress on the promotion of good eating places, good roads, fine accommodation, special events and our Canadian crafts—all designed to create a positive interest on the part of tourists from other countries.

Included in the opinions from our members were suggestions that more effective promotion might result through a closer liaison between the bureau and the provincial and municipal tourist agencies.

We know that great strides have been made in this direction by Mr. Field but the reports would seem to indicate that it is the smaller agencies that need guidance in planning and timing their promotional programs. This we appreciate would be costly, but might be a very productive expenditure in the overall pattern of promotion.

Here is something very dear to my heart:

(c) Educational Programs at Industry Level—For many years our association has been greatly concerned and in many instances disturbed about the lack of facilities for educating and training present and would-be employees of our industry. Due to the untiring efforts of our regional and branch officers, much progress has been made. Continuing support of all branches of government at federal, provincial and municipal levels is solicited in order that educational facilities ranging from a degree course in food service management to vocational and short courses for management through to kitchen and dining room personnel may be provided.

(e) Publicity on Canadian Government Travel Bureau Program—In reviewing the opinions expressed by our members across Canada, it became apparent that knowledge of the programs and the job that is being done by the Canadian Government Travel Bureau is very limited. Our association would benefit by greater knowledge of the program and would in turn be in a position to inform members.

Mr. Chairman and gentlemen, thank you very much for your kind attention. Any comments?

Mr. SMITH (*Calgary South*): I wonder if I might ask Mr. Tomasso this: this organization is well known to us and has done, I think, a good job. The brief, however, in effect comes to this, that you have come to the committee to ask the government to spend more money and to provide you with more organization. I would be interested to know what you are doing yourselves. You took some pride in that organization of some 4,000 people—

Mr. TOMASSO: 2,000.

Mr. SMITH (*Calgary South*): Of some 2,000 people. What are you doing to improve the standard of food among the membership of your restaurants, to make the American tourists want to come up here and eat? And what are you people doing to improve the situation with regard to the educational information that you are sending out?

Mr. TOMASSO: I am having our managing director help me on this. We are doing a good deal, and we sent out a man last year, right across the country, to talk to our branches and to give them the know-how on their operations, improving the look of their operations and their service. He went across the country at our expense, and had a very successful tour.

I have just come back from the maritimes, and I noticed our restaurants, those who have our emblems on their windows, are clean and are serving good food to attract the tourist when he comes. There is no lobster for the tourists when they come and that does not help them any. We try to tell them to push regional dishes—Oka cheese and Canadian maple syrup.

The CHAIRMAN: Why could they not get lobster?

Mr. TOMASSO: Because the lobster is probably shipped out of the area.

The CHAIRMAN: You can get lobster from different places in the maritimes any day of the year.

Mr. TOMASSO: But in the maritimes, especially in Prince Edward Island, they have no lobster in July and August. They are building a new plant down there—

Mr. SMITH (*Calgary South*): I do not want just to deal in lobsters. You read a very short brief, telling us what we, as a committee representative of government, should do for you. I am concerned with what you are doing for us, and what you are doing for the tourist association. You say you have sent out briefs and had somebody go across the country. You said the restaurants bearing your seal were clean. Have you made any assessment, other than your own personal view, as to whether anything is being accomplished because of this? Sending out a leaflet—as you will be the first to agree—telling the restaurateur to keep a clean restaurant and to be kind to visitors does not mean much, unless you are making some effort to assist the campaign.

Mr. TOMASSO: We are not a health organization; the provinces have their own health laws. If a restaurant is to get a licence it must be given by the province concerned, according to the sanitation and health standards. Therefore, they are eligible to join our organization. We want all restaurants to join our organization so we can send messages to them.

The CHAIRMAN: Who tells them to make the prices so high?

Mr. TOMASSO: Well, I want to tell you something, and it is this. Approximately 90 per cent of our restaurants employ ten people or less; 70 per cent are man-and-wife operations. They are slaving around the clock and only see one another when they are going on and off shifts.

Mr. SMITH (*Calgary South*): I have one other question. The need for establishing a Canadian identity is something that is not unfamiliar to you. The complaint has been made by the former gentlemen whom you succeeded as president, and with which I agree, that often there has been much attempt by restaurateurs to establish a particular diet which the American tourist, if we may deal with him is encountering in his own area. He comes up to Canada and expects to eat something different. Has there been any attempt by your organization to encourage these regional dishes so the food which they will eat will have a Canadian identity.

Mr. TOMASSO: That was the purpose of my tour. As president, I am promoting public relations for our industry. One of the prime things I said was that they should push Canadiana on their menus. That is what I did in the maritimes; but then I got this business of there not being lobster during July and August thrown at me.

Mr. SLOGAN: Do you, on a national level, do anything to create new recipes that would be very distinctively Canadian, and distribute them throughout your association?

Mr. TOMASSO: I will ask Mrs. Montgomery to answer your question.

Mrs. FLORENCE MONTGOMERY (*Managing Director, Canadian Restaurant Association*): Mr. Chairman and gentlemen, considerable has been done in connection with this matter of regional dishes. About four years ago I gave up the chairmanship of a committee within the Canadian Tourist Association called the committee on Canadian cuisine. That committee issued a special booklet on dishes of the various provinces across Canada. It did receive some popularity; and the only reason the committee sort of petered out—it has not entirely; it is under a new chairman now, but the activities are reduced—is because of a matter of financing. When I was last chairman it had reached the point that we had to have considerable money to carry on and the money just was not available. However, we do issue bulletins to all our members across Canada stressing this matter of regional dishes. This is a subject which is very close to my heart. I love to talk about it and publicize a luncheon or a dinner where I find dishes of the region being featured. At present we have evidence of this in Magnetic Hill and other places where they really feature them. This has

contributed a great deal to the interest of tourists who come into those areas. There is a tremendous field for expansion in that one subject alone and we can do it if we are given the resources and personnel to do the job.

Mr. SLOGAN: Do you have a home economist on your staff?

Mrs. MONTGOMERY: No.

Mr. HERRIDGE: Why do so many of the Canadian restaurants advertise southern fried chicken when you go into their establishments?

Mrs. MONTGOMERY: That is something we would like to know.

Mr. FLEMING (*Okanagan-Revelstoke*): Has your association been able to provide something in the nature of a guide to good eating in Canada? Is anything of that sort directed toward the American tourist so when he is in a certain region he knows what to look for when he arrives?

Mr. TOMASSO: That is a terrific idea, and, I think, it could be done here.

Mr. FLEMING (*Okanagan-Revelstoke*): Is it?

Mr. TOMASSO: It is not done in Canada. This is something that would have to be undertaken by a company or a person.

Mr. FLEMING (*Okanagan-Revelstoke*): You have not facilities for that?

Mr. TOMASSO: No; we have member restaurants. We cannot put out a guide to good eating. However, New Brunswick and Nova Scotia have a folder; they make it up at their own expense; they give this out, and it has the names of the restaurants listed.

Mr. FLEMING (*Okanagan-Revelstoke*): That would be the sort of thing the Canadian Restaurant Association over a period of time might be able to develop. I do not know whether it has the resources itself to undertake such a program. However, it might be able to create an interest which would lead to such a guide. It would add one more source of information which the American tourist would have before he gets here, and he would know what to look for. Very often they would be prepared to try our regional dishes, if they knew what they were. This sort of thing would be a basic step in an educational program of that kind.

Mrs. MONTGOMERY: We continuously stress the great need for such a guide. Many of the guides now available are not what they should be. They are put out on a local basis and it is a case of if you pay out $50 you are listed in this booklet. It is not a guide. We know one is badly needed, but this is hardly the function of a trade association.

Mr. FLEMING (*Okanagan-Revelstoke*): If it could not do it out of its own resources, I think it might encourage the development of this and make it a paying proposition.

Mrs. MONTGOMERY: A very good point.

Mr. GUNDLOCK: What foods and dishes are distinctively Canadian? I personally do not know the answer to that question.

The CHAIRMAN: It is not southern fried chicken.

Mr. SLOGAN: There is Winnipeg Goldeye.

Mr. TOMASSO: I would not say strictly Canadian dishes; I would say regional products from the area which would be featured.

Mr. GUNDLOCK: You do not have provinces that serve strictly Canadian dishes?

Mr. TOMASSO: The province of Quebec serves strictly Canadian dishes. New Brunswick boast about their marinated fiddle heads, like we had at Magnetic Hill.

Mr. SLOGAN: What are they?

Mr. TOMASSO: It is a vegetable.

Mr. SMITH (*Calgary South*): Would you tell us a bit about your purpose in taking an economic survey? At the same time I might ask the witness a second question. I think he has suggested that the government should undertake this, and I would like to ask why the Canadian Restaurant Association should not undertake it.

Mrs. MONTGOMERY: Mr. Chairman, in connection with the question concerning the economic survey, I would like to say that the restaurant industry has long been known as a depressed industry in many ways. It has not received the consideration and prominence that many other industries have in Canada. We are faced continuously with not being able to supply proper information concerning the industry. Our Dominion Bureau of Statistics are doing a job, but it is not nearly as extensive as it should be. We feel that the only way this can be accomplished—to get a real picture of the Canadian food industry—would be to undertake a survey of the industry.

Mr. SMITH (*Calgary South*): What sort of a survey have you in mind?

Mrs. MONTGOMERY: To determine the economics and the planning of it.

Mr. SMITH (*Calgary South*): Is it to find out whether or not a restaurateur is making money?

Mrs. MONTGOMERY: Not so much whether he is making money; it is whether it is economical to open certain types of places in certain areas. It covers the whole field. So often we receive requests from people who say they have a town with a population of 1,000 people and they would like to have Murray's or Canadian Food Products open a restaurant in that area. There is so little known about the economics of the industry that a big firm would not go into an area of that kind because it is not economically sound.

Mr. HERRIDGE: I would like to ask the gentleman who presented the brief a question or two. I was most interested in the suggestion that the restaurant industry would like to get capital loans from government in order to expand and develop. As a socialist, I am interested in this evidence concerning a favourable approach to dining rooms on the part of free enterprise. I fully realize the difficulties. Would you explain to the committee why you make this request, why your operators cannot obtain sufficient loan capital at the present time? And then could you make any suggestion to the committee as to loans that are being considered, the interest rate that you propose and the terms of such loans, and why you would suggest the restaurant industry requires this assistance from the government at the present time?

Mr. TOMASSO: In the case of some restaurateurs,—the tourists like to see that professional look to a restaurant. He likes to see the nice fronts, and be able to walk inside and get the benefit of that particular atmosphere. He likes it to hit him in the face and not be equivalent to something he has seen somewhere else. He is looking for that. As a result, the restaurateur is forever spending money on equipment. As you know, the profits in the restaurant industry depend on volume, and sometimes they just do not have the volume. It is seasonal, and when they go out to get money to buy equipment, it is spread over a long period of time. Sometimes it cost them 10 per cent to 12 per cent, or even 15 per cent and, besides that, the poor fellow would like to fix up his restaurant and remodel his front. He finds he cannot get the money at the bank because the restaurant industry has not that sound reputation which other industries have. Therefore, he has to go to a private industry or private people to get that money, and sometimes he has to pay a very high rate of interest.

We would like a fair interest rate, the normal rate of interest, so these people could get money at fair interest rates in order to remodel their places and give them that look and that atmosphere for which the tourist and the public are looking. Sometimes they cannot do it. Sometimes they make homemade things and when the public enters they say: "My gosh, this looks homemade; it has not that nice look about it." They will have to compromise. I would like to see them get the money at a fair rate of interest.

Mr. HERRIDGE: Would you suggest an amendment to the Industrial Development Bank Act that would provide loans over a long period of time at a low interest rate for the small businesses?

Mr. TOMASSO: The Canadian Tourist Association, which we supported on this, have presented a brief to the Minister of Finance, Hon. Donald Fleming.

Mr. HERRIDGE: And you support that brief?

Mr. TOMASSO: Oh, yes.

Mr. FLEMING (*Okanagan-Revelstoke*): Is not the restaurant business a high risk business?

Mr. TOMASSO: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): A number of people go into it, though, because it looks easy. I understand there is a fairly high number of failures. Is that having a detrimental effect on the financing arrangements?

Mr. TOMASSO: You see, gentlemen, everyone thinks they can run a restaurant. Every fellow who raises chickens in his back lot and tosses a salad. thinks he can get into the restaurant business. However, it is not only that. It is estimated that 96.7 per cent of the failures are due to inexperience and incompetence.

The CHAIRMAN: How then would you expect the government to give loans to those inexperienced people?

Mr. TOMASSO: I feel the banks in the areas would know whether these people were reliable and it could be worked somehow through the bank managers of these areas.

Mr. FLEMING (*Okanagan-Revelstoke*): You are seeking these loans for experienced, qualified, restaurant operators; is that correct?

Mr. TOMASSO: That is right.

Mr. AIKEN: There has been a certain amount of scepticism, I think, in the committee, and I think some of the committee feel you are speaking only on behalf of large, established restaurants. Do I understand it is the smaller restaurant—the several employees restaurant; the husband and wife restaurant—that you are really concerned with in connection with these loans?

Mr. TOMASSO: Ninety per cent of our operations are small restaurant operations. We are concerned with a small restaurateur who wants to give himself a smart look, something that will appeal to the tourist and the public. As far as restaurants being in the business a few years is concerned, I ran across many in the maritimes who have been in the business 20 to 23 years and are still small; but they are honest people and are trying to serve quality and make a living, to which they are entitled.

Mr. AIKEN: Mr. Tomasso, may I ask you another question? We have got, maybe, a little bit off the subject, but I realize that your association was asked to come here to make representations as to what the government and the travel bureau could do to improve the restaurant business in Canada.

Have you any specific suggestions as to, firstly, how the travel bureau could improve its methods; and, secondly, how the government, over and above the travel bureau, could assist in improving the appeal that tourist establishments would have in Canada?

Mr. TOMASSO: I buy all the magazines; I get all these smart magazines all over the country I find that what I see is good; it is the kind of thing I want to see. I think there should be more of it. But I think there should be more coordination between the provinces, because I think at one time we were pushing New Brunswick on one coloured sheet in this magazine through the Canadian Government Travel Bureau, and on the other page there was an ad put in by New Brunswick itself. That was "a one shot deal". I think it should have been spread into two shots. It is just the communications between the province and the travel bureau.

Mr. AIKEN: I think Mrs. Montgomery, perhaps, wanted to make an answer too. Did you have something to say, Mrs. Montgomery?

Mrs. MONTGOMERY: Mr. Chairman, in answer to your question, Mr. Aiken, I would like to say that in our brief we have mentioned two points: one is that the bureau should have more money in order to extend these operations, and the other is that possibly more should be known by the other groups, such as our own, about what the bureau is doing. In that way we would be able to supplement it through our publications, through our meetings and the various types of access that we have to our members.

I think I would like to make a further comment, if I may, on what Mr. Tomasso was saying about the loans. I think it should be understood that the cost of establishing a restaurant is greater than for any other known retail business. We say today that $500 per seat is a minimum cost; $1,000 per seat is an average cost—and in the United States they are now talking about up to $2,000 per seat for a very fine restaurant.

The trouble has been in many people thinking they could open a good restaurant—and have done so—with a gas burner, a dish pan and a few things like that. They have found before long that they could not get adead without money. So they are continually in debt and they are not able to operate. I am referring to many of these places that have started on a very, very small scale, operating a very useful and worthwhile service in the area they happen to be located in. It may be a somewhat out-of-the-way area, but one patronized by tourists.

Many of these people have come along over the past few years. Given the right sort of help, they could make some of our finest restaurants in Canada, where there is that personal attention by the man and his wife in looking after our tourists and giving them the kind of food they would like to have.

Mr. AIKEN: You think this would be an incentive to raising the standard of restaurants throughout the whole of Canada.

Mrs. MONTGOMERY: Yes; and I might say, also, that is our one and only aim in the Canadian Restaurant Association, to improve the standards of restaurant operations throughout Canada. Our whole program, public relations and educational program has been directed to that one objective.

If I may have one more minute, Mr. Chairman, to say something of the things we are doing in the educational field: we are working with provincial governments right across Canada in the extension of education. We are working at the present time to have a degree course in Canada established. It is disgraceful that Canada has not a single degree course in food service administration. In the United States there are 41.

During the winter of 1958 an extension course in Food Service Administration was conducted at the University of Toronto. It will be held again this year.

In Alberta our people have been able to establish apprentice training for chefs. We are working on that in Ontario. So our whole program is geared to upgrading the industry. We are a fairly young association; we are limited by our resources and our personnel; but I think we have made terrific strides.

Mr. HERRIDGE: You have mentioned the financial difficulties of the small operator, and I know a good number in those circumstances, who are hard-working, capable people. Lack of capital is not only felt by restaurant owners, but it is felt by farmers and other small businesses.

The government, after the war, passed an act which was known as the Business and Professional Loans Act, which provided loans to veterans to establish themselves in small businesses, or in professions, at reasonable interest rates. These loans were recommended by the local bank manager, who knows the circumstances better than anyone else. At the same time, it divorces the question of a loan from politics altogether. The Government guaranteed a certain blanket sum in respect of these loans.

That act has been very successful indeed; the loss to the government of Canada has been infinitesimal. Do you think that if a similar type of legislation were passed to aid, particularly, small restaurant operators, it would be of some assistance to you?

Mrs. MONTGOMERY: That is precisely what was asked for in the brief that was presented to the Hon. Donald Fleming last year—and that it be handled through the chartered banks of Canada. In other words, that would remove it from politics; the government would authorize a sum of money to be allocated for that purpose. We were not suggesting that new people be given consideration in this loan arrangement; it would be for established operators with good reputations—

Mr. HERRIDGE: Pardon me. In that brief, the loan was coming from the bank, but guaranteed by the government?

Mrs. MONTGOMERY: The bank manager, who knows the operator, would be giving the loan.

Mr. HERRIDGE: The government would not put up any capital?

Mrs. MONTGOMERY: No.

Mr. HERRIDGE: But it would put up a guarantee in a blanket amount as required by the bank?

Mrs. MONTGOMERY: Yes.

The CHAIRMAN: Mr. Tomasso, you made a statement a while ago—a very important one, I think: that is, the lack of coordination between the different levels of government and business in the development of this industry. You gave a specific instance, relative to the maritimes, I think. Have you anything else to say about that? Have you been attending these tourist meetings here in Ottawa?

Mr. TOMASSO: No; I only attended one, in Quebec City, the C.T.A. convention. We would just like to know what is going on, knowing the tourist spends 30 cents of every dollar on food and beverages. I feel it is very important for us to be kept abreast of all information going out.

The CHAIRMAN: Have you ever made any representation to attend this conference in the fall between the federal and provincial governments?

Mrs. MONTGOMERY: No; but we would like very much to be included in that.

The CHAIRMAN: I do not see any reason why you should not be.

Mr. CÔTÉ: There is no reason why that should not be done. I think we, in the Department, would be very happy to show the Canadian Restaurant Association the operations of the Canadian Government Travel Bureau, and on behalf of the travel bureau I extend to Mr. Tomasso and Mrs. Montgomery an invitation to visit the bureau this afternoon. We will arrange that for you, if you so wish.

On the point of advertising in New Brunswick that you raised, it may have looked as if this advertising from the federal government and the provinces was not coordinated. In fact, it was coordinated, and it was determined that that would be the proper way to do it. We do not quite know whether it is effective until we get the results in from the various ads that have been put in. But Mr. Tomasso mentioned a "one shot deal". It is sometimes useful to have a greater percentage of the advertising in one issue, to cover Canada and various regions, or provinces. This was a deliberate attempt to do that.

The CHAIRMAN: Mr. Côté, I am going to suggest that this is one of the important aspects you must consider. Those who have made a study of this problem of the tourist industry have, I think, felt over the years that there has not been coordination between the different agencies; for instance, the railroads, resort hotels, provinces and the federal government. I am sure that before we get through we will try and find some suggestions that might be acceptable, because I think it is very, very important.

Mr. SLOGAN: Mr. Chairman, are we finished with Mr. Tomasso? I wonder if I could ask him some questions?

The CHAIRMAN: Yes.

Mr. SLOGAN: The Minister of Agriculture stated not long ago that Canadians pay less for food than probably any other country in the world, compared with their earnings, and so forth. Would that not place you in a preferable position, say, to people in a country where the cost of food is much higher, as far as preparing food is concerned, and so forth?

Mr. TOMASSO: We find that what we have to contend with today is not always food cost; it is labour cost. We have to pay labour at the going rate. Our industry, as you know, is a 7-day week industry, and it is very hard for us to get staff to work in the restaurant industry. The word "waitress" has a connotation of low class and it is hard to get waitresses. It is hard to get staff to work a 7-day week, to work on Saturdays and Sundays while everyone else is out having a good time. So we have to pay our staff having that in mind. As a result, our wage costs are getting higher all the time.

We used to operate on a 25 per cent wage cost in cities; now we are up to 30 or 32 per cent. So that is part of our big expense.

Mr. SLOGAN: Is the high cost of labour and premises reflected in the quality of food that the restaurants are serving?

Mr. TOMASSO: Do you imply that the quality of food in restaurants is bad?

The CHAIRMAN: Maybe he is referring to the price.

Mr. SLOGAN: I am referring to the fact that you said that labour and premises take up such a great part of the operation of a restaurateur, and that the food cost is not that important.

Mr. TOMASSO: I did not say that the food cost was not important; I said the labour cost has been rising all the time. The food cost is very important, and you will find that most of the restaurateurs, the smart ones, the men who are upgrading their restaurants, are not taking it off the plate but are putting it on the plate; they are trying to do all they can to make that plate more attractive.

Mr. SLOGAN: I am glad to hear that. As a bachelor, I have to eat a good deal in restaurants. Also as a Ukrainian it is one of our national characteristics to place a great deal of emphasis on food. I can say, in my opinion, that most restaurateurs whom I know are non-imaginative. I think they do not serve their food in an appetizing manner and it is often very flat. This might be a personal opinion, but I know I often go back to a restaurant which in the first

instance I may not go into because it may not be appealing on the outside, but when I do go inside sometimes the quality of the food served is good and I go back. Last week I went into a restaurant in Toronto which had spent probably at least $100,000 on redecorating, and the food was terrible. I certainly will not go back there. I do not feel there is enough emphasis given to the quality of the food and the way it is served.

Mr. TOMASSO: The Canadian Restaurant Association tells its members that quality is first and foremost, that the food should be served in the most appetising way and be well prepared. That is what I try to do in my own restaurant.

Mr. SIMPSON: Mrs. Montgomery said that in the United States there are 41 courses available for food and restaurant administration. Can you tell us who conducts the majority of these courses? Are they university courses or are these courses down there conducted by the restaurant trade?

Mrs. MONTGOMERY: They are conducted by the university, but there is an advisory committee of the industry working with the faculty of the school.

Mr. MARTEL: You say there are none in Canada?

Mrs. MONTGOMERY: There are none in Canada.

Mr. SLOGAN: Were you referring to restaurant administration?

Mrs. MONTGOMERY: Food service administration. We believe if we have management trained that all else will take care of itself. If you have a good manager you will have well-trained employees.

Mr. SLOGAN: You mentioned some courses are provided at the university. I know there are courses at the technical school in Manitoba.

Mr. TOMASSO: And also in Quebec.

Mr. SLOGAN: I feel some persons who are not qualified to attend university might wish to take this course. I believe it would be better if they were carried on at a technical school where those who attended would not have to have the academic standing which they would if it were in a university.

Mr. TOMASSO: We have that now in Canada, in Quebec, New Brunswick and in Ontario—also in Manitoba. That is fine. It is not necessary for them to have matriculation. They can go in after the first or second year of high school. However, we would like to get the young, bright people with a high school education who are going on to college to come in and help us in our industry.

Mr. FLEMING (*Okanagan-Revelstoke*): Your objective is to get a corps of personnel such as Switzerland has?

Mr. TOMASSO: The idea I like is what they are doing at Cornell University. There they have courses in management and those graduates are the ones who will build our industry.

Mr. FLEMING (*Okanagan-Revelstoke*): You do not feel there should be a direct application of the Swiss system which primarily is an apprentice system?

Mr. TOMASSO: I think that in Quebec and Alberta they are doing that now. I think it is wonderful. You will find, however, that the chef who starts his own business is the most likely to fail.

Mr. SLOGAN: I suppose you have heard the expression "vertical integration" used in respect of agriculture. Part of that, of course, is over-specialization, and so on. Do you not feel that with administration, such as you see it, coming into the field there will be a tendency for the hotel business to become a chain business, and so forth, under able administration, and that the smaller restaurateur will be laid out flat on his back.

Mr. TOMASSO: They are never beat—the small restaurateur. He can always go in, speak to these people, skake their hand and give the personal touch which is so important in our industry.

Mr. SIMPSON: In your membership of approximately 2,000 would you have any statistics to show the number of business failures or anything of that nature?

Mr. TOMASSO: In our membership?

Mr. SIMPSON: In your membership or in the industry?

Mr. TOMASSO: Not within our membership. We have no statistics or figures. There was a Dun and Bradstreet report—I do not know whether it was in the United States or Canada—in 1957 that showed there was 96.7 per cent failure.

Mr. SIMPSON: You do not have anything in your records of the business turnover from one party to another?

Mr. TOMASSO: We do not have that.

Mr. AIKEN: We are getting into the subject of training in Quebec. I wonder if Mr. Smith of the Montreal Tourist and Convention Bureau has anything to say on this subject in connection with apprentice training.

Mr. CHARLES SMITH (*Secretary-Manager, Montreal Tourist and Convention Bureau*): Speaking exclusively in respect of the province of Quebec, through its Department of Trade and Commerce, it has been operating a hotel school for a great many years which has been highly successful. It is being nurtured from year to year, is growing in importance from year to year, and the results are more than evident. I am speaking exclusively on this point from the viewpoint of the secretary of the Montreal Hotel Association where they do have a terrific demand for hotel personnel. I may say there is a decided need, not only for restaurateurs and kitchen help, but also for dining room staff and personnel generally connected with the food industry. That has long been recognized by the province of Quebec and the Department of Trade and Commerce there. They have a school where there is a two-year course, in one case being run through a technical school in the province.

There also are summer courses operating in the province; these are abbreviated courses catering primarily to the family operation people which, in the province of Quebec, is almost essential.

Mr. HERRIDGE: Mr. Chairman, I would like to refer to a statement on page 2 of Mr. Tomasso's brief. It reads:

> Included in the opinions from our members were suggestions that more effective promotion might result through a closer liaison between the bureau and the provincial and municipal tourist agencies.
>
> We know that great strides have been made in this direction by Mr. Field but the reports would seem to indicate that it is the smaller agencies that need guidance in planning and timing their promotional programs.

I was very struck with this. I have been interested in that for some years. Whenever I go to Victoria, I present myself at the bureau as a tourist from the United States and I ask them for suitable places in British Columbia to go to, and they never once referred me to the Kootenays! I think that is very short-sighted in the tourist industry, where success in the catering business is in keeping the numbers of people fluid and moving from place to place. What is done by your organization to overcome that parochial approach? I think this is a parochial approach which is damaging to both industries.

Mr. TOMASSO: I know the Montreal Tourist and Convention Bureau come to me and to all the restaurants in our area for any material we have such as postcards, folders, and so on. They send all this out and we are very thankful to them because it helps us a lot. As far as the other agencies are concerned, I think Mrs. Montgomery could speak about that.

Mrs. MONTGOMERY: I might say, first of all, that the section in our brief which has been referred to was based on remarks made by members of the executive in British Columbia, Alberta, Saskatchewan and Manitoba. They all seemed to feel that they have so many of these small agencies which have not been in operation very long which need guidance and assistance. In fact, they are suggesting it would be helpful if the Canadian Government Travel Bureau had a branch in each province of Canada so that these other agencies could coordinate their program with that of the Canadian government. There were two places mentioned. The Rocky Mountain Tourist Association and the Waterton Lakes group have limited resources and they are feeling their way. They think some guidance would be of help to them.

Mr. HERRIDGE: Could that objective not be reached by further stressing this question in cooperation between the travel bureau in Ottawa and the provincial tourist bureaus?

Mrs. MONTGOMERY: I would think so.

Mr. HERRIDGE: And the local bureaus?

The CHAIRMAN: I think that is a good question to ask the assistant deputy minister. It is a very important question.

Mr. CÔTÉ: Mr. Chairman, the cooperation with the provinces is very close indeed on the development of tourism. The point which has given us a good deal of concern is how far can one go in developing intra-provincial tourist activities. We believe—and the provinces have accepted this—that it is their burden to develop tourist traffic within the provinces. The liaison with municipal and other tourist bureaus has been left exclusively to the provinces. The federal government provides the provincial travel bureaus with the publicity material. One point which is of extraordinary difficulty is to gauge intra-provincial tourist activities. There are no statistics on that subject which are at all reliable because there are no ports of entry as between provinces. You have ports of entry as between Canada and the United States and can gauge the number of tourists who come in and you know where they come in. You cannot, however, determine at the present moment the size of intra-provincial tourist trade. We are studying this matter with the provinces. We have not a remedy yet for the problems of assessing the number of intra-provincial tourists.

Mr. HERRIDGE: I want to illustrate my point from our local experience. Years ago each little tourist operator—and we had quite a number of them in the Kootenays—would try to make sure that the tourist who visited his motel or summer camp came back the next year, but he soon found out that that tourists preferred to sample new fields. So the tourist operator made an arrangement with friends who operated resorts at some other location, and he would say to the tourist:

> Next year you should visit my friend's place in the Kootenays.

So now they help one another through providing that broader outlook rather than trying to retain the tourist each year for themselves only.

Mr. CÔTÉ: That is a viewpoint that we highly commend. And in our experience we found the best example of it in the Atlantic provinces. But it is broadening throughout Canada.

The CHAIRMAN: Are there any other witnesses you would like to have heard now, Mr. Aiken?

Mr. AIKEN: I do not know whether we plan to meet this afternoon or not. But I am sure that as a result of the discussion Mr. Delage would like to say a few words, or Mr. Smith may have something further. Those are the two other people who are here. Mr. Smith represents the Hotels Association of Canada, and it all refers pretty much to the same problem. I wonder if Mr. Delage has anything to add to what has been said?

The CHAIRMAN: It is now about 1 o'clock and it looks as though we might need an hour and a half or so with these witnesses.

Mr. SLOGAN: Maybe we could have one of them appear before we adjourn for lunch.

Mr. HERRIDGE: Perhaps the committee might meet between 4 and 5.

The CHAIRMAN: Is that agreeable to you?

Mr. C. SMITH: Both Mr. Delage and myself have to catch a train this afternoon back to Montreal on pressing business.

The CHAIRMAN: What time?

Mr. C. SMITH: Our train will be leaving at 3 o'clock. We would prefer it if you would carry on for three quarters of an hour. We could fit it in and answer any questions at this time.

Mr. AIKEN: Perhaps we might hear Mr. Delage now. It is ten minutes to one.

The CHAIRMAN: Very well.

Mr. GÉRARD DELAGE (*Legal Advisor and Executive Secretary, Province of Quebec Hotels Association*): Mr. Chairman, I can stay after 3 o'clock. It is Mr. Smith who has to leave so I shall give him my turn now.

Mr. C. SMITH: Mr. Chairman and gentlemen: first of all, I would like to thank you very much for inviting me to your committee meeting today and for giving me an opportunity of expressing my views about the Canadian Government Travel Bureau.

At the outset, in my estimation, having regard to the limited amount of funds available to the Canadian Government Travel Bureau, it has been doing a remarkable job.

Mr. Chairman, please do not object if I take exception to one of your remarks that the Canadian tourist picture is dreary. I am a little dubious about the reports which are bandied about in the newspapers and by citizens from coast to coast concerning the value of the Canadian tourist business. I personally think that the Canadian tourist business is undervalued considerably. I do not know, but I question the reliability of the Dominion Bureau of Statistics figures which place it at something like $350 million.

A gauging or measuring of the value of the tourist business, I have been informed, has not been conducted for more than a decade. I do not know where you could get a $3.50 room today in a hotel, or where you could get a meal for 65 cents. A cup of coffee does not cost 5 cents any more. It costs 10 cents, and sometimes more than that.

That low priced automobile of $2 thousand, 10 or 15 years ago, is now a low priced automobile of $4 thousand. So clearly I think there must be an upgrading in the gauging of our tourist industry, or in the measurement of it.

I also think by not upgrading it we are doing ourselves a disservice because we are proclaiming to the world that our tourist industry is bad, where actually it is good.

Now, referring to the 3 per cent drop last year, again those figures come from the Dominion Bureau of Statistics. There is a possibility that there was

a drop. Nobody gainsays that. But the reasons given for it were poor weather, the recession, strikes in the United States, and also a tremendous amount of travel to Europe last year, which was something a great many of us overlooked.

You had the big world's fair at Brussels, and added to that was the general trend, evident since the end of the second war, towards world travel. The G. I. Joes, following the second world war, were anxious to travel, because they had travelled so much while in the service. This is a trend which is not peculiar to Canada. It is in evidence in every country where the economy will permit travel. The trend is to longer outside travel, particularly abroad.

With regard to the type of publicity, I have heard it mentioned about this business of Canada being a wilderness, and as to its being questionable as such in advertising. But I have endeavored in recent years, more particularly within the last year or two, to change to a more realistic type of advertising through the Canadian Government Travel Bureau where igloos, forests, streams, mountains, and lakes were not featured to the same extent as they were in the past.

That I think is a good thing, and I for one have been in the past ten years proclaiming that a proper approach to advertising in Canada would be on an area basis, telling people what is going on in each area, what it costs, what they can enjoy there, and so on. Let us not simply show them a lake, a stream, or a river, which is something which would exist in almost any country in the northern hemisphere or even in Europe—and we are not alone to blame for it. On a recent trip to Milan I came across an Air France poster about which I complained to Air France when I got home. It depicted a large expanse of ground which was supposed to be a forest, a lake about the size of a good sized dish, and beside it an individual that was supposed to look like an Indian. It was about the size of a postage stamp, and underneath it, it said:

Visit Canada, Air France

Alongside were some four or five other posters which told a different story. They depicted New York City, Chicago, and Boston in a realistic manner. But the Air France poster of Canada was simply ridiculous.

Yet we cannot be altogether too critical of our foreign friends. When we stop to look at our own postage stamps, we may see polar bears, wild geese, fish, and other kinds of postage stamps which would create the impression among people who did not live in Canada that we were living in a primitive country here.

Numismatic organizations abroad said to me "How do you get all these stamps, are they special to you?" And when I said they were Canadian stamps which we were actually using, but it was not actually the way Canada looked, they found it difficult to believe.

And through our Canadian consulate office in Berne, Switzerland I found that one of the most popular films being distributed on behalf of Canada was entitled: How to Build an Igloo. That is not going to tell anyone in Europe what we have in Canada in the form of touristic attractions.

And moreover, the 40 to 50 thousand inquiries which we receive each year in our office, would indicate that there is very little of interest about Canada published in the United States. I can say—and I think that most of the press will agree with me in this—that it is very infrequently that Canada is even mentioned in any local newspaper anywhere in the United States unless the material is sent by somebody in the travel business, or unless it is paid advertising.

Whether our own information offices in the United States are responsible or not, I do not know, but Canada is not made known in the United States through the press or reports on even important Canadian matters in the same way that we report American matters.

Mr. AIKEN: On that point, do you think there is too much of an impression in the United States that Canada is a poor man's holiday place? Is not the impression abroad that where you cannot afford to go to Europe, you can go up into the woods?

Mr. C. SMITH: I think it has been conventional over a great many years that Canadian Government Travel Bureau advertising should give that impression. I do not say that is the case now; but there was the impression, that if you were looking for a low cost vacation, Canada was the place to go. I do not believe that this country goes to the same extent in publicizing its touristic resources as the Americans do in that regard.

Mr. AIKEN: Leo Dolan, a former member of the bureau, stated not long ago that Canada lacked snob appeal in its advertising.

Mr. HERRIDGE: We do not want it either.

Mr. C. SMITH: I do not think it behooves us to advertise in the manner of Florida, the Bahamas, Puerto Rico, or those glamour countries. We naturally, are a friendly hospitable people in Canada, and we have touristic attractions which are the equal of most of those available in the United States and at far less cost; but the thing I am complaining about is that the assets we have are not publicized to the extent that they are in the United States.

Now, we are only 17 million people stretched from the Atlantic to the Pacific. Objectively, we are all of a mind. The average person catering to the tourist, or in the tourist service industries, has not got the concentration of touristic wealth that you will find in the so-called glamour countries. Consequently, we are unable to meet the challenge on the same dollar for dollar basis.

The CHAIRMAN: Do you agree, then, we are not meeting the competition in this country from other countries—for instance, the competition from Mexico, the British isles, and the United States?

Mr. C. SMITH: We are meeting it in some respects; in other respects we are not.

The CHAIRMAN: The figures speak for themselves.

Mr. C. SMITH: Again, on the question of figures, Mr. Chairman, the report I have heard here, was that newsprint was first and the tourist industry was third. The economists of the banking industry in Canada proclaim the tourist industry the second largest United States dollar earning industry. It may be third in importance or foreign revenue. The banking interests proclaim, according to the Dominion Bureau of Statistics, it is the second largest U.S. dollar earning industry. I wonder if it is not the first, if you take the interprovincial travel within Canada. If a proper gauge was used I think we might find the tourist industry would probably be the largest industry in Canada.

Mr. FLEMING (*Okanagan-Revelstoke*): I am looking to see how the industry can be developed further. I think Quebec has taken the lead in development, both in winter and summer recreation, in the tourist season. That is, Quebec seems to be the only province that is doing much of a positive nature to promote winter recreational sports,—whereas in the rest of the country there is relatively little imagination given to dominion advertising with regard to winter recreation, the tourist attractions, and things like that.

What is the Quebec experience? Is it showing a very definite field? One of the things we hear mentioned is that people in the tourist industry have

only a limited season of four months; whereas in Quebec they have managed to get a longer season, and therefore amortize the overhead over a shorter period as a result of the winter development.

Mr. C. SMITH: That is quite possible, but you must have natural attributes to conduct winter business. The Montreal Tourist and Convention Bureau is one of the oldest in Canada and North America, and has been operating since 1919. One of the features of the Montreal Tourist and Convention Bureau is that it has been publicizing the area on a year-round basis.

The city of Montreal, as far back as 30 years ago, was putting out an extremely costly pamphlet, publicizing the winter sports, in the city of Montreal. That development of the Laurentian area for winter sports, while still publicized in Montreal, has been superceded, to a very large degree, by publicity emanating from the provincial level and area levels, the regional level and the operators themselves within the province. Consequently, together with the in-between seasonal business, they are developing the convention business, and that has taken up a great deal of the slack.

The CHAIRMAN: Mr. Smith, you mentioned a while ago figures of the Dominion Bureau of Statistics which may not be right. Would you agree with this, that apart from those figures entirely, if you look at the developments in various countries to accommodate the tourist, would that not be a good indication of the countries that are increasing their tourist industry? I am talking, for instance, of Florida, California and Mexico. They have 20 times the hotel and tourist accommodation they had 10 years ago. How does that compare with Canada?

Mr. C. SMITH: As I said before, I think that is a very unfair comparison, because Florida is a concentrated area. They have a market of 170 million people, plus anybody outside their own tourist market to draw from. In Florida, the state chamber of commerce and the Greater Miami chamber of commerce have spent millions of dollars on publicity and advertising; and in addition to those millions of dollars spent by those two groups, they are supplemented by almost the same amount of money in advertising expenses contracted for by operators in those areas.

Therefore, they in turn, with something to sell on a year-round basis and a market in which to sell it, have enlisted the support of transportation industries to the point where the transportation industries such as the airlines, railroads and so on are doing as much to advertise Florida as the operators themselves are doing.

The CHAIRMAN: I think you have made an important contribution, but the point I was making—I think it is important and I am sure you agree with me—is that the accommodation for the tourist reflects the income from that tourist industry to that particular state or country.

Mr. C. SMITH: Yes, but it still devolves that the desire to visit that particular area has to be established.

The CHAIRMAN: Yes, you and I agree in that connection; in other words, there is not sufficient spent in connection with advertising.

Mr. C. SMITH: I would certainly agree to that.

Mr. SLOGAN: Would you say the fact that most of the programs which Canadians watch originate in the United States and, as you say, every day in the newspapers we read everything in connection with current events and so forth in the United States, and also the fact that our magazines often

originate in the United States, and even some of the Canadian ones carry a lot of material about the United States, is one of the reasons why there are so many Canadians going to the United States, and perhaps out of all this they get a curiosity to see these places?

Mr. C. SMITH: Let us face it, gentlemen; it is the hard sell, is it not, to begin with; secondly, where have we got to go? Canadians themselves are remarkable travellers. Take, for example, the city of Montreal; it has a population of 1,800,000 people. There is hardly a person there who has not voyaged somewhere in the province of Quebec or the neighbouring provinces or, if he is continually bombasted he will visit Florida. After all, anyone who has been bombasted with ten months of winter ever since he was born and becomes aware of all this publicity, certainly is going to go.

Mr. HERRIDGE: That is not very good advertising.

Mr. C. SMITH: There was a report given in Miami in 1956 that 43,000 Montrealers had visited there. The Miami chamber of commerce records will show that.

Mr. COATES: Have you any recommendation other than increased advertising?

Mr. C. SMITH: I recommend the bureau consider area promotion.

Mr. COATES: As carried out in the Atlantic provinces?

Mr. C. SMITH: My idea of area promotion is simply any advertising which goes a litle further to publicize a certain area and, thereby supplements provincial advertising, such as they are doing now in the province of Quebec, is very beneficial. I am speaking within the confines of a province as against areas within a province. The province of Quebec publicity bureau does a tremendous job in advertising its attractions areawise.

Gentlemen, you will agree that one of the main things in connection with successful tourist promotion in Canada is that once you have the Americans here, keep them here as long as possible. That is the object of good tourist promotion. The fact that a United States visitor coming to the province of Quebec, because of the distance he travels to reach it and the fact there is a lack of major cities near our borders, means that our visitors are going to stay longer, whether they like it or not. If we can keep them here longer, it is better business. If you would do a tremendous job of publicizing the Gaspe area and feature it the way the province of Quebec bureau has, it would mean that a man would take five or six days to make that tour and it would be good business. If you can feature the Saguenay cruise so that you can get the visitor in town two days before sailing and hold him there two days after the five-day cruise is completed, it is good business and means business over a longer period of time. But if the province was cut into four areas and different spots in that area were featured, you could say: in this area there is a certain class of hotel, that American plan rates prevail from such and such a time to such and such a time, that the sports facilities are such and such, that this is such and that is such, and do a selling job, rather than saying "la belle province de Québec"—that is a good byline—it would be much better. Let them know all those things which are available in the area. The same may be said for British Columbia, Prince Edward Island and the other provinces. But to just simply say "this is Canada", and show pictures of those areas—people can see pictures anywhere.

The CHAIRMAN: You made another important contribution. I had an idea that you also included in your advertising—this area advertising—that the maritimes, we will say, should concentrate on the eastern seaboard of the United States. Do you agree with that?

Mr. C. SMITH: I do.

The CHAIRMAN: And the same with each of the other provinces?

Mr. C. SMITH: I say that there is a definite source. I think this is borne out by statistics and a report that was brought out by the Montreal tourist and convention bureau in 1953, entitled, "Where they come from; where they go, and how they get there".

The CHAIRMAN: I am glad to hear you say that. Tell the committee this: you are suggesting that for Quebec, say there are four areas. Would those four areas advertise separately in the states from which they would expect tourists?

Mr. C. SMITH: I did not say they had four areas. I would recommend that, in publicizing, the Canadian government should publicize area-like across four, five or six sections of the province.

The CHAIRMAN: Assuming they did that, would you consider that advertising in a certain area would bring tourists to that particular area, for various reasons?

Mr. C. SMITH: Yes. I would say this, that the statistics that are available through transportation, through border crossing records, will indicate where the tourist comes from. Consequently, I would think it would be simply good business to allocate your advertising budget in that particular area where the majority came from.

The CHAIRMAN: Would you agree that 90 per cent or more of the tourists who come into Canada, come in on rubber?

Mr. C. SMITH: I would not say 90 per cent or more; I would say certainly more than 80 per cent of them do. Also, in our statistics which I endeavour to glean from year to year from various sources and from questionnaires, we learn that, in our particular instance in the province of Quebec—and particularly the city of Montreal—by far the bulk of our visitors come from the eastern seaboard.

The CHAIRMAN: Will you expand on this cooperation of advertising with respect to federal, provincial and private enterprise? I think the committee would appreciate your ideas.

Mr. C. SMITH: I have recently been to Austria. I think that what I have seen in Austria has been an eye-opener to me in the matter of publicizing the country, the provinces and the areas within the provinces. However, cooperation between the federal government and the provincial governments is not always available to the fullest extent or to the degree desired. Nevertheless, within the province—and I speak only for the province of Quebec—I know of no other province where there is the same kind of cooperation between the areas, or municipalities within the province and the provincial government as there is in the province of Quebec. I think perhaps that pattern might well be copied by other provinces.

In the matter of assistance, it is a matter of the provincial government helping those who help themselves. If private enterprise is ready to show that they are ready to spend some of their own money, the provincial government goes along with them and does the best they can to assist them. There is a tremendous amount of cooperation in that field.

Mr. COATES: You took to task the statistics of D.B.S. with regard to income in Canada derived from the tourist industry. Would you take to task the statistics of Canadian money going to the United States?

Mr. C. SMITH: You have an answer in your own trip when you come back from the United States. Sometimes you are asked how much money you

spent; sometimes you are not. As I understand it, Canadian spending in the United States is reported to the customs officers at the border, who in turn report to the federal government departments.

As far as American spending in Canada is concerned, the same thing applies—as he comes back—as I understand it—he is questioned, and the United States Department of Commerce furnishes our government with figures of what the American spent in Canada. That is, as I understand it, how it is operated.

Mr. CÔTÉ: Mr. Chairman, if I may supplement this, the information we have is that the source of the over-all expenditure rate in question by the Dominion Bureau of Statistics is derived from the traveller's vehicle permit. Though the questions asked are voluntary questions and people do not have to answer—and they do not have to answer accurately—about 60 per cent of the forms which go out are returned with the answers. It is upon this that the Dominion Bureau of Statistics bases itself. Those figures may or may not be accurate; but this is the best source we have at the present time.

Mr. COATES: Is this for obtaining information in respect of United States money spent in Canada?

Mr. CÔTÉ: This is in respect of Americans in so far as their expenditures in Canada are concerned. I gather that the Department of Commerce in the United States does a parallel survey and their figures are relatively close to those put out by the Dominion Bureau of Statistics. Even that is not proof that the statistics are accurate. I think there is something in what Mr. Smith says, that perhaps these figures are on the low side.

Mr. C. SMITH: I would like to suggest that when we read in the papers all the time that there is nothing to see in Canada and that our travelling figures are deteriorating, that we will create the impression, not only in our own country but abroad, and if a man gets up and speaks saying we are spending more money in the United States than in Canada, that is not going to help. Rather if there was a more realistic figure, there might be an incentive to come to Canada.

I recently learned from the Department of Trade and Commerce in Newfoundland that they estimated $12½ million income from the tourist business last year. Our confreres in the maritime provinces of New Brunswick and Nova Scotia estimated a revenue of pretty close to $50 million apiece. The figures for the province of Quebec are estimated at approximately $150 million. Those, presumably, are conservative figures in all instances. That would indicate—excluding Prince Edward Island, which certainly has some tourist business—that approximately two-thirds of the tourist business reported by D.B.S. is east of the Ontario border. Now, Ontario certainly does some tourist business and, I presume, British Columbia also. I understand that Manitoba is starting to get into this business and reached $37 million last year. Therefore, I believe that if a more realistic picture was known I would say the tourist industry was probably the biggest money bringing industry in Canada.

The CHAIRMAN: As you know, the D.B.S. figures show the amount of money the American spend in our various provinces.

Mr. C. SMITH: I still question that, sir. As a matter of fact, about a year ago we asked D.B.S. about a change in the gauge for measuring the value of United States spending in Canada. As I recall it—I may be wrong and stand to be corrected—they said they saw no reason to change the gauge.

The CHAIRMAN: We have been using the same system for years and are basing our figures on the gauge we have used for years.

Mr. MARTEL: On this question of coordination, I am very much interested in what Mr. Smith said about more emphasis on the regional aspects in each province. I think this coordination between the federal, the provincial and what you call municipal, which I would call a regional basis, should be greater. I have in mind, for instance, the Quebec district, where in the winter they advertise their winter carnival. Also, you mentioned the Laurentians where they have the winter sports.

Last year in north-western Quebec the chamber of commerce published a small tourist guide—it was big enough—on the local regional basis. I would like to know if mimeographed material could be made available? As I understand it now, sometimes the tourist who comes in perhaps does not get the same pamphlet, but the same advertisement in the same area from the federal and the provincial bureau. As I understand Mr. Smith's remarks, he would like to have the tourists given more information all around in all districts.

Mr. C. SMITH: I think that the referral list of the Canadian Government Travel Bureau could be far more effective. It is a tremendously effective list as it is, and I am certainly very happy that we are getting it. But I think it could be made more effective, and that it would draw more inquiries if the coupon would give an opportunity to the person who has completed it a chance to indicate where he wants to go, and what he wants to see. If there was regional advertising there would be a greater interest inspired in our advertising, and the referral list would grow accordingly.

Then, in that particular case, you would have the recipient of the referral list, and you people, in your area, could do far more to advertise or to publicize your establishments in your own area.

Mr. MARTEL: As it is right now I understand that the regional guide organizations have to look after it themselves.

Mr. C. SMITH: We all do.

Mr. MARTEL: On a regional basis of their own?

Mr. C. SMITH: That is right.

Mr. MARTEL: If there was more coordination between the federal, the provincial, and the regional areas, it would help a lot to keep the tourist inside the borders, once he comes to Canada?

Mr. C. SMITH: You mean from moving from one area to another?

Mr. MARTEL: Yes, once he gets to Montreal, if he hears nothing about northwest Quebec or the Gaspe, he will not go there.

Mr. HERRIDGE: I am interested in the suggestion that tourist bureau publicity should not be on an area basis. I think it is an idle point, when you consider the funds available to the Canadian Government Travel Bureau in Ottawa; and that by dividing an area on the basis, if you like, of four areas, then that would make 40 areas in the 10 provinces. But if a certain area were mentioned let us say, in a particular month's national advertising, it might not be mentioned again possibly for years. That would create quite a problem to the tourist publicity bureau. So I think the policy followed by the Canadian Government Travel Bureau at the present time is the one best designed to spread as widely a possible with the funds available.

Mr. C. SMITH: I agree with you on that. It is.

The CHAIRMAN: I think Mr. Smith has made it very clear, and I think it is a very important point. We would like to see maritime advertising placed in that area in the United States from which they would expect most tourists.

And I think he also indicated that when they have, for instance, four areas in the province of Quebec, it is probably the responsibility of the province and perhaps of the municipality to see to it that the tourist visits more than one section.

Mr. C. SMITH: That is right.

Mr. AIKEN: Let us adjourn, Mr. Chairman.

The CHAIRMAN: Do you want to meet this afternoon? Are you through with these witnesses?

Mr. AIKEN: I would like to finish this study today, because tomorrow we shall have the Canadian Tourist Association before us.

The CHAIRMAN: Let us meet, then, following the orders of the day. Please do not be all the afternoon getting here.

Mr. COATES: Before we go might I request that the assistant deputy minister provide information on his duties with the travel bureau as well as his general duties in the department, so we might be in a better position to determine whether a deputy minister should be selected or recommended to head this? And may we at the same time also have a list of the number of departments that the travel bureau has been associated with over the years?

Mr. CÔTÉ: I will have that for you tomorrow morning.

AFTERNOON SITTING

MONDAY, June 8, 1959.
3.30 p.m.

The CHAIRMAN: We have a quorum, gentlemen. Mr. Côté, the assistant deputy minister, has some information to table. It was requested this morning.

Mr. CÔTÉ: Mr. Chairman, the three pieces of information that were asked for are as follows: one is the departments and ministers under whom came the travel bureau since its inception. This will be found in the standing committee's verbatim report of last session at page 311. I will table this again, if you wish, Mr. Chairman, and then it can be available for the committee this year.

The second piece of information which was desired was the comparative number of visitors to national parks, as between 1958 and 1959. I have this information here and will table it for the record.

The CHAIRMAN: Is that agreed, gentlemen, that we incorporate this in our proceedings?

CANADIAN GOVERNMENT TRAVEL BUREAU DEPARTMENTS AND MINISTERS
1934–1959

Year	*Department*	*Minister*
1934–35	Railways and Canals	Hon. R. J. Manion
1935–36	Railways and Canals	Hon. C. D. Howe
1936–37	Transport	Hon. C. D. Howe
1937–38	Transport	Hon. C. D. Howe
1938–39	Transport	Hon. C. D. Howe
1939–40	Transport	Hon. C. D. Howe
1940–41	Transport	Hon. P. J. A. Cardin
1941–42	Transport	Hon. P. J. A. Cardin
1942–43	National War Services	Hon. J. T. Thorson
1943–44	National War Services	Hon. L. R. LaFleche
1944–45	National War Services	Hon. L. R. LaFleche
1945–46	Trade and Commerce	Hon. Jas. A. MacKinnon
1946–47	Trade and Commerce	Hon. Jas. A. MacKinnon
1947–48	Trade and Commerce	Hon. C. D. Howe
1948–49	Trade and Commerce	Hon. C. D. Howe
	Reconstruction and Supply	Hon. Robt. H. Winters
1949–50	Resources and Development	Hon. Robt. H. Winters
1950–51	Resources and Development	Hon. Robt. H. Winters
1951–52	Resources and Development	Hon. Robt. H. Winters
1952–53	Resources and Development	Hon. Robt. H. Winters
1953–54	Northern Affairs and National Resources	Hon. Jean Lesage
1954–55	Northern Affairs and National Resources	Hon. Jean Lesage
1955–56	Northern Affairs and National Resources	Hon. Jean Lesage
1956–57	Northern Affairs and National Resources	Hon. Jean Lesage
1957–58	Northern Affairs and National Resources	Hon. D. S. Harkness
		Hon. Alvin Hamilton
1958–59	Northern Affairs and National Resources	Hon. Alvin Hamilton
1959–60	Northern Affairs and National Resources	Hon. Alvin Hamilton

COMPARATIVE STATEMENT OF VISITORS TO THE NATIONAL PARKS

April 1, 1958 to March 31, 1959

National Parks	1958–59	1957–58	Increase or Decrease
Banff	880,150	790,910	+ 89,240
Cape Breton Highlands	162,938	128,397	+ 34,541
Elk Island	222,695	183,041	+ 39,654
Fundy	179,277	143,662	+ 35,615
Georgian Bay Islands	14,521	26,300	− 11,779
Glacier	386	222	+ 164
Jasper	332,251	332,024	+ 227
Kootenay	385,736	347,678	+ 38,058
Mount Revelstoke	27,669	39,028	− 11,359
Point Pelee	604,149	591,235	+ 12,914
Prince Albert	135,546	123,280	+ 12,266
Prince Edward Island	206,245	200,748	+ 5,497
Riding Mountain	667,561	630,189	+ 37,372
St. Lawrence Islands	53,573	59,250	− 5,677
Waterton Lakes	362,829	302,872	+ 59,957
Yoho	51,817	41,875	+ 9,942
Total National Parks	4,287,343	3,940,711	+346,632

COMPARATIVE STATEMENT OF VISITORS TO THE NATIONAL PARKS—*Continued*

National Parks—*Continued*	1958–59	1957–58	Increase or Decrease
National Historic Parks and Sites			
Alexander Graham Bell Museum	45,804	36,053	+ 9,751
Fort Anne	30,443	24,052	+ 6,391
Fort Battleford	18,099	15,214	+ 2,885
Fort Beausejour	16,051	13,778	+ 2,273
Fort Chambly	56,804	72,965	− 16,161
Fort Langley	55,010	3,500(est.)	+ 51,510
Fort Lennox	10,816	13,335	− 2,519
Fortress of Louisbourg	25,796	20,705	+ 5,091
Fort Malden	28,855	21,197	+ 7,658
Fort Wellington	18,859	17,426	+ 1,433
Grand Pre	38,945	31,362	+ 7,583
Halifax Citadel	237,259	234,000	+ 3,259
Port Royal Habitation	28,085	23,441	+ 4,644
Signal Hill	26,307	500(est.)	+ 25,807
Sir Wilfrid Laurier's Birth-place	6,363	4,650(est.)	+ 1,713
Woodside	2,046	1,284	+ 762
Sub-total	645,542	533,462	+112,080
Estimated Attendance			
Batoche Rectory	600	800	− 200
Lower Fort Garry	15,000	21,300	− 6,300
Fort Prince of Wales	425	550	− 125
Sub-total	16,025	22,650	− 6,625
Total, Historic Parks	661,567	556,112	+105,455
Grand Total	4,948,910	4,496,823	+452,087

Mr. CÔTÉ: I will have the third piece of information tomorrow.

The CHAIRMAN: I might say, gentlemen, the number of ministers who were in charge of this branch was eleven since it was formed in 1934. I think it would be a good idea if you referred to the records. You can get them from the library. For instance, at page 317 it gives the tourist income for Mexico, Florida and California, for the years 1950 to 1957. The amount spent by U.S. tourists, for instance, in Mexico was $172 million in 1950, and, in 1957, $305 million, an increase of 80 per cent. I believe last year was much higher. This information is in the proceedings of last year.

Of interest too, of course, is the figure for California: in 1950, $650 million, and in 1956, $900 million.

Mr. HERRIDGE: Mr. Chairman, just before we go on, I think we should bear in mind that in some of these places and districts a very large sum is spent in gambling, which would add to those totals. That situation does not exist here.

The CHAIRMAN: You are not referring to Canadian money, of course!

There are other tables that were part of the record of proceedings of last year's session.

All right, we have some of the witnesses still with us. Shall we proceed, before you ask questions?

Mr. AIKEN: Mr. Delage, I think, is the other witness who has not yet been called upon, Mr. Chairman. I wonder if he would care to say anything on the subject which we have been discussing? Mr. Delage is the representative of the Province of Quebec Hotelkeepers Association.

Mr. GÉRARD DELAGE (*Legal Adviser and Executive Secretary, Province of Quebec Hotelkeepers Association*): I have a brief which is not exactly a brief but a recommendation. I should say, before beginning, that in English "recommendation" by a Frenchman is like having a baby: it is very easy to conceive, but very hard to deliver.

The Province of Quebec Hotelkeepers Association whose 962 members represent approximately 80 per cent of all the capital invested in the Quebec hotel industry, wishes to congratulate the Canadian Government Travel Bureau for its constant endeavour to promote tourism in Canada.

However, our association believes that the publicity and advertising program of the Canadian government travel bureau will never succeed in bringing an adequate number of visitors to all provinces of Canada, as long as the said program does not specifically enhance the main tourist attractions of every Canadian province.

With this end in view, the Province of Quebec Hotelkeepers Association humbly recommends that the Canadian Government Travel Bureau contrive to create in every province of Canada an advisory board composed of qualified representatives from the hotel and restaurant industry,—and you should have here less, the tourist bureaus, the initiative syndicates, the transportation companies and the trade in general, which committee could help and advise the travel bureau in the preparation and formulation of its annual publicity and advertising program.

The CHAIRMAN: Have you any questions to ask Mr. Delage, gentlemen?

Mr. AIKEN: Mr. Delage, your idea would be that this would be a committee independent of any provincial organization?

Mr. DELAGE: Yes, representating private enterprise.

Mr. AIKEN: And this would be sponsored or fostered by the Canadian Government Travel Bureau, through a branch of the Canadian bureau within the province?

Mr. DELAGE: Yes, but it would not cost the travel bureau anything. I think that if they would ask the principal bodies, associations, to represent hotels, restaurants, transportation companies, tourist bureaus and initiative syndicates, they would name qualified representatives and form an advisory board which they could consult, and which would coordinate the work that is done in the tourist business, in the province and in Canada.

Mr. AIKEN: I wonder, Mr. Chairman, if I may ask Mr. Field a question along this particular line?

The CHAIRMAN: Yes.

Mr. AIKEN: Do you have branch offices of this nature now through Canada?

Mr. FIELD: No, we have no offices in Canada, except the bureau's offices here in Ottawa. But, as has been said repeatedly this morning, we do have a very close cooperation with all these agencies, provincial, regional and local.

Mr. AIKEN: Do you feel there would be something accomplished if a suggestion along Mr. Delage's lines were considered, an advisory committee in the province to assist you?

Mr. FIELD: There are advisory councils in some of the provinces now already in existence. They do make representations to provincial governments, and they pass on to us their recommendations.

From reading the brief presented by Mr. Delage—and a very brief brief it is—I think there is some value in this. We do try to get expert advice regarding our publicity programs. We get recommendations passed on to us by provincial and regional organizations. I think what Mr. Delage is looking for is a tightening up of this, a sort of more formal organization of it.

Mr. HERRIDGE: Mr. Delage, with respect to this suggestion of yours as to advisory boards, in view of the structure of this country, having federal and provincial governments and doing everything in a cooperative spirit, do you not think it would be better for your advisory boards to deal provincially with the provincial travel bureau and have them bring their ideas to the travel bureau in Ottawa as a sort of an apex of the discussion on this question?

Mr. DELAGE: I do not know. Actually, the Canadian Government Travel Bureau discusses all matters with the provincial governments, but this advisory board was set up to advise the provincial governments at the same time and also the federal bureau.

Mr. HERRIDGE: What I mean is that it would occur quite frequently that you send representations with regard to particular matters, but primarily they would be advisory bodies or councils to the provincial governments?

Mr. DELAGE: Yes.

Mr. HERRIDGE: But they would pass their ideas on to the federal travel bureau?

Mr. DELAGE: Yes. Actually, we have the same thing for the hotel business in the province of Quebec. We have a hotel and restaurant council and it is formed under the sponsorship of the provincial government. The Minister of Trade and Commerce is the honorary president. This council is composed of all associations interested in hotel, restaurant and tourist business. This council publishes magazines in the culinary art and they stress refresher courses and education along this line, but the hotel people, the restaurant owners, the chefs, the suppliers and all the associations are interested in the tourist business.

Mr. HERRIDGE: And they make representations to the provincial government?

Mr. DELAGE: Yes.

Mr. HERRIDGE: Would your association be prepared to support a considerably increased expenditure on the part of the tourist bureau to reach the objectives in which you are interested?

Mr. DELAGE: I think all associations interested would be happy to spend the necessary money to have it work.

Mr. HERRIDGE: Do you not think the amount we expend at the present time in publicity, both federally and provincially together, is very small compared to the income brought into Canada in relation to that spent by other major industries in promoting their own markets?

Mr. DELAGE: Yes, according to the experts we should spend at least one per cent of the revenues we draw from tourism in advertising.

Mr. HERRIDGE: That would be about $10 million?

Mr. DELAGE: Yes.

Mr. HERRIDGE: One per cent or about $10 million.

Mr. FIELD: If we are judging this by the amount of money brought into Canada from visitors abroad, which last year was approximately $352 million, it would mean a budget of at least $3½ million for the bureau.

Mr. FLEMING (*Okanagan-Revelstoke*): For developing promotion?

Mr. FIELD: Yes.

Mr. MCGREGOR: What was the total cost of operating your department?

Mr. COTE: $2.3 million this year.

The CHAIRMAN: To the figures I gave earlier, as set out in last year's proceedings, I would like to add that our revenue in 1950 was $260 million and our revenue last year from the American tourists was $309 million, an increase of about 12 per cent, against 80 per cent for the Mexicans.

Mr. AIKEN: I have no further questions to ask Mr. Delage.

Mr. NIELSEN: I have one question, Mr. Delage. I mean no offence when I direct your attention to it, Mr. Delage, but I am wondering why there was excluded from your recommendation the Yukon and Northwest Territories, which have a great tourist potential, perhaps as great as any other part of Canada, and it is increasing quite substantially this year as a result of the statehood of Alaska. Would you say that the intent in the third paragraph of the resolution was in fact to stipulate provinces and territories?

Mr. DELAGE: Yes, that would be better. I thank you for the correction. It should be provinces and territories.

Mr. HERRIDGE: Yes, we are all inclined to consider the Yukon and the Northwest Territories as part of Canada, are we not?

The CHAIRMAN: Yes, with some reluctance, eh?

Mr. FLEMING (*Okanagan-Revelstoke*): I would like to ask Mr. Field a question. It is related to this matter of liaison. Are you able in the course of a year to travel extensively in Canada to see for yourself what developments are taking place in the various regions or are you relying on the information which is funnelled through the provincial organizations?

Mr. FIELD: I must be very frank and say I have not had as much free time in the past two years to visit all the areas of Canada as I would have liked. I have just returned from a three-week automobile tour through the Atlantic provinces and I was amazed at some of the developments I saw there. I have been in every province in the last two years. I will do my best to do more of this field work, but I have a fairly large bureau to administer. Unfortunately, the most effective time to visit these places is the time when we are busiest in the bureau. This places quite a burden on me, but I do have a continuing and daily communication or contact with the various provincial and regional offices and I rely to a great extent on that.

Mr. FLEMING (*Okanagan-Revelstoke*): Suppose it were made possible that more time was available to you for this kind of field work, if circumstances were such that you could do it, do you find that what you see by going yourself and seeing the development on the spot is actually of greater benefit than having these reports sent it?

Mr. FIELD: I certainly do. It is much better that I go out and see them first hand.

Mr. HERRIDGE: Have you ever visited the Kootenays?

Mr. FIELD: Yes, I have.

The CHAIRMAN: That is two plugs you have got in today; that is your quota.

Mr. FIELD: You have a very active organization out there.

Mr. HERRIDGE: It is active in a lot of respects.

The CHAIRMAN: Have you any other suggestion which you would like to make to this committee from the hotel association?

Mr. DELAGE: No.

The CHAIRMAN: Do you attend the conference in the fall which is attended by provincial and dominion officials, deputy ministers, directors and so on?

Mr. DELAGE: I attended it two years ago, but not last year. However, if you invited the Canadian Restaurant Association I think that we would like very much to be invited to attend, and it is possible we would attend.

The CHAIRMAN: You know that includes members of this committee as well?

Mr. DELAGE: Yes.

Mr. MARTEL: I would like to ask Mr. Delage a question. Being a French Canadian myself, I wonder if asking a question in English of a French Canadian would help him to express his own opinion.

I understand from a recent statement by the Minister of Transport that the Dorval airport new terminal will be kept dry. I am wondering if that would have any affect on the tourist industry. I understand T.C.A., for instance, will keep on serving liquors to its clients during transcontinental flights and so on—I cannot ask you how the new policy at the airport of Montreal or Dorval terminal will be consistent with that of T.C.A. However, do you feel this could have an adverse effect on the tourist industry?

Mr. DELAGE: I must admit I do not understand this kind of policy, because in all airports of the world of which I know, you can be served wine and spirits. With this new image of Canada that our good friend, Alan Field, is presenting, and continues to present, I think it is a drawback—if I may use this word—to have a new international airport in Dorval which will be dry.

Mr. MARTEL: Are the liquor licences given by provincial authorities, when they concern an international airport like Montreal: they still have to have a provincial licence?

Mr. DELAGE: Yes.

Mr. MARTEL: But as far as you know, the airport authority, or transport commission have not asked for such a permit?

Mr. DELAGE: It seems that they do not want to ask for it.

The CHAIRMAN: You heard Mr. Smith speak this morning about regional advertising, so to speak?

Mr. DELAGE: Yes.

The CHAIRMAN: You understood what he meant by that—advertising the maritime tourist attractions down through the New England States, and so on? Do you agree with that idea?

Mr. DELAGE: Yes; and I think that this advisory board, the creation of which I am suggesting, would tend to—

The CHAIRMAN: Well, do you do that now in your own association?

Mr. DELAGE: Yes. Actually, the province of Quebec hotel association, for instance, receives an annual subsidy from the provincial government to make a summer campaign called, "Let's visit the province of Quebec".

The CHAIRMAN: Do you have agencies in any city in the United States encouraging tourists to come to Quebec?

Mr. DELAGE: Yes; the province of Quebec government has an agency in New York.

The CHAIRMAN: And do any of your hotels, through your association, make headquarters in New York, or any other city, for the purpose of encouraging tourists to come to Quebec?

Mr. DELAGE: No, but they have agents.

The CHAIRMAN: They have agents?

Mr. DELAGE: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): How large a factor do you find the development of winter recreation, the gradual and increasing attraction of the skiing trade and, generally speaking, publicity directed towards promotion of winter activity in the tourist business—how large a factor is that becoming in the hotel business in the province of Quebec?

Mr. DELAGE: It is becoming more and more a large factor. In the Laurentians, for instance, it is a year-'round vacation land; but the main part of their revenue comes from the winter season.

Mr. FLEMING (*Okanagan-Revelstoke*): What are the months of the interim period where the hotels have their slackest season? In what months do they they have their least business, would you say?

Mr. DELAGE: May, the first part of June, the last part of September, October, and the first part of November.

Mr. FLEMING (*Okanagan-Revelstoke*): So they have managed to prove that winter conditions are ideal—that you can develop as strong a tourist business in winter as you can in the summer?

Mr. DELAGE: Yes, if you have—

Mr. FLEMING (*Okanagan-Revelstoke*): You must have the conditions?

Mr. DELAGE: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): But if you have them, it can be done?

Mr. DELAGE: Yes.

The CHAIRMAN: Are there any other questions of Mr. Delage, gentlemen? Are you through with the witnesses that have been brought in?

Mr. AIKEN: Mr. Chairman, I have one question I should like to direct to Mrs. Montgomery before we leave the witnesses, and then I would like to go on to another matter with the assistant deputy minister.

Mrs. Montgomery, you were present this morning when Mr. Smith mentioned the Bureau of Statistics figures: do you have any comment in that connection, with reference to the restaurant business?

Mrs. MONTGOMERY: Yes, indeed, Mr. Chairman and Mr. Aiken. We have for many years been very concerned about the lack of information on the food service industry. We feel that we are never able to present a true and proper figure either of sales of the food service establishments across Canada, the number of employees engaged, or the number of restaurants or food service establishments. On numerous occasions I have met with the people from the D.B.S. here, but they claim they have great difficulty in getting the information. For instance, on the number of restaurants, we are frequently called at our office and asked for the number of restaurants or eating establishments across Canada, and usually we have to give figures that are five or six years old—and that is not very satisfactory.

In the matter of dollar sales, two years ago—in 1957—when the bureau was reporting $445 million annual sales, the J. Walter Thompson Agency did a survey—a sort of spot survey—and brought this figure up to over $600 million. We feel that it belongs at the three quarters of a billion dollar level. Our reason for this is that the D.B.S. figures of sales do not include all the sales done by the departmental stores across Canada, industrial feeding, in-plant feeding, schools, hospitals, air lines and all of these other public feeding services that make up a part of the industry. So that in essence the reports that come out are really only slightly over 50 per cent of what we estimate the actual volume of sales amounts to.

Mr. AIKEN: And you think the impact of the tourist industry in general is much greater than the D.B.S. figures would indicate?

Mrs. MONTGOMERY: Almost double.

Mr. AIKEN: Thank you, Mrs. Montgomery.

Mr. SLOGAN: May I ask Mrs. Montgomery a question, Mr. Chairman? I might say that the impression I got from the brief presented this morning, and from what you have been saying this afternoon, is that the restaurant association is in a very sorry state indeed, and it seems to me you are not doing anything to help yourselves. You have over 2,000 members in Canada. I suppose they are spread over most of the towns and cities across Canada?

Mrs. MONTGOMERY: That is true.

Mr. SLOGAN: With regard to a lot of these figures which you request, could they not take an interest in that; and even if there are some restaurants in the locality which are not members of your association, I am sure they would be in a very good position to estimate the volume of their business, and so forth. Do your members not take a big enough interest, so that if you try to run such a survey they would give you a more representative figure? I am sure the government, on its part, would cooperate: for instance, Trans-Canada Air Lines and any of these others would supply you with their figures. I am sure they have accurate figures of the amount of food they serve on their lines during the year.

Mrs. MONTGOMERY: That is true. In answer to your question, Mr. Chairman, I should like to say that operators generally would give the figures, or the information, to government much more readily than they would to us—to a trade association. They are not too happy about everyone knowing what their volume of sales is and they feel that that information would not be treated—for some reason or other—in the same manner that it would be treated by government.

Mr. SLOGAN: I would presume that if you could assure them that it would be confidential, they would be more willing to give this information to your own association—knowing very well it would not get into the income tax collector's hands!

Mrs. MONTGOMERY: You must remember, too, that while our membership is 2,000 across Canada, there are many firms where we might have ten members in one organization. By the same token, there are some 18,000 eating places of one kind and another across Canada, so our membership is very fractional of the over-all picture.

Mr. AIKEN: Thank you, Mrs. Montgomery.

Mr. Chairman, I should like to direct a question to Mr. Côté. So far we have heard, both in this session and the last, of the efforts made by the travel bureau to distribute literature throughout Canada, and particularly in the United States. I would like to direct some questions towards the possibility of enlarging the scope of the government travel bureau, or government services generally, beyond merely dispensing literature and film, and so forth. I would like to draw Mr. Côté's attention to a statement made last year by Mr. W. Gordon Wood, President of the Canadian Tourist Association when he stated:

> The combined expenditure of the government of Canada, the provinces, the transportation companies and tourist operators in the U.S.A. amounted to several million dollars. This is mostly advertising, with litle atempt at public relations or special events, although several provinces are represented at the specific United States attractions.

He suggests the government could do a lot more toward special events as well as cover what has been mentioned today. I wonder if Mr. Côté would like to enlarge on that?

Mr. CÔTÉ: Mr. Chairman, it is true that the United States tourist industry is spending millions of dollars on the tourist trade in order to bring tourists to the various segments of the U.S.A. I do not know that there is anywhere in one place a complete figure as to what the United States does spend to attract tourists.

The expenses in Canada in efforts to attract tourists are of the order of several million dollars.

Mr. AIKEN: Perhaps you misunderstood the statement. It merely said the combined expenditures in the United States—that is, to interest people in the United States.

Mr. CÔTÉ: The combined expenditures from Canada into the United States?

Mr. AIKEN: Canadian expenditures in the United States, yes.

Mr. CÔTÉ: What is your question?

Mr. AIKEN: Can something more be done toward increasing the interest in Canadian travel beyond just literature, in respect of such matters as the Royal Canadian Mounted Police ride and the National Ballet of Canada. A few of these events were sent to the United States where they stirred up a great deal of interest. I am wondering if more along that line could be promoted, if not actually undertaken, as a government effort completely apart from the dissemination of literature.

Mr. CÔTÉ: I think that is so, that a good deal more can be done. However, I would suggest that what is being put forward now by Mr. Aiken is in the nature of communicating Canada's personality abroad by means other than by literature.

Mr. AIKEN: Yes.

Mr. CÔTÉ: I entirely agree there are many other ways. The Canadians are not well known in the United States. The question is who should do that. That is the next question. The communicating of Canada's personality to the United States by the National Ballet of Canada, the various orchestras and the Stratford festival are all manifestations of Canada's personality which the provinces and the various groups are putting across. I entirely agree we should be doing more of that stamping of our own personality on the events as they go by.

The CHAIRMAN: Why has it not been done? In any research work being done by your department and representation made to the government?

Mr. CÔTÉ: There is some work being done in that respect. As an example, the Canada Council are making funds available for various organizations to become self-supporting and to present attractions in Canada. We have that in Toronto in the Toronto Opera Company.

In Montreal there is the Canadian Theatre which is presenting plays in both languages. They are getting Canada Council support for that. The various provinces are doing something in that respect. It is true we are not as far developed in Canada as they are in the United Kingdom, for example, through the British Council. The British Council is an instrument of United Kingdom foreign policy in projecting its personality. That has not been the case in Canada until very recently when the Canada Council was formed. It is helping to project Canada's personality in Canada for a start and one expects also abroad.

Mr. SMITH (*Calgary South*): The evidence this morning and the statement the witnesses have just given now suggests perhaps there is not a sufficient amount of correlation between the various departments of government, which perhaps is no fault of the bureau itself but rather an administrative problem. I wonder if the witness would comment on that? I have in mind, as an example, that we know the C.B.C. have developed certain films for export in conjunction with the National Film Board. We know the film board assembles some of this material and we are not sure whether or not attempts have been made to correlate the relations of these two bodies and the work of the branch of the department which is now before us. We have heard there is some relationship between this section of the department with other aspects. Do you feel you have been rather set out as an orphan and no one has made an effort to coordinate your functions with the other organizations?

Mr. CÔTÉ: I do not think the travel bureau feels it is an orphan. Mr. Field can say more about that. The travel bureau has had the job of coordinating

the federal government's efforts as it relates to travel in Canada and between the regions of Canada. This has been growing. There have been changes of the bureau from one department and another which may have had an effect upon it, but it has been with this department here for a number of years.

The bureau functions really are not very easy when you come to intra-provincial travel. It is not unnatural for various groups to wish that the federal government would supply more of the finances for doing things which are not being done. So far, the line has been taken that the federal government should primarily promote foreign travel to Canada by whatever means it could. The travel bureau has another particular task, the more difficult one of finding adequate ways and means of promoting travel within Canada which is a very delicate question.

Mr. SMITH (*Calgary South*): The point I am interested in is this. I am not going to attempt to justify the establishment of anything more than we have in the way of a separate entity. What I am after is this. Is there any attempt to maintain a common approach to the problem with the tourist bureau as a focal point? Secondly, do you think the travel bureau is inappropriately located in this department and do you think it might serve a better purpose in another department?

Mr. CÔTÉ: The travel bureau is serving as a focal point for the coordination of travel policy. The second point as to whether or not the travel bureau is appropriately situated in the Department of Northern Affairs and National Resources is a matter of opinion.

The CHAIRMAN: It is a matter of policy?

Mr. CÔTÉ: Yes.

The CHAIRMAN: Have you any explanation as to why Canada lags so far behind in getting American dollars from the tourist industry as compared to the figures I quoted a moment ago in respect of Mexico, which show over the past eight years that they have gained 80 per cent, and over the same period we have gained 12 per cent?

Mr. CÔTÉ: Well, there are a number of factors, Mr. Chairman. We have given thought to it. One of the things we believe has had an effect is the point made by the member for Kootenay West. A number of countries show an increase, and sometimes a very rapid change in their tourist industry, and gambling is a big factor. There is no doubt about it that in Mexico it is one of the factors, and also in Cuba.

The CHAIRMAN: I disagree with you that it is the case in Mexico; and what about Switzerland, which has had a $1 billion tourist industry for years? Why do we seem to be lagging? That is what the committee wants to get at. I would like to have the assistant deputy minister to give us an explanation. It may be that more money is needed, and if so, say so; or more coordination. Give us ideas. We have had nothing but excuses for 20 years.

Mr. CÔTÉ: If we take, for example, the total United States spending in millions of dollars throughout the various years, in 1948, Canada earned $267 million of the money spent by American tourists, which was something of the order of 42 per cent of the total percentage of spending. And in 1957 the Americans spent $1,372,000,000.

The CHAIRMAN: Where?

Mr. CÔTÉ: Throughout the world. And Canada obtained 23.7 per cent of that amount. The great increase during that period was in the spending in Europe and the Mediterranean by American tourists.

Mexico, for example, in 1948, had received $147 million of the total United States tourists spending, or 23.3 per cent. On the other hand, in 1957 Mexico received $305 million which is 22.2 per cent of the total American spending.

We have sustained a fairly considerable loss, but I suggest that it has been a loss to Europe and the Mediterranean rather than a loss to Mexico.

Mr. FIELD: May I add something to that? We have done a considerable amount of study on travel trends, and there is source material available to us which might indicate policy for the future. The fact is that American travel spending has expanded enormously since 1950. From 1945 until 1950 American travel spending expanded largely in the direction of Canada because facilities were not immediately available into Europe. They began to open up again after 1948, after the immediate damages of the war were partially repaired. And the American travel market today, the United States domestic spending, is estimated to be worth $20 billion. United States foreign travel spending is estimated to be worth in the neighbourhood of $1,500,000,000 to $1,800,000,000. It is my contention that the market for the Canadian tourist industry is not that $2 billion or less than $2 billion foreign spending. Our market is the domestic market, because the topography and geography of this country make it more available for American travellers to visit Canada than many parts of their own country. They do not really have to go abroad to come to Canada.

If you look at the map you will see that the nature of the terrain is such that U.S. residents, can get into Canada from their heavily populated cities more easily than they can get into many of their own states. It is easier to come into Ontario from the heavily populated cities of Pennsylvania, New York and New Jersey than it is to go to Florida; and if they do come into Canada they will travel by better roads than they will in going down to Florida. It is the domestic market I maintain which is our market.

The CHAIRMAN: Why can we not get more of it? Can you tell us why we are not getting more of the American dollars in our tourist industry?

Mr. FIELD: Because European travel promotion has been permitted to expand, not only by the European governments but largely by American carriers, into these countries. I am thinking of such factors as the United States lines, the United States steamship lines, the American airlines, and so on. They are spending a great deal of promotion money to get Americans and Canadians to go to Europe.

At the same time, in these last 15 years, the travel plant in the United States really represents our biggest competition. Our major competition is not Switzerland or Europe. Our competition is our good friends in New York State, Florida in the Adirondacks, the Catskills, the central Atlantic states, and the New England states. And in those states the size of their travel plant has enormously expanded. Billions of dollars have been spent in those places to develop new hotels and new attractions, and that is really the competition this country is facing.

Mr. SMITH (*Calgary South*): I am not prepared to accept the principle that the government or any administrative body is to be expected to carry the entire load. We realize that industry and commerce has a part to play in it.

You have regular meetings with the provinces when you receive briefs from the Canadian Tourist Association, many of which are helpful, as you have stated. Have you been able to develop real cooperation with the people who are going to benefit from better tourist business? I do not mean just the hotels and motels, but have you been able to do anything in the way of correlation of the information you have available, in making the people themselves a little more conscious of the benefits to be obtained? Is there any promotional objective in your bureau to encourage the development of such things among other people to assist you? Because surely you cannot carry the entire load.

Mr. FIELD: You have raised two of the most important points which I have heard at any of the hearings of this session. First of all, on the matter of

coordination and the representation of Canada abroad: if I may interpret your earlier remarks on this question of correlation and the building up of an awareness of the value of the industry in respect to Canada—it is in those directions, I think, that we could well direct ourselves with considerable profit, almost immediate profit.

We already possess an interdepartmental committee on Canadian information abroad. This is a very broad committee, and all the departments which have responsibilities abroad are represented on it. It is through such an agency that one might expect there would be a better definitive projection of the image of Canada. But it does not always work out that way because there are varying factors.

If we go to Chicago, let us say, to a great trade fair, the exhibition commission will prepare an excellent display. But who is going to give out information on Canada? Questions will be asked about education, questions will be asked about the ballet, the Stratford Festival. Questions will be asked about the parliament of Canada which is a matter of great interest to the people of the American states.

It means that we have to do more in this direction in the way of coordinating our activities abroad.

There is another agency I should mention which comes into convention every fall. It is called together by the private organizations, and it generally meets at the Seignory Club in November. Representatives of business interests meet there with government representatives to try to work out common representations. This has been valuable. But again there must be some way to implement what those people recommend to us and in general to get a more effective use of their knowledge.

Mr. SMITH (*Calgary South*): You believe this is a good thing, but you have not yet advised, or approached how it should be carried out.

Mr. FIELD: Generally speaking, that is right.

Mr. HERRIDGE: Mr. Chairman, following up this approach of Mr. Smith's, which I think is a very good one: the National Film Board, for instance, shows a large number of documentaries in the United States, and the C.B.C. supplies some. We have representatives of External Affairs, consuls and trade commissioners. Does the National Film Board come to you and say, for instance: "We are now preparing a film on so and so, and would you advise us?"—and I have never seen any suggestion, on this point in any of these films in Canada—"Could you advise us as to how to introduce a little publicity with respect to the tourist industry in Canada?" Does the C.B.C. do that, and does External Affairs come to you and say, "How do we use our consuls in this matter?" Does the Department of Trade and Commerce come to you and say, "How can we help in this, with lectures and meetings of service clubs?" Is that sort of thing done now to give evidence of cooperation and the effect of a policy of coordination?

Mr. CÔTÉ: The answer to that is, yes. That is being done now. We have in the United States 485 outlets for film distribution, which have been coordinated through the inter-departmental committee on information abroad. The various departments come to see the travel bureau, or the travel bureau representatives have seen them in the course of business, and there is a great deal of interchange of views as to what should be done.

Mr. SMITH (*Calgary South*): This is most interesting—

Mr. CÔTÉ: In addition to that—if I may add one word—the deputy minister, for his part, has become, in the last 1½ years, a member of the National Film Board, and has this very much in mind when attending their meetings. Possibly Mr. Field might comment on that.

Mr. SMITH (*Calgary South*): This is most interesting, and part of this information was given in another committee, where it was shown the corporation, together with the film board, was developing through three American networks this opportunity to see Canada. But this is the important thing: this is brand new and it has never happened before. Is this not an interesting experiment, but has it been encouraged? You have never done this one thing before, I think I am right in saying.

Mr. CÔTÉ: Yes, through one network.

Mr. SMITH (*Calgary South*): You have not made any attempt at such a saturation through the three networks, of showing a film arranged through the C.B.C., or produced by the National Film Board?

Mr. CÔTÉ: I think that last statement is correct.

Mr. SMITH (*Calgary South*): This is a good thing?

Mr. CÔTÉ: Yes, this is a good thing. There is a tremendous market to be had, if we can penetrate it or get into it, for the distribution of films on travel to the various United States networks. If we can get in there, to make films available that are suitable and will interest the Americans, there is a big market available. We cannot, at this juncture, pay for it, and, therefore, we have aired our films that are suitable. That is perfectly in line with the thought in the National Film Board and the travel bureau.

Last year—this is the one example I mentioned earlier in my statement—the minister was able, by personal contact, to get one film shown on one network, that is "Trans Canada Summer". This end of it is new but the general coordination part has been going on for years. We have not exhausted all the ideas, I trust.

Mr. HERRIDGE: My point was that I have seen some of our documentaries in the United States, and I have often thought they have shown a beautiful picture with respect to a certain portion of Canada, and yet an opportunity was lost in them of saying "Come and see Canada", or "If interested, write to the national travel bureau". We could take more advantage of those films by giving the last word, after the film is shown, to advertising this country.

Mr. CÔTÉ: I think we ought to, and we will look into that suggestion.

The CHAIRMAN: How many films have been shown in the United States in the last year, for instance, Mr. Côté?

Mr. CÔTÉ: We have a figure here, Mr. Chairman, of the number of titles in the various outlets in the United States; there are 157 titles of films. The total number of showings in 1958 amounted to 70,940, to an estimated audience of 4.1 million. The increase in the number of showings last year over the previous year was by 18 per cent in showings.

On the television, the number of titles in the various outlets was 70. That is an increase of 25 per cent over the previous year.

Mr. SMITH (*Calgary South*): Seventy titles?

Mr. CÔTÉ: Yes, 70 titles. The number of telecasts in black and white was 1,558; and, in colour, 277.

Mr. SMITH (*Calgary South*): Can you give me an estimate or an intelligent guess at the source of the material? What percentage would be film board? What percentage did they provide?

Mr. FIELD: I can answer that, Mr. Smith, this way: we gather these films for our film library from the provinces and the transportation companies, and a number we have in the past produced or paid for ourselves from the film board. But when a province offers a film to us, if it passes the review committee as being a good film for tourist promotion, then the bureau buys all the print sufficient to put that film into 485 outlets in the United States.

Last year we expended about $115,000 of our budget on this kind of film purchase.

Mr. SMITH (*Calgary South*): You do not recover any percentage of your cost from the provinces on this?

Mr. FIELD: This is part of our cooperation deal, with them. If they will make the films of their area—because we feel a province knows better what they want to promote and export—then we will buy all the prints necessary and place them in the libraries in the United States.

Mr. CÔTÉ: There are two points I would like to make. The first is, the selection of films is made by the federal-provincial committee, which includes also representatives of industry. Secondly, the telecasts—to complete the information I gave a moment ago—were shown, we reckon, to an estimated audience of some 60 million Americans.

Mr. MARTINEAU: On another point, I believe the best advertisement for Canada, the best publicity would be satisfied tourists. Does the bureau handle complaints received from Americans who have come to Canada and for some reason or other have lodged complaints? If they do, how do they handle certain complaints.

Mr. CÔTÉ: I think Mr. Field might answer that.

Mr. FIELD: We do get complaints, Mr. Chairman, from time to time; and it is necessarily the case that these complaints almost invariably have to do with provincial jurisdiction.

For example, in the matter of an automobile accident, where a person felt unduly delayed in travel by having to report or stay for a police court hearing. We refer those to the provincial travel bureaus. They, in turn, take that up with the responsible authorities. I might also add that in some 15 years that I have been in and around this industry, and my acquaintanceship with the directors of all the tourist bodies located in New York city, I think Canada has fewer complaints from its tourists than probably any other country in the world.

Mr. SMITH (*Calgary South*): May I ask you a question? You mentioned you received three-quarters of a million inquiries. Have you done anything to ascertain—I recollect you said you had no actual check on the indication or the result of your campaign—as to how successful it might have been?

Have you done anything to review whether or not these three-quarters of a million people—or whatever number of inquiries you had last year—came to Canada? Has there been any attempt made to see how successfully you are performing your duties and encouraging Americans to come

Mr. FIELD: Yes, there has been. The bureau has been conducting a survey based on a selected number of inquiries that we receive each year. Last year and the year before we sent out 200,000 questionnaires to people who had written asking for information. We received about 25,000 returns. We ask them questions about how much they spent, whether they were satisfied with the information they got, could it be improved, what they thought of travel in Canada and, in the past, we have asked them about what they thought of our roads and so on. We tabulated all this and I would like to give you a couple of indications of the value of the campaign. Mr. Martineau had asked me a question about satisfied customers. Our returns show that about 42 per cent of the people who come to Canada come because of word of mouth advertising; in other words, the satisfied customer will bring more people. The returns show that 36 per cent of the people coming to Canada—and there are some 7½ million of them—have come as the result of advertising and publicity.

Mr. FLEMING (*Okanagan-Revelstoke*): Of these 750,000 inquiries that you received, how many of those are written inquiries and not clipping out a coupon and sending it?

Mr. FIELD: About 55 per cent are written enquiries. I think last year around 380,000 coupons were received and the balance was letters or postcards.

Mr. FLEMING (*Okanagan-Revelstoke*): And this type of inquiry is more likely to result in actual visits?

Mr. FIELD: Yes, if we can get a person to write us a letter, our surveys show that in 82 per cent of the cases the letter writer will come to Canada; if a coupon is sent about 57 per cent will come.

Mr. FLEMING (*Okanagan-Revelstoke*): There is one thing that has not been discussed today and it may infringe possibly on policy. What I have been wondering about is whether the assistant deputy minister can say whether it is possible that the terms of reference of the travel bureau, in view of developing conditions, are too narrow. In view of the fact that countries like the United States find it possible to embark on cultural exchange programs, does the bureau have sufficient authority to recommend and initiate similar policies that would be useful to the tourist industry under its present terms of reference? Does it have that power to coordinate interdepartmentally tours by the R.C.M.P., cultural exchanges and so on, or has it that authority at the present time? If it has not, would it be valuable if it did have authority to initiate that type of thing?

Mr. CÔTÉ: Well, the authority of the travel bureau, in so far as it relates to the interdepartmental functions that you mentioned, promotion and so on, is sufficiently broad. It is represented on an interdepartmental committee and it can make its viewpoint known and have the benefit of exchange of views. In so far as extending its activities domestically is concerned, that would be very difficult unless more money were available. There would be no real difficulty in so far as policy is concerned. We expect though that it is a problem which would have to be looked at fairly carefully as some provinces do not always look kindly upon what might be intervention in a field which is theirs, and tourism within a province is really the responsibility of that province.

The CHAIRMAN: You are on a good subject and Mr. Martineau opened it up. In relation to your interdepartmental exchanges and consultations—and I have particular reference to customs and immigration people who are the first men to greet these tourists. I think they are about as important a personage in tourist business as anything I could conceive of. I know in my own area I take particular care they extend that courtesy—do you receive any complaints about the treatment received by the American tourist coming into this country from our customs and immigration officials?

Mr. CÔTÉ: I know of no complaint, but Mr. Field knows the field better than I do and perhaps he could answer your question.

Mr. FIELD: We do get an occasional one but, oddly enough, far more often we get comments from American tourists saying that they wished the United States customs officials were as courteous as the Canadian officials are.

Mr. HERRIDGE: I have had that said to me dozens of times.

Mr. SMITH (*Calgary South*): Could I pursue another question.

Mr. MARTINEAU: I have a question along the same line concerning complaints I have heard. I have heard complaints from Americans that the food that is served in Canadian restaurants is the same as American food, or sometimes even worse, or staler; I wonder if the bureau ever has thought of encouraging Canadian restaurant owners and their associations to develop specifically Canadian dishes. We have good Canadian food and I think the best type can be found in lumber camps and things of that nature where there is typical Canadian food served. Has the bureau given any consideration to encouraging the restaurant owners to develop that kind of food or serve

that kind of food? The Americans want something different than what they get at home. They do not want the same hamburgers, hot dogs or sausages; they want something Canadian, such as flap-jacks.

Mr. CÔTÉ: I think you have a good point there, Mr. Martineau. This subject was discussed partially this morning when the representation from the Canadian Restaurant Association was present.

The travel bureau has given thought to that subject but it is a field which is not being carried on directly by the travel bureau, as it is something domestic; and rather, we have encouraged the Canadian Tourist Association to look at that—and now the Canadian Restaurant Association—to see what they could do about that. However, the travel bureau has not the personnel or the funds to do that at the present time.

Mr. AIKEN: Is not one phase of a larger problem the fact that we are getting too much like the Americans and that there is a lack of excitement in their coming to Canada? We speak the same language; we have the same dollars, except they may be worth a little more; the same food and so forth. Is not that possibly part of our difficulty in attracting people? They like to go to Cuba where they have different money, different food and so forth.

Mr. SMITH (*Calgary South*): This is part of my question. I do not think that is it at all. I think you are doing good work, but I think the philosophy you have developed—and this board is representative of it—is wrong. We have a great expanse of wilderness and you say: this is a new approach. It is this which is our principal sales media, and it is a different approch because you are going to place emphasis on other important things we have. In this booklet consisting of forty photographs it exaggerates the fishing we have and the vast wilderness scene. It shows only one photograph of one city. I think we have developed in the mind of the American tourist the idea that the fishing is the greatest in the world. However, this is open to question. Therefore, I think we are creating in his mind an illusion that this is a great expanse.

We show nothing of the facilities, the conveniences and the modern cities and very little of the night life which a great many citizens of the United States would enjoy. We show little of the modern hotels and, after talking to many of them who have come up here, I think they are under the impression that they are going to have to sleep in something less than good accommodation. I think this philosophy has to be changed as much as anything else.

Mr. HERRIDGE: I disagree completely with you. They have hotels and night clubs. The particular fact that we have advertised the wilderness and natural beauty of Canada is what is attracting many of them here. Many come to my district because they can be guaranteed a grizzly. They can go up to the hills. It is chilly and it is healthy for them. They like it: it is something different. I am in favour of that type of advertising.

Mr. SMITH (*Calgary South*): Yes, but in fair doses.

Mr. HERRIDGE: Reasonable quantities.

Mr. CÔTÉ: This is a very complicated subject the committee has embarked upon, I might say; and I think Mr. Field would be able provide us with more light on this subject. I do not think—with due respect to Mr. Smith—that we are at the present moment doing the sort of advertising of wilderness as such. There is a great deal of it. But I think, if you have an opportunity of seeing the advertisements which are being published in the United States magazines and newspapers—you might have seen that this morning—

Mr. SMITH (*Calgary South*): Yes.

Mr. CÔTÉ:—there is a good deal more this year of the civilization aspect of it. Another aspect of this question is that the Canadian and United States

tourists are taking a good deal more nowadays to the outdoor life in the camping style. We have found in our national parks a very rapidly developing form of travel in Canada which the Americans have taken to tremendously. I think that in the specific subject of advertising I should like to defer to Mr. Field, who knows that aspect better than I do.

Mr. SMITH (*Calgary South*): I am not for one moment suggesting or arguing that this be reversed and that we show a series of night clubs and down town centres. I merely say the proportion is completely unrepresentative of what we have to offer today.

Mr. FIELD: At the risk of saying something that may run somewhat counter to the policy of the department, I agree with Mr. Smith, and in my remarks this morning when I presented the folios of our advertising I was merely trying to show that we are doing exactly what Mr. Smith has suggested, and which I think most people here agree with.

You cannot give up a market that we already possess: there are people who come here year after year to go fishing, and so on. They bring their families up for the very pleasant and very inexpensive holiday they can have in Canada. In presenting this picture to the American people you can go too far, and I think the new trend we have taken is a trend in the right direction.

Mr. Smith has pointed out that these folders do emphasize outdoor living. Our big booklet probably has had the greatest distribution of any booklet ever produced in Canada. I am told it is the largest printing order issued in Canada now. We distribute over one million every year. This booklet does emphasize the outdoor aspects of Canada, because we are always looking for high impact photographs. Now we are in the process of preparing a new booklet. The old one is now in its fifth season and I think, frankly, it has just about outlived its usefulness. The new picture booklet will include—as the assistant deputy said—the more civilized presentation of Canada. We are presenting it as a place. That does not mean night clubs; it is a place where you can find pleasant, well equipped, well appointed hotels, where you can get a good meal, where you can see a show if you wish, and you will not have a moose looking over your shoulder.

Mr. SMITH (*Calgary South*): That is exactly my point.

Mr. HERRIDGE: I understand a great many of them are anxious to get away from what I call "chiselization".

Mr. CÔTÉ: I must say, we are not going to overlook the outdoor spaces either in that presentation.

Mr. GUNDLOCK: To come back for a moment to the satisfied customer you were talking about a little while ago as being the best advertisement that Canada could have; I think we all agree with that statement and I think we mostly agree that the public relationship aspect contributes to the satisfaction of that customer as much, or probably more than the actual accommodations that he receives when he gets here on this trip.

To come back for a moment to our own park employees, the point I was trying to make this morning was that our own government employees—and I have seen this so many times in various parks in Canada—from the wardens, and so on, all the way up and down from the superintendent, have made bad impressions, particularly on the United States tourists, not maliciously but simply through lack of understanding.

I have felt quite strongly for a long time that if we could establish some sort of workshop, shall we say, on how to win friends and influence people—the United States tourists, shall we say—it would be a wonderful thing for our parks. I have listened to the witnesses here today and to the discussion, and if that same idea were carried further—probably to the associations,

hotels and restaurants—for a really good calibre workshop, for lack of a better word, Mr. Chairman, I think it would do a great deal to improve the tourists and visitors industry in Canada.

One well satisfied customer may only attract one or two more up, but a dissatisfied customer can certainly turn ten or a dozen away with the same effort. I feel quite strongly about that public relations point in this tourist industry.

The CHAIRMAN: Mr. Côté, in your appropriation for advertising in the travel bureau over the years, have the increased amounts kept pace with the increase in the cost of advertising?

Mr. CÔTÉ: The last increase is barely sufficient to keep up with the increase in costs—$68,000, we anticipate. I have a feeling that as we go along we are falling behind slightly, and had it not been for the ingenuity of the agencies and of Mr. Field in relocating some of the advertising, we would be going back on the number of prospective customers we might be reaching.

We are concerned about that, and I think that we are not making any progress in so far as our advertising appropriations are concerned, in getting after a larger segment of the United States audience.

The CHAIRMAN: In other words, you are not getting enough money?

Mr. CÔTÉ: Well, not enough to develop the tourist trade as we want it developed.

The CHAIRMAN: That is what we want to hear; that is what the committee is for. There is one other question, since it was discussed this morning. When you are advertising, say in New York, do you pick the eastern area of Canada? When you advertise in Los Angeles, we will say, do you advertise the western area of Canada?

Mr. CÔTÉ: We have undertaken advertising along that general line in the last while, Mr. Chairman, and I think probably the best spokesman on this particular subject would be Mr. Field, who has this aspect well in mind.

Mr. FIELD: Mr. Chairman, we are regionalizing our advertising. It is obviously good business practice to do that. You must make a separation here between newspapers and national magazines. In newspaper advertising it is only good, sound business practice to push in the west coast papers the west coast attractions of Canada also mentioning the prairie provinces.

But it also is good business to be pushing Newfoundland or Prince Edward Island in California papers. We had, through our agencies a very careful breakdown of the various newspapers for regional promotion. In national magazines we cannot do it in quite the same way. There is a development in the American magazine industry that is helping us. More and more the large magazines are turning to regional issues. That is—without mentioning any of them by name—they find that their advertising market must be broken up into four or five different regions. So we are buying very carefully, through our agencies, those markets that offer the highest return.

We are also taking advantage of the fact. As these magazines present themselves to us as market rather than simply so much circulation. We prepare our advertising with a presentation, a message and a kit, offered to that particular magazine market. For example, in the educational magazines we offer a teachers' kit which is composed of these various booklets. They are designed to interest the teacher in coming to Canada. We get a big distribution of this booklet which is called "Summer courses in Canada" in the educational magazines in the United States. The publications using our advertising will make this appeal to the reader.

With regard to the Honeymoon Books—the Bride's Books, as they are called in the trade—we offer another kind of package.

Mr. SMITH (*Calgary South*): We will examine this one rather closely!

Mr. HERRIDGE: Pardon me; you did not go into very much detail in regard to that book. Would you tell us what it contains? You did not go into very much detail in respect of that.

Mr. FIELD: I will read the names of the booklets if you wish.

The CHAIRMAN: There is an age limit, you know!

Mr. FIELD: I never speak about this package without being asked embarrassing questions. Another booklet in that kit is called "Honeymoon Trips in Canada". Another includes every package tour offered in all parts of Canada. It is for these youngsters who get married and save up $500 for a wedding trip. Their budget will only allow for $500 so they are interested in just that. Therefore, we outline cost of the trips in providing the kit shown here.

May I pass on to another phase of our work? In the outdoor books we offer the fisherman's package which provides another set of literature. In certain of the highly populated centres some magazines have a terrific circulation. In some cases as high as 12½ million. In these markets we also offer this set of booklets on the national parks of Canada. We had a terrific response this year from this type of merchandising of Canada's travel attractions.

Mr. FLEMING (*Okanagan-Revelstoke*): You also have a winter recreation package?

Mr. FIELD: Yes. You must remember that the bureau is not advertising the year around. We do not have sufficient money for this purpose. Therefore, we will offer the winter package only when persons inquire.

Mr. FLEMING (*Okanagan-Revelstoke*): It has a limited distribution?

Mr. FIELD: Yes.

Mr. SIMPSON: I was thinking, from this discussion we have had in relation to the trade industry that it is quite apparent there is probably an obligation or a duty on every Canadian to realize the benefits which can be derived from tourists coming into Canada. I am wondering if the Canadian Tourist Association has, in their advertising, developed any form of a small, very concise pamphlet which could be handed out to every Canadian who goes across the border. Individual Canadians are not going to be in a position to read all these things and perhaps would not read them anyway. However, I am wondering if any thought has been given to a precise pamphlet which could be distributed to every person going across the border which would bring forcibly to their attention their obligation as a Canadian in an endeavour to promote the coming of tourists into Canada.

Many of the tourists going across the border probably would not be in a position to forcibly tell people about Canada. You might give them the information to pass along as to where these people could obtain the necessary information. A lot of Canadians may go across the border and be asked certain questions and it would be helpful if these Canadians were in a position to tell these American people where to get the information.

Also we have a great number of people going down there who are athletes and could be great ambassadors for Canada and perhaps better than they are. We do not know what they are telling those people across the line about Canada. It might be helpful if they could have something which would help them paint the proper picture.

Mr. CÔTÉ: I do not think that particular thought has occurred to the department or to the bureau. It is one which should be looked into, just as should the suggestion made by Mr. Gundlock a bit earlier about the way the national parks officers and officials may handle tourists. Those are two points which we would like to consider to see whether or not anything can be done along those lines.

The CHAIRMAN: Have you changed your advertising agency?

Mr. FIELD: Yes. We now have three agencies which compete with each other; rather there are two agencies and three advertising groups. Two of the agencies amalgamated, so we only have two now. The three groups are located in Toronto and Montreal. The competition between the three groups is pretty sharp. They are doing their best for us. I am quite satisfied we are getting full value for the money expended in this way.

Mr. SMITH (*Calgary South*): Might I ask a final question. As I see it, this is important to the committee. You are completely happy with the organizational set-up which you have under the Department of Northern Affairs? Am I right? This branch has made no recommendation suggesting any change that might improve its efficiency or which would not leave it in the position of becoming an orphan? Have you made any assessment to determine that this is the most efficient method in which you can encourage travel to Canada?

Mr. CÔTÉ: I think, in the Department of Northern Affairs, we are satisfied that the travel bureau, with the funds it has, is making most efficient use of all the means at its disposal to attract an increasing number of visitors to Canada. I would not like to leave the impression that the Department of Northern Affairs has yet achieved the apex of success in developing tourism to Canada. There are a number of other things which can be done to attract more tourists, say, from the west coast into the western parts of Canada. That has not been possible so far with the funds available.

We do not believe we, as yet, have successfully completely tapped the United States market which is our largest market and which is most important to Canada, not only from a straight dollar viewpoint, but also from the human relations viewpoint. To our mind, one of the most important aspects of travel is to have Canadians better known in the United States. That is a very important thing.

Mr. SMITH (*Calgary South*): You would appreciate it if Canadians did not adopt in many instances an inferiority complex?

Mr. CÔTÉ: There is no reason to.

Mr. SMITH (*Calgary South*): I quite agree.

Mr. CÔTÉ: And I do not think Canadians have.

Mr. CADIEU: Do you feel you are getting full cooperation from all the provinces across Canada?

Mr. CÔTÉ: I think we are getting full cooperation from all provinces across Canada within the limits of their budgets and their particular outlooks.

The CHAIRMAN: We will adjourn. I hope that tomorrow we will get some recommendation as to how we can improve the tourist industry.

The meeting is adjourned until elevent o'clock tomorrow. We shall then have three witnesses whom I know you will be delighted to hear.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
JUN 22 1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 34

TUESDAY, JUNE 9, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

WITNESSES:

Mr. E. A. Côté, Assistant Deputy Minister of Northern Affairs and National Resources; Mr. Alan Field, Director, Canadian Government Travel Bureau; Mr. James M. McAvity, President, and Mr. John W. Fisher, Executive Director, both of Canadian Tourist Association; and Dr. J. Lawson Mackle, Director of Public Relations, Joint Board of Ontario Travel Associations.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21447-8—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielson, Esq.,
and Messrs.

Aiken,
Argue,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, June 9, 1959.
(44)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Baskin, Coates, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, Korchinski, Martel, Martineau, McGregor, Murphy, Nielsen, Payne and Slogan. (14)

In attendance, of the Department of Northern Affairs and National Resources: Messrs. E. A. Côté, Assistant Deputy Minister; G. M. Carty, Chief Administrative Officer; D. W. Bartlett, Executive Officer; M. A. Currie, Administrative Officer; Alan Field, Director, Canadian Government Travel Bureau; R. D. Palmer, Chief, Travel Information and Publications; and H. L. Crombie, Research Section: and Messrs. James M. McAvity, President, John W. Fisher, Executive Director, and Erwin E. Kreutzweiser, Research and Publications, all of the Canadian Tourist Association: and Dr. J. Lawson Mackle, Director of Public Relations, Joint Board of Ontario Travel Associations.

Messrs. H. W. Herridge, M.P. and W. F. Matthews, M.P., not being members of the Committee, by agreement sat at the table and took part in the questioning.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Item 293 relating to the Canadian Government Travel Bureau.

Mr. Côté produced replies to questions which had been previously asked; copies thereof were distributed and the said information was ordered to be printed in the record of this day's proceedings.

Mr. McAvity presented a brief of the Canadian Tourist Association. He and Mr. Fisher were questioned on matters that were raised in the brief. Dr. Mackle commented on some of the said matters and answered questions which were directed to him.

At 12.58 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m. this day or as soon thereafter as routine proceedings in the House are finished.

AFTERNOON SITTING

TUESDAY, June 9, 1959.
(45)

The Standing Committee on Mines, Forests and Waters at 3.10 o'clock p.m. this day resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources, and continued on Item 293 relating to the Canadian Government Travel Bureau.

Members present: Messrs. Aiken, Coates, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, Korchinski, Martel, McGregor, Mitchell, Murphy, Nielsen, Payne, Simpson, Slogan and Smith (*Calgary South*). (15)

21447-8—1½

In attendance: The same as at the morning sitting with the exception of Mr. G. M. Carty.

Mr. H. W. Herridge, M.P., not being a member of the Committee, again being present, sat at the table and participated in the discussion.

Messrs. Côté, Field, Fisher and Mackle were questioned in regard to the tourist industry and its problems.

At 3.30 o'clock p.m., the bells having rung to summon Members to the House, the Committee recessed.

At 3.55 o'clock p.m. the Committee resumed.

Members present: Messrs. Aiken, Cadieu, Coates, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, McGregor, Mitchell, Murphy, Nielsen, Payne, Richard (*Saint Maurice-Laflèche*) and Simpson. (13)

Questioning on the aforesaid matters was continued; questions were also asked regarding the operating methods of the Canadian Government Travel Bureau.

At 5.08 o'clock p.m. the Committee adjourned until 3.00 o'clock p.m. on Wednesday, June 10, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

TUESDAY, June 9, 1959.
11 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Gentlemen, we are still on the Canadian Government Travel Bureau items. We are very fortunate in having with us this morning, in addition to Mr. Côté, the assistant deputy minister, and officials of the travel bureau, Mr. James M. McAvity, the president of the Canadian Tourist Association, Mr. John W. Fisher, its executive director, and Mr. Erwin E. Kreutzweiser, of its research and publications branch. Welcome gentlemen to this committee. I know that we have a common interest so we will be glad to hear your very frank expressions in connection with the matters which come before us.

Mr. AIKEN: Mr. Chairman, there is one other gentleman here. He does not intend to present a brief, but he is sitting in, just in case any questions are asked him. He is Dr. J. Lawson Mackle of the Joint Board of Ontario Travel Associations. He is just sitting in on the meeting.

The CHAIRMAN: That is fine; we will be glad to hear from you later.

Mr. E. A. CÔTÉ (*Assistant Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, at a previous meeting of the committee, one of the committee members, Mr. McGregor, sought to have some information concerning civil servants, by departments, employed in the Yukon and Northwest Territories. I have this information available in sixty copies and they will be distributed. I will table it with the committee, if I may.

Mr. NIELSEN: Are these federal civil servants?

Mr. CÔTÉ: Yes, full-time federal civil servants.

INFORMATION REQUESTED BY MR. R. H. McGREGOR, M.P. IN THE STANDING COMMITTEE ON MINES, FORESTS AND WATERS

FULL-TIME CIVIL SERVANTS, BY DEPARTMENTS, IN THE YUKON AND NORTHWEST TERRITORIES

Department	Yukon	N.W.T.	Total
Agriculture	4	1	5
Citizenship and Immigration	5	12	17
Teachers	8	—	8
Fisheries	1	4	5
Justice	8	6	14
Unemployment Insurance Commission	5	—	5
National Defence	343	—	343
National Health and Welfare	47	50	97
National Revenue	18	1	19
Northern Affairs and National Resources	32	137	169
Teachers	1	147	148
Post Office	17	3	20
Public Works	53	3	56
R.C.M.P.	—	4	4
Trade and Commerce	—	3	3
Transport	152	416	568
	694	787	1,481

Also, Mr. Chairman, I have for tabling some figures in connection with the Atlantic provinces accounts on the United States tourist expenditures in the Atlantic provinces. I would like to table these.

ATLANTIC PROVINCES

% OF U.S. TRAVEL EXPENDITURES*

	1953	1954	1955	1956	1957
	8.1	7.9	7.7	7.9	7.5
Total U.S. Expenditures (Millions).....	—	$283.2	$302.9	$309.3	$325.3
Atlantic Provinces in Millions of dollars....	—	$ 22.37	$ 23.32	$ 24.43	$ 24.39

* SOURCE: Dominion Bureau of Statistics.

Thirdly, Mr. Fleming, one of the members, asked yesterday for information concerning my duties in the department by branches, and I have those to table.

> Mr. E. A. Côté, Assistant Deputy Minister, Department of Northern Affairs and National Resources, exercises supervision within that department over the Forestry and Water Resources Branches, the National Museum of Canada, the Canadian Government Travel Bureau, and the National Historic Sites Division and the Canadian Wildlife Service of the National Parks Branch.
>
> The duties are to supervise the activities of the branches, normally not in detail, but in their more important aspects, particularly those involving questions of policy. He is to be available for consultation by the branch directors and to help in formulating policy. He reports to the deputy minister and raises with him important questions of policy for consideration by the deputy minister or for decision by the minister. He is to ensure, through the directors, the efficient operation of the branches and their adherence to government and departmental policy generally.

Mr. COATES: It was I who asked you, Mr. Côté.

Mr. CÔTÉ: I am sorry, Mr. Coates; you did.

The CHAIRMAN: Is it agreeable, gentlemen, that these be incorporated in our proceedings?

Agreed to.

The CHAIRMAN: The first one relates to the Northern Administration Branch and the other two are in connection with the tourist industry.

Mr. NIELSEN: There are some inaccuracies in No. 1, Mr. Chairman. There are substantial numbers of R.C.M.P. up there. For a rough estimate, I would say there are at least sixty R.C.M.P. in the Yukon and yet there are none shown here. I suggest you check the list, Mr. Côté.

Mr. CÔTÉ: This does not include the R.C.M.P. It includes the civil servants as such and I think that the R.C.M.P. are not considered as civil servants as such.

Mr. NIELSEN: These are civil servants.

Mr. CÔTÉ: Yes.

Mr. MCGREGOR: Of course what I meant by my question—perhaps I did not say it—is how many are on the government payroll. Probably I said civil servants. What is the difference between how many are on the payroll and how many are civil servants?

Mr. CÔTÉ: The R.C.M.P. are not classified as civil servants; they have a special act governing their activities.

Mr. MCGREGOR: But you have four mounted police noted here.

Mr. NIELSEN: That is the Northwest Territories.

Mr. CÔTÉ: These are civilians, Mr. Chairman, working with the R.C.M.P.

Mr. MCGREGOR: Civil servants?

Mr. CÔTÉ: Yes.

Mr. MCGREGOR: Why do they not say so?

Mr. CÔTÉ: I think the heading states full-time civil servants by departments in the Yukon and Northwest Territories, and the R.C.M.P. are considered a department.

Mr. MCGREGOR: And the mounted police are not considered civil servants?

Mr. CÔTÉ: The R.C.M.P. as such are not considered civil servants.

Mr. MCGREGOR: If you are going to take that attitude it is pretty hard for a person to find out any truth about what is going on up there. What I wanted to know is how many are on the payroll up there.

The CHAIRMAN: Let me say, Mr. McGregor, the answer given is exactly as you requested.

Mr. MCGREGOR: Maybe it is; that may be, but that is not what I meant to ask.

The CHAIRMAN: Well, they are not mind readers.

Mr. MCGREGOR: Maybe they are not. I am not so sure about that. There are some other questions which have been answered on the same basis. I do not know whether or not it is the proper time to ask these questions.

Mr. AIKEN: Mr. Chairman, we do have witnesses here in connection with the travel bureau. We might be able to take Mr. McGregor's point up at a later date.

Mr. MCGREGOR: That is all right with me. Could I obtain the answer to the question I still have in mind in connection with this? I want to know how many people are on the payroll up there.

Mr. CÔTÉ: On the federal government payroll?

Mr. MCGREGOR: Yes.

Mr. CÔTÉ: We will get that information for you.

Mr. PAYNE: Does the figure of 343 under National Defence apply to civilians working with the Department of National Defence and not to military personnel?

Mr. CÔTÉ: That is correct.

Mr. NIELSEN: That figure represents permanent civilians?

The CHAIRMAN: Gentlemen, let us get on with consideration of the travel bureau.

Mr. AIKEN: Mr. Chairman, before we proceed with the witness, I would like to make a short statement, if I may.

I feel that an injustice has been done to a civil servant who has not the right to reply, and in all fairness I think it should be put right.

There were certain press reports yesterday which left the impression that the director of the Canadian Government Travel Bureau had been severely criticized in this committee yesterday. Now, this was not the case at all, as those of us who were here can easily testify. In fact, two of the briefs commended the director for his work. We have not completed the item yet and, of course, I do not want to give a conclusion, but I think it would be fair to say that up to this point no evidence has been given to the committee to indicate that the bureau is not doing the best it can properly to spend the funds allocated to it.

I do not want to say any more, Mr. Chairman, but I realized that the people who were in attendance do not have the right to reply, and the minister not being here, I thought that matter should be clarified.

The CHAIRMAN: Thank you, Mr. Aiken. It was well to bring that out.

Mr. COATES: Mr. Chairman, supplementary to that, may I say—and I do not want to carry this on because we have witnesses here who might further enlarge on this matter—that we heard witnesses yesterday who have—complained of the operations of the travel bureau and at the same time complimented the director. Now, it seems to me to be somewhat strange that both things can be said at the same time.

The CHAIRMAN: It is not unusual in the house.

Mr. COATES: I also felt, Mr. Chairman, that the witnesses did not bring out, to the degree I would have liked to see, the faults they find with the travel bureau and what they would like to see done with it.

Now, I say I do not want to carry this on, but I would like to have the witnesses know what my feelings are in this regard, so they may be able to assist the committee in a very direct manner by saying what they find wrong and what they feel the cures are for the present situation.

The CHAIRMAN: That is quite true, Mr. Coates. We welcome constructive ideas. While we are on this—and this is for Mr. Côté's benefit—I noticed in the evidence yesterday, and it will be on the record, we referred to the 80 per cent increase in the tourist business in Mexico over the last seven years and I think there was something like 12 per cent increase in Cuba. It was said a great deal was due no doubt to the gambling in Mexico as well as, say, in Cuba. I believe the statement was wrong, Mr. Côté, because gambling was outlawed in Mexico some twenty years ago. True enough, they bet on horse races but gambling is not prevalent; it is not allowed there.

Mr. GUNDLOCK: I would like to say a word along the same line, Mr. Chairman. I have visited the travel bureau here in Ottawa on several occasions, and while their policies may not be agreeable and that sort of thing, I feel the people over there are doing a tremendous job; they are keenly interested.

The CHAIRMAN: Let us save our commendations until we are through. Have the witnesses a prepared statement?

Mr. AIKEN: I think the tourist association has. It may be that Mr. McAvity will read the brief. He is president of the Canadian Tourist Association and he has a brief to present.

Mr. JAMES M. MCAVITY (*President, Canadian Tourist Association*): Mr. Chairman and gentlemen, I would like first to express the appreciation of Mr. Fisher and myself in allowing our appearance to be postponed until today, instead of it being yesterday. We have prepared a brief. It is not a brief brief, but we wanted to put as many opinions as we could before you. As I read it over, you can make notes and I will answer questions either while I am reading the brief or afterwards.

The CHAIRMAN: I think it would be better, Mr. McAvity, if you read the brief first and afterwards the members might ask questions.

The Canadian Tourist Association is the national organization of travel in Canada. CTA is to the travel industry what the Canadian Chamber of Commerce is to business or the Canadian Manunfacturers Association is to industry —a trade association, CTA is a non-profit body supported by its members, which include organizations representative of virtually every economic interest in the tourist industry in Canada. We have about 550 members which include nearly all chartered banks, the bigger transportation companies, the hotel, restaurant and accommodation field, as well as many of Canada's larger commercial enterprises. The list of members ranges from the small motel operator to departments of government.

The aim of the Canadian Tourist Association is to foster more travel within Canada by Canadians and through improvement in Canada's facilities as a host to encourage visits from other lands. CTA works closely with chambers of commerce, boards of trade, area associations and other group activities. We are the coordinating body for travel in Canada. We provide liaison between the provinces. Through pamphlets, press releases and public appearances, we are continually making more Canadians more aware of the importance of the travel industry to the economy of Canada and to our unity.

The association feels that Canada is losing out in a very competitive travel market. The competition will increase as the world grows continually smaller through improved transportation and more convenient methods of payment. Canada must lower her onerous international travel deficit by improving her standards to entice visitors to come in greater numbers and stay longer, and by encouraging Canadians to know Canada better. In other words, to stay at home.

Importance of tourist Industry

Tourism* in Canada today is big business. No one knows for certain how big it is, due to the lack of adequate surveys of travel by Canadians in Canada. The latest figures indicate that the value of all travel to our economy is in the neighbourhood of 1.8 billion dollars. This includes money spent by visitors to this country and by travel within Canada. Tourism brings in more American dollars (309 million) than any export except newsprint. The real impact of these figures comes from the fact that the travel dollar receives such a very wide distribution. A recent DBS survey shows that:

31¢ of each dollar went for food and beverages
24¢ of each dollar went for lodging
16¢ of each dollar went for transportation
20¢ of each dollar went to retail stores
9¢ of each dollar went for entertainment and miscellaneous expenses.

This survey shows only the primary distribution of tourist expenditures. These tourist dollars are passed on to buy supplies and services, employ labour and pay taxes. This results in a secondary distribution of much of each dollar, benefitting many other parts of the economy. There is no doubt that tourism can circulate more "fresh" dollars in a given community than most other forms of industry.

Canada's tourist industry has expanded substantially during the past decade. Spending in Canada by visitors from all countries has risen from an estimated $280 million in 1949 to $352 million in 1958.

There has been a marked improvement in the Canadian approach to tourism in the last few years, and a better job is being done in catering to tourists. Standards of food, accommodation and service have improved recently. But we feel there is room for much more improvement.

We must face the facts on the international travel market. Canada is losing its share of the American travel dollar. While the amount of money spent by residents of the United States on travel in Canada has increased steadily, this amount has decreased from close to 40 per cent of the total U.S. foreign spending in the 30's and 40's to about 20 per cent today. At the same time the rate at which Canadians are travelling outside Canada has risen sharply. The difference between what this country takes in as a tourist host and what it spends abroad is also growing and Canada's travel deficit reached $192 million in 1958. We experienced this onerous international deficit beside a

*The word "tourism" is used to encompass all activity related to travel or visiting, other than migration.

country with 10 times our population. Surely it is time we asked ourselves why Canada is not getting a greater share of the international travel market. Why are we not even holding our own people at home? Our tourist revenue is not keeping pace with the increase in the U.S. standard of living, its disposable income or the way in which Americans are going elsewhere. The visitors we do receive are not staying long enough or spending enough.

Must Improve Plant

Certainly it is time we took a good hard look at the plant or product called Canada. Much of our accommodation plant is out of date and needs renovation and expansion. One of the major problems in the tourist industry with its shortness of season, is the difficulty of obtaining adequate credit at reasonable rates of interest. In 1958 the Canadian Tourist Association submitted a brief to the Minister of Finance, the Hon. Donald Fleming, requesting parliament to pass a Tourist Establishment Improvement Loan Act. This would necessitate also an amendment to the Bank Act permitting the chartered banks of Canada to make long term loans to the tourist industry for the improvement of property, additions or renovations. We asked the government of Canada to guarantee these loans made by the banks. The service would be similar to that supplied to fishermen and farmers and would not involve great sums of public money. It would be presumed that the chartered banks would exercise the same scrutiny they use in their regular business. We do not expect that every applicant will receive a loan. It should be a system based on merit and on experience. It would not apply to new business but only for the improvement, replacement and expansion of established resorts, restaurants, hotels, motels and camps.

It has also been suggested that the tourist industry be eligible for loans under the Industrial Development Bank. It is our submission that the government should at least appoint experts to bring in a report on the credit situation for the industry. Four provinces of Canada have established lending systems for the tourist industry but it is our submission that this development is not enough to assist an industry of such great national importance.

Personnel Training

Many people have the impression that tourism is an industry fit only for the amateur or someone looking for an easy part time endeavour. Nothing could be further from the truth. Tourism is big business and needs skilled managers. A deficiency of skilled personnel is seriously hampering further expansion of the industry. Education is badly needed in the trade, and we suggest that the Canadian Tourist Association, with proper federal assistance, is the logical organization to carry out a training program. Such a program might include films, pamphlets and other instructional aids and provide people in the field to give counsel to operators and employees. More instruction must be given in the arts of catering and accommodation. Study should be given to including such courses in the curricula of either technical institutions or universities in Canada. Such courses are available in both Europe and the United States. Canada needs more training films, more instructional courses, more guides to better operations. Hospitality and food are the prime ingredients in any country's reputation. They are far more important than scenery. We feel that some great coordinated effort should be made throughout Canada to improve standards. More professional advice should be available to municipalities and area organizations which are trying to promote attractions. The great need is to show the small operator, especially, how it can be done. The industry is hungry for instructional aids. The Canadian Tourist Association could give an educational program national standards and effectiveness.

The association needs, however, more staff and substantial financial assistance if it is to engage in a broad program for the betterment of Canada's tourist industry.

There are two specific and inter-related fields of endeavour that must be considered in any program of stimulation and expansion of tourism in Canada. They are, "promotion" and the tourist "product" or "plant". These are similar to sales and manufacturing in other industries. Any program which does not include both these factors is incomplete. Capital expenditures for the "plant" cannot be justified without a good promotional campaign. Conversely, promotion of inadequate facilities is unwise and in the long run will ruin our reputation as a good vacation land. In other words, it is only common business practice to back up our sales campaign in the United States by making sure that the tourist gets what he wants upon arrival here. The two go hand in hand. How long would any Canadian business last if it spent all its money on advertising and little on the improvement of the product?

Canadian Government Travel Bureau

The Canadian Government Travel Bureau spends more than two million dollars a year to place our vacation attractions before potential United States visitors. We believe the travel bureau makes an excellent presentation and we have noted with pleasure the marked improvement in the type of advertising used by the bureau this year. The bureau deserves full praise for its advertising program and for the efficient servicing of the numerous inquiries. It is our submission that the Canadian Government Travel Bureau does not spend enough money and that its budget should be greatly enlarged.

I would like a question on that later, if someone would like to ask me one. Including the expenditures of provincial governments and transportation companies, less than four million dollars is spent on advertising in the U. S. market. This is 1.23 per cent of the amount spent by American tourists coming to Canada.

A new awareness of the importance of the travel industry to Canada's economy would necessitate an increased budget for the Canadian Government Travel Bureau. A bigger budget would enable it to institute a public relations program in the United States in addition to advertising, thus taking advantage of special events, conventions and group activities. We believe that the bureau should have more offices in the United States and we regret that an office has not yet been opened in San Francisco. There is considerable criticism of this lack in British Columbia and Alberta, which draw heavily on California traffic. It seems to us only fair that if Canada has travel offices in New York and Chicago, it should have one in San Francisco—and Boston as well. And I would add Cleveland as well.

We believe that lack of funds is the only reason why there have not been more offices opened in the United States.

The travel bureau should be encouraged to open offices in Europe and Latin America. Many European tourists are coming to the United States but Canada is not getting them—apparently. There is a great opportunity to encourage new Canadians, instead of returning home for visits, to bring out their parents on trips to this country. Mexico and Latin America generally are fertile fields. The United States does a rich trade with visiting Latin Americans but we are not getting them in Canada. We are not getting them because we are not going out after them.

We believe that the government of Canada should encourage the United Kingdom and other countries to make more Canadian currency available for the sake of commonwealth and free world unity. Canada should study how this country might block certain export monies for travel use.

Improved Services

Every encouragement should be given to make our great national parks more attractive and designed to hold the visitors for a longer period. The North American tourist is restless and highly mobile. He wants something to do and giving him glorious scenery is not enough. The reactions of children are of prime importance because they will influence the parents on whether or not a return trip will be made or how long the party will stay. Many American resorts and parks have established special services or diversions for children—swings, refreshment stands, supervised baby sitting and even free films for the proverbial rainy day.

Our national parks might further their efforts to recognize the phenomenal interest in outdoor sports—especially boating, water skiing and camping. We should have more facilities for launching boats and the services which are part of boating such as outlets for electricity, fuel and fresh water.

Canada's airports provide an opportunity to enhance our reputation as hosts. Legions of world travellers know Canada from waiting at our international air terminals. Every effort should be made to increase their interest in Canada. We congratulate the Department of Transport on its expansion program but suggest more attention should be given to the comfort of the traveller at our air terminals. Fine buildings are not enough and we might well study the conveniences of European, Latin American and many United States airports.

Know Canada Better

It is our belief that the government of Canada should do more to encourage Canadians to travel at home. The strengthening of our economy from American travel expenditures here is nullified by the vast amounts of travel dollars taken out of Canada by Canadians. Canadians spend three times as much overseas, as overseas people spend here. Canadians spend almost twice as much in the United States as Americans spend here with ten times the population. Per capita, Canadians spend $25 in the United States and the U.S.A. spends less than $3 per capita here.

We are not selling our own country to Canadians. Only a mere 19 per cent of Canadians taking holidays spend them in a second province. Fewer still go across Canada. CTA feels that an integrated program through the media of TV, radio, newspapers, magazines and public addresses and public relations under the know Canada better slogan would influence many Canadians to see the glories of this country. The best way to feel the potential of Canada is to see more of Canada. The government of Canada might consider a national, non-profit travel organization such as CTA as the medium for an enlarged program of "Know Canada Better".

Surely, we can find some way to enable more young high school students to see more of Canada. Study should be given to possible travel scholarships within Canada for bright young Canadians.

The initiative should also be taken now in view of the Confederation centennial celebrations which will be upon us in eight years from now. We urge the government of Canada to launch a bold and imaginative plan for the celebration of our 100th birthday, and we should start today.

Mr. AIKEN: Mr. Chairman, I think the committee should thank Mr. McAvity and Mr. Fisher for this excellent brief. I feel it contains just about all the things we were striving to find out yesterday. We have been searching in the committee for suggestions as to how the Canadian government could help the tourist industry better, beyond just sending out literature and beyond assigning staff to the bureau. I note there are at least six or eight excellent suggestions there. Some of them are new and some will certainly bear questioning by the committee.

The CHAIRMAN: Thank you, Mr. Aiken.

Mr. MCAVITY: May I explain one thing in deference to Mr. John Fisher. You have heard nothing of the organization of our association. It consists of Mr. John Fisher, executive director, Mr. Erwin Kreutzweiser and three girls in the office. I am the lay president for one year in the same way the Canadian Chamber of Commerce has a president each year. The work that we do is phenomenal when you consider that we have a budget of only $60,000 a year.

The CHAIRMAN: Mr. Fisher, do you wish to make an oral statement at this time?

Mr. JOHN W. FISHER (*Executive Director, Canadian Tourist Association*): No.

Mr. NIELSEN: I have one or two observations to make in respect of the brief. There are two factors which stand out in my mind. One is that it states here that Canada must be made more aware of the tourist industry and, secondly, that we are not selling our own country to Canadians. I hope you will take this kindly, Mr. McAvity, as that certainly is my intention. On page 2, I notice that you say: "We provide liaison between the provinces." You do not say you provide liaison between the provinces and the territories. I would have liked to have seen in your brief one reference at least to the Yukon and the Northwest Territories, both of which have quite a large tourist potential.

For instance, again on page 7, where you refer to the expenditure of the provincial governments and the transportation companies, you do not include any reference to the expenditures by the territorial governments.

Mr. MCAVITY: I do not have them.

Mr. NIELSEN: This is part of Canadian tourism. I would like to have seen that in your brief. On page 10 you refer to the 19 per cent of Canadians who take holidays and who spend them in a second province. In that percentage there are included Canadians who spend holidays in either one of the territories. You say, again, that fewer still go across Canada. How many go north in Canada? On these points I simply wish to point out that the Yukon and the Northwest Territories have a tourist potential. They are part of Canada. I think perhaps that was certainly an unintentional omission inherent in your brief in so far as northern Canada is concerned.

Mr. HERRIDGE: May I make a suggestion that in order to have a logical sequence in the question the brief be considered page by page and that we get the answers on each page and on one point at a time?

The CHAIRMAN: Before you do that, are there any questions which you would like to ask either of the witnesses regarding their organization?

Mr. AIKEN: I do not think Mr. Nielsen's question is answered.

Mr. PAYNE: This may have been dealt with in a section of the brief. I am asking this more from a point of view of clarification of my own thinking. This committee now has received many excellent delegations including this one. We are continually being faced with a situation which I am sure deeply concerns all members of the committee, that is repeated requests for government participation in the efforts of the various associations in these important fields and their efforts to embark upon financial programs of assistance. This presents many problems for a small nation. We have limited resources. I would like more clarification on that phase of it which I think is very fundamental in the brief we have just heard.

The CHAIRMAN: Mr. Fisher, would you like to comment on the statement made by Mr. Nielsen?

Mr. MCAVITY: I would like to make a comment if I may. I concede that this point is very well taken. To the best of my knowledge, we have no associations in the Northwest Territories or in Yellowknife. I have been to Yellowknife

and attempted to sell a few memberships there but no one would pay a fee. I have not been to the Yukon. I am very anxious to go there. I do not think we have any statistics. The Minister of Northern Affairs and National Resources gave an excellent talk on the tourist potential which I think should be before this committee. I heard it last year and I think it is excellent. I think there is a great future for the territories. We are very sorry about our omission.

Mr. J. FISHER: The territories were included among the advertising in the United States, because they do not advertise.

Mr. MARTINEAU: Mr. McAvity mentioned selling memberships to the different tourist operators. I would like to know what the conditions of membership in that association are. I see many tourist establishments which have the sign C.T.A. I find that, as a rule, they are inferior in the type of service provided to the ones which have such inscriptions as A.A.A. and other things. I am wondering just how selective the association is in choosing its members?

Mr. J. FISHER: We do not recommend that any member display our sign except in an office.

Mr. MARTINEAU: I have seen these signs.

Mr. J. FISHER: It might be the Canadian Travellers Association and not the Canadian Tourist Association. We are not in the licensing field at all.

Mr. NIELSEN: Is your association incorporated?

Mr. J. FISHER: Yes.

Mr. NIELSEN: Under the Dominion Companies Act?

Mr. J. FISHER: Yes.

Mr. COATES: I would like to ask the president of the association if he feels the amount spent by the federal government on the tourist industry is not just an insignificant drop in the bucket for what we receive in return for the money we spend.

Mr. MCAVITY: That is the question I was hoping would be asked. If you are in business, have a profitable line and have something which can be manufactured at low cost it is one which gets a maximum amount of attention in the marketing field, in the advertising, sales promotions and promotion of salesmanship itself. Here I think we have something that is profitable. In the difficult post-war years it has brought in a tremendous amount of hard dollars.

I have been in the United States recently and across Canada in the past six weeks. In Ohio last week I spoke to a great number of people. There were a great many questions asked. I think those people would come to Canada in much greater numbers and would stay longer if our efforts could be followed through. I say this sincerely. I have discussed the advertising done by the Canadian travel bureau with members of the advertising profession in Canada. They think the advertising is excellent; it is dramatic and has a strong selling appeal. The only trouble is that perhaps the volume is not satisfactory. We think the only way to get increased volume is to put stronger pressure on it. You can disregard all the other indices used by economists. The people who go after things the hardest will get the largest share. We believe there should not only be more advertising but more follow-up on the ground.

Mr. COATES: These travel offices would be the means of following up?

Mr. MCAVITY: One of them.

Mr. AIKEN: Along the point which Mr. Coates has raised, last evening I took the trouble of looking up the terms of reference of the department. The Department of Northern Affairs and National Resources Act which sets out

the responsibility of the minister in section 5, subsection 8, gives the minister the responsibility in Canada for tourist information and services. I have the feeling that only the first has been used; that is, tourist information. I have the feeling that the inclusion of the words "and services" would include almost everything else which has been raised in this brief and that the terms of reference are sufficiently wide to include most of the suggestions which have been made and that there would not have to be any change at all in the legislation.

Mr. PAYNE: If I may, I would like to discuss a matter I think is very fundamental. I think at this time it is in order that we call on the witnesses for a further statement and this is not because I am in any way opposed to the assistance to travel associations. However, we have these problems everywhere we turn in Canada. Here is a brief which is not really giving basic credit to the government in its activities. We have programs for spending in our national parks. We have programs for roads and Canadian historic sites. We have museums, historical sites, and so on, throughout Canada. I would like to know from this industry whether or not they feel that the government's obligation is to take the full load in this when they are already providing the plant and maintenance cost involved in the establishment of basic tourist services. Where do they want us to go?

Mr. MCAVITY: I would like to answer that. The government is by no means the only body advertising in the United States, for instance. In addition, all the large transportation companies and all the provincial governments are advertising in the United States. There is a tremendous amount of advertising from resort areas, hotels, private resorts and even fishing resorts in very many American publications. It is well upwards of $4 million; it is close to $5 million, I believe. Here is a unique example of government and private enterprise working together to build up a free economy. This is a unique situation in which the government and private enterprise join in advertising outside this country.

Mr. PAYNE: I wish to clarify the point I am trying to make. Believe me, I am interested in the tourist industry as well as any other industry. However, in your brief what you are asking is that the federal government should coordinate these various agencies and vastly increase the federal commitment in advertising the tourist industry.

Mr. MCAVITY: We have not used the word "vastly". We would have liked to. We have asked for more advertising and it is increasing. We have asked for more offices to be established. We suggested a public relations program in the United States. That means people travelling around. We would like to see someone who can sell Canada going to the United States, seeing people, and being heard. In Canada in the last few months, and at no expense to the association or the government, I have travelled, seen people, adressed gatherings, luncheon meetings, and so on. I think someone should be doing this in the United States. I do not think it should be a government man. It might be that someone in an organization like ours which embraces government and industry might be a better answer. However, someone should be doing it. The state of Florida did it some twenty years ago. They glamourized it and made a Coney Island out of it, but they achieved what they wanted. We do not want a Coney Island in our national parks, but the people in the United States should be made aware of what is on their northern doorstep.

Mr. MARTINEAU: Following the line of questions asked by Mr. Coates, I would like to ask whether or not the witness thinks as far as publicity is concerned that in publicity we are over-selling Canada and there is a lack in the type of accommodation and tourist attractions which we provide once the tourists are here.

The tourists who go back are not giving us very good publicity. Apparently we are doing good promotional work but are not providing the same increase in our services to the tourists. I would like an answer on that.

Mr. McAVITY: I would say that when you travel across Canada today you cannot help but be impressed by the improvement in our facilities in all the tourist service industries. There are, however, many places to which we have referred where improvement is greatly needed.

I might tell you about an experience which an American told me of last week. He was coming back from Muskoka last summer where he enjoyed himself and his trip was spoiled by some rudeness at a roadside place between London and Windsor.

Mr. MARTINEAU: That is the type of thing which I am wondering if the association is helping in preventing. I believe that every time a complaint of that nature is received by the association it should be dealt with and effective action taken. Would it not be better to try to improve the type of service the operators are providing rather than ask the government or other agencies to spend more money on publicity? I think everybody in the United States knows Canada is up here and that we have beautiful scenery. However, I think there is a great deal of disappointment when they come to Canada.

Mr. McAVITY: I think there is a great need here for the plan suggested by Mr. Herridge; that is that we should take one point at a time. Quite clearly, your point is covered here in our brief. We have mentioned the need for training facilities and things of that sort. There is a need for such things. John Fisher and myself have discussed this matter and also the system of distribution of films, slides, pamphlets, curricula of training in virtually every province in Canada. We are looking for money to produce these films, training pamphlets and such. The Canadian Tourist Association has seen more of me than my own business in these past few months. I have been busy looking for funds.

The Canadian Chamber of Commerce does not have to function as we do. They have many industries supporting them, and they have the staff. In the absence of staff of our own, we have produced a scheme for the Canadian Junior Chamber of Commerce. Last fall I personally met with their board of directors from all across Canada and the result is the Jaycee tourist hospitality program conducted by the Canadian Junior Chamber of Commerce and sponsored by the Canadian Tourist Association.

Dr. J. LAWSON MACKLE (*Director of Public Relations, Joint Board of Ontario Travel Associations*): In answer to Mr. Payne's question, we in the travel industry in Ontario went to our provincial government and tried to convince them that we, as a non-political and non-profit making organization, could do a certain type of job for the tourist industry which no government or government official could do.

This morning I had pleasure in meeting the president of the Canadian Tourist Association for the first time, because he is always going in the opposite direction to me. I was very surprised to know he did not know I had been travelling for the last four years from Lake Placid to Chicago doing what the president suggested should be done. We have 1,100 or 1,200 members in our association and we are trying to bring tourists into Canada. We could do a job which is well worth doing if the government would help us. I do not think it would cost the taxpayers of Canada a nickel more if you diverted some of the funds which you now have appropriated for advertising, and so on, and give it to the Canadian Tourist Association. They could expand their business as a non-profit organization.

The Ontario government is so happy with the work we have been doing that they have given us a grant in 1958. This year they have upped our grant and in 1960 we hope they will up it again. An independent organization can

do a better job in this field than can a government official. I think that any money you could divert to the Canadian Tourist Association would return tremendous dividends without putting any additional burden on the taxpayers.

Mr. HERRIDGE: Might I ask a question on page 1 of the brief? You mention there that you have about 550 members. Could you inform the committee what you consider your potential membership to be, that is, what percentage of the total hotel, tourist and other operators in Canada belong to your organization? What is the membership fee and how do you accumulate the $60,000 you mentioned previously?

Mr. J. FISHER: The membership fee varies from $25 for an individual up to $1,500 for four of the provinces, and the federal government gave us a grant of $5,000. Our highest industrial fee is $300 for the oil companies. Most of the fees would be in the $25 or $50 category. You ask what is our potential. If we can produce more results we will get more members. Until we have more members and therefore more revenue it is difficult to have programs. We find it very difficult substantially to increase our membership. I am sorry to say that some of the small operators do not like to pay our fees. We find it very difficult to get money from them.

We also run into the problem of the national corporation which already gives to local organizations and, therefore, feel that they should not give to our cause. So, we are reaching a saturation point, until we have more spectacular results in increasing our revenue from memberships. This year we just about broke even. We had a fall-out of about 7 per cent or 8 per cent and that just about balanced the new members we were able to get. It is a long, tough, hard struggle, but we feel we will reach a point, if we get assistance, whereby it will be easy to get new members.

Mr. HERRIDGE: Up to date the small operator has been inclined to join his provincial or local organization and not affiliate with yours?

Mr. J. FISHER: Yes, that is the case.

Mr. COATES: In this regard, Mr. Fisher, could you explain the set-up in England in order that the committee will better understand how other countries handle tourist promotion?

Mr. J. FISHER: I would prefer it if you referred to the British Travel Association which, I think, is 80 per cent or 85 per cent subsidized by the government of the United Kingdom, and the rest is raised privately by direct beneficiaries of the travel bureau. However, the huge budget which the British Travel Association has at its disposal is mostly consumed in advertising in foreign lands. It has never been the intention of the Canadian Tourist Association to be in the advertising business or to buy space. We are concerned primarily with the Canadian plant and ways we can make it more attractive and, to answer Mr. Payne, when we suggest the government might contribute something to our cause, we are not trying to bleed the taxpayer, we are asking him to "prime the pump". If we can improve the facilities of this country we can bring in hundreds of thousands of dollars of extra revenue. There must be something wrong or we would not be losing percentagewise on the international market.

It is our contention that you have given us a precedent, by spending over $2,400,000, and this shows that you are interested in the tourist business. We say: let us be businesslike and back up that investment by an educational program. We think half the trouble in Canada is due to lack of imagination. And, Mr. Nielsen, with areas such as the Yukon, your visitors association needs spiritual help or guidance more than money. But it takes money in order to provide the trained personnel to reach the people who need to be assisted in this country.

Mr. PAYNE: Would you answer one question for me? I do not want you to get the wrong impression. Mr. Fisher; I am searching for information. It is relative to the $2,400,000 spending. You are actively approaching people in the tourist field, and I am not asking this question from a point of view of embarrassing you. Is this money being well spent?

Mr. J. FISHER: Yes, I would think it is.

Mr. PAYNE: Could it be more usefully spent?

Mr. J. FISHER: Only by increasing it. To answer Mr. Martineau's question, if it came to a choice, and you asked me whether we should continue to advertise in the United States or take that money and use it on the plant for a short period of time, I would say use it on the plant, because it is needed. I think we should do both.

Mr. NIELSEN: Following up this line of questioning in connection with advertising, and I am particularly referring to the Yukon, I know there are not many people there, but we have a large area with a large potential, and yet in all the samples of advertising that I have perused most carefully I only found advertising relating to every province in Canada, but not one single ad related to the Yukon and Northwest Territories. I am speaking of newspaper advertising now and I am not referring to the pamphlets which you have on the display board here. If that is the way the ad money is going to be spent, I cannot see it affecting 40 per cent of the land mass of Canada at any rate.

Mr. AIKEN: May I follow up Mr. Herridge's question by asking Mr. Fisher if he would explain the relationship of the Canadian Tourist Association with all the other similar organizations throughout the world, such as the Hotels Association, the Restaurant Association, the Provincial Tourist Association, the provincial government travel bureaus, and so forth.

Mr. J. FISHER: We are the only national organization for the travel industry. We embrace the whole industry, as does the chamber of commerce or the Canadian Manufacturers Association; so it is only natural as a coordinating body that we do have as members, the hotel associations of Canada, the Canadian Restaurant Association, the major provincial associations and all the branches such as local chambers of commerce. We probably have thirty of those throughout Canada, and hope to have more. I would say we cover a pretty good cross-section of the organizations interested in tourism. They are all members, and by paying a special fee are entitled to one vote each.

Mr. MARTINEAU: May any tourist operator join the tourist association?

Mr. J. FISHER: Provided it is approved by our board of directors.

Mr. MARTINEAU: And what are your general requirements?

Mr. J. FISHER: We have been so hungry for cash that I wish you would not ask me that question. However, I do not recall anyone having been turned down recently.

Mr. MARTINEAU: That was the point I was trying to bring out a few minutes ago. Do you not issue some kind of scroll or something of that nature that shows one is a member of your association?

Mr. J. FISHER: We do.

Mr. MARTINEAU: That is the point I was coming to a while ago, and you said you displayed no such signs.

Mr. J. FISHER: I thought you meant outside.

Mr. MARTINEAU: Or possibly on a desk or a wall?

Mr. J. FISHER: Yes, we do.

Mr. MARTINEAU: Although a lot do display signs, they do not provide the same type of good service as you might find in the case of an operator who belonged say to the AAA or other such groups.

Mr. J. FISHER: Have you any particular one in mind?

Mr. MARTINEAU: I would not like to mention any one, but an experience has occurred to me a few times and that is why I asked you the question in connection with your requirements for admission to membership.

Mr. J. FISHER: As long as they are reputable associations or individuals, we accept them. However, we have nothing to do with licensing.

Mr. MARTINEAU: As you know, a lot of the tourists, especially American ones, who are travelling along the roads of this country, watch out for these signs.

Mr. J. FISHER: They would never see our signs. It is just little plaques. It only says so and so is a member of the association, and it is dated.

Mr. SLOGAN: Would it not be well for your association to supply such a sign to your members, because, as you develop, no doubt it is going to contribute to the standard of service that is rendered by your members, and this will be taken automatically as a standard by Canadians and Americans alike, when they learn of this. They might show an interest in such a sign and decide to patronize these establishments. When that is established, I think possibly your problem of membership may be solved. In fact, it may well then come to the point where you might have to exercise your right of restraint in issuing these plaques.

Mr. J. FISHER: Yes, that may be so.

Mr. SLOGAN: Yesterday we received some figures which stated that 42 per cent of Americans who come into Canada have decided to do so because of word of mouth advertising from people who have been in Canada, whereas only 36 per cent come as a result of direct advertising. I believe we spend about $15 in advertising for every inquiry we get at our offices in the United States. There are some factors that are obvious. As you said, you are the coordinating body for travel in Canada. You also said that Canada must lower her onerous international travel deficit by improving her standards to entice visitors to come in greater numbers and to stay longer, and by encouraging Canadians to know Canada better. I do not think we appreciate one great service which you could render, and that is to encourage Canadians to see more of their own country first. That would tend to lower our deficit in relation to the other countries. It seems to me that wherever we have a tourist attraction it does not become a problem. For instance, in the case of the Calgary Stampede, you cannot get any hotel accommodation; the same is true in the case of the British Columbia centennial, the Canadian National Exhibition, the Highland games, and so forth.

I think one of the things you and we should encourage is that there should be more regional festivals which would attract the whole family.

Now, there was criticism brought out yesterday in connection with the advertising of Canada, and I would like your opinion on this. It was stated that Canada is often depicted as a land of Eskimos and Indians, trees and lakes. My own feeling is that you do not have to advertise to attract the fishermen, and so forth, but you do have to advertise to attract the family group, and that is the important one when it comes to travelling. I think we realize that, and our advertising seems to be developing that trend.

Mr. HERRIDGE: You should have submitted a brief!

Mr. SLOGAN: Do you feel our advertising could be improved to attract more—

The CHAIRMAN: Could we confine our questions, Mr. Slogan, and not have such eloquent observations? You are entitled to make observations, but I think they should be kept brief. It is all right to make short observations

preliminary to your questions or based on what has been said. Anything dealing with page 1 is all right; however, we cannot at all times confine our questions to just the one page.

Mr. SLOGAN: My first question would be this. Do you think there is anything the Canadian government could do to encourage such events as the Stratford Festival, or create new ones where they are not present; or do you feel that would be a provincial responsibility?

Mr. MCAVITY: I think it is a joint responsibility. I have attended only one of the conferences embracing Mr. Field's travel bureau, the provincial and federal government representatives. They have been getting together for many years to discuss effective liaison having to do with their advertising programs. Our association was invited to attend, and I did so for the first time last December. My own feeling is that we have improved tremendously in the area to which you are referring. I am not familiar with all the Canadian and provincial government advertisements, but I know a number of people who are professional advertising men, and they have a very high respect for our advertising generally; that includes provincial as well as federal. Such things as the Stratford Festival, the Royal Visit and "Come and see history in the making" have been used. I think it is a wonderful slogan, Mr. Slogan!

The St. Lawrence Seaway has been featured. I think it is timely and well spotted. If there were more money to take more space, I think we would have space to advertise the glories of the Yukon, the Northwest Territories and Labrador, because there is very excellent fishing in Labrador.

Mr. Martineau has a point in connection with word of mouth advertising. A poor recommendation in respect to a spot along the road can be disastrous for us. The friend I mentioned in Dayton was an example.

I would argue a bit here with John, and I think some of our businessmen would do likewise, that if we had to make a choice of how we would like to see the federal government spend $2 million, I would not say stop advertising any more than would Imperial Oil, Coca-Cola or any others. I would like to see them spend some money on the fastest growing media, television, and put on a few good television shows in the U.S.A. to bring people up here.

Mr. SLOGAN: May I suggest the government of Canada feels that its primary purpose is to attract outside visitors into Canada; but in view of the fact that so many Canadians are travelling abroad, do you not feel it should also be a function of the government to stimulate more travel in Canada among Canadians as well?

Mr. MCAVITY: I think the government, through one of its crown agencies, has shown a forward step in this regard. The Canadian National Railways have the travel-now-and-pay-later plan. This is going to stimulate travel in Canada.

Mr. SLOGAN: I would also like to ask Mr. Fisher a question, because he has had a lot of experience in broadcasting and so forth. Do you feel that the fact that we have so many American publications in Canada, that we see so many television shows, and hear so many radio broadcasts, and even a great deal of our Canadian publications carry a great deal of American content, is a stimulation for Canadians to travel in the United States?

Mr. J. FISHER: Yes, I do; that plus proximity, and the fact that Canadians follow the line of least resistance. As the bulk of the population is in south-central Ontario, it is so easy to go to Buffalo, as it is to go from Vancouver to Seattle. We have a problem in connection with our long east-west line and going northwest in this country, and it takes a good deal of promotion to move Canadians. We cannot get easily from Windsor to Winnipeg—it is quite a trip. But if someone were hammering away at what Canadians would be missing if they did not see more, or what they would miss, I think there would

be an improvement. We have noticed already an improvement in interprovincial travel since we have been hammering away at this subject. Also, the federal government has helped the maritimes with their advertising.

Mr. NIELSEN: We have been trying for years in the Yukon to see the rest of Canada, and now some of our people are seeing it.

Mr. SLOGAN: Do you feel when the Trans-Canada Highway is completed it will contribute more to interprovincial traffic?

Mr. J. FISHER: It will contribute but not cure. We feel there is a great job to be done, and whether the government can do it or whether it should use an agency will be up to you. By working through service clubs, by conducted tours, by transportation companies and by group activity throughout the land we could stimulate interprovincial travel.

Mr. CÔTÉ: May I make a comment at this point regarding the trans-Canada highway? I think the members of the committee would be interested to know that, as a result of a federal-provincial conference on tourism, the federal government and the provincial governments have embarked upon a program of camp grounds and picnic grounds over the Trans-Canada Highway so as to make the journey more attractive and easier. Every fifty miles or so there are stopping-off camp grounds or picnic sites so as to bring the attractions of the various regions of Canada to the notice of the traveller, and to try to keep the tourists in Canada and to promote interprovincial travel.

Mr. NIELSEN: It also exists along the Alaska Highway. I have a question. Does the federal government now make any grants to local or other tourist organizations at all anywhere in Canada?

Mr. FIELD: None whatever, other than the Canadian Tourist Association.

The CHAIRMAN: Gentlemen, we were on a very important subject a minute ago; let us try and finish it. It was being discussed as to whether interprovincial travel would cut down the deficit; in other words, we would, thereby, all be spending more in Canada than in the United States.

Mr. J. FISHER: I think it would have that effect. The figures from the United States have been going up and up over the years, maybe not percentagewise, but they have been going up, and this has been nullified by Canadians going outside.

The CHAIRMAN: If you have read the evidence given yesterday, you will note that our increase in seven or eight years was only 12 per cent.

Mr. MARTINEAU: In connection with the same subject, I notice on page 3 of the brief it states:

> Spending in Canada by visitors from all countries has risen from an estimated $280 million in 1949 to $352 million in 1958.

If you take into consideration the rise in cost of living, that means there has been no expansion in our tourist industry.

The CHAIRMAN: You are referring to the value of the dollar?

Mr. MARTINEAU: Yes, is that correct?

Mr. J. FISHER: Yes.

Mr. HERRIDGE: In connection with page 2, I would like to ask two questions. You state Canada must lower her onerous international travel deficit by improving her standards. Could you give the committee some idea of any complaints with respect to our standards you have received from persons who have come to Canada, and particularly, about things that need correcting; secondly, do you find on occasion that tourists are not very well informed about Canada and with the circumstances under which we live? I remember one occasion when a wealthy man came from New York to hunt grizzly bears, and he brought a case of toilet paper with him, which was put on the packhorse and taken up into the mountains, this showed that he had a completely inadequate understanding of the Kootenays, you see!

Mr. AIKEN: I am not so sure!

Mr. J. FISHER: I am not an expert on grizzlies nor toilet paper! But to answer your two questions, I will say this. We are not in a receiving position for complaints. The Canadian Government Travel Bureau would receive them as well as the different provincial and municipal bureaus. However, we know that Americans complain bitterly about the dollar situation and the premium on the Canadian dollar. We maintain that is largely a question of psychology, and with the proper training in Canada we could ease the pain a little bit. The Canadian Government Travel Bureau has issued some excellent little signs, in fact hundreds of thousands of them, which are put up on cash registers. We think they could go further and take the words "discount 5 per cent" of the sign. Those are fighting words, "discount on United States funds". It would be better to use "exchange". There are many tips you could give the trade in that regard. I could give you one illustration as to how serious this dollar business is. A man in Halifax went into a store and bought $200 worth of merchandise last year when the exchange rate was 4 per cent, which would have meant a difference of $8 he would have had to pay. He asked the saleslady if she was going to charge him this 4 per cent. She said that she did not think so, but that the manager would like to see him. The manager came over and said: "Certainly not; I am glad you spent $200 in my store; welcome to Canada". The man said: "Bless your heart; this is such a change; I am the president of the Florida Citrus Growers Association, and I am going to send you a box of fruit every month for the next year". I do not know the cost of a box of fruit, but from the Kootenays, where you have delightful cherries, Mr. Herridge, I would imagine a box of fruit is worth from $5 to $8. You see, gentlemen, it is a psychological and educational program. That is one of the major complaints we have.

The second question you asked was: do the Americans come well informed? No, I do not think they do, and I do not think if you multiply your budget by ten you are going to educate 171 million Americans about Canada. That is a long range process. However, we feel a great deal more can be done, once the American gets here, to make him feel a little more at home by being friendly to him. In this way he will want to know more about us.

Mr. AIKEN: In regard to advertising in the United States and the fact most Americans think they know more about Canada than they do know—and that goes for a lot of Canadians—I still feel an increase would definitely help to make more Americans aware that Canada is up here and that we have many of the modern facilities that they have in the United States.

Mr. J. FISHER: It would help; but the United States is a pretty big market. And we are up against stiff competition in regard to food, beverages, automobiles, tobacco, and their millions of dollars of advertising. Our $2 million is just a drop in the bucket. At that rate it would take you 100 years to make a dent. It will help, but you are not going to accomplish it over night.

Mr. MCAVITY: I would like to speak to that for a moment, Mr. Chairman. Advertising is a very difficult thing when it comes to judging values. There are readership checks which try to show the sponsor how much value he is getting for his dollar. Mr. Martineau has pointed out that word of mouth publicity is important, and if our advertising is only effective in the amount of 36 per cent, this 36 per cent represents hundreds of thousands, if not a few million, Americans. Each of the Americans who come and is pleased, goes back and talks with other people. They will say: "I was in Saskatoon last week—or Whitehorse—or Charlottetown—and was very pleased with what I saw", and this is the kind of word-of-mouth advertising we want. Every American who goes up to the Muskoka lakes and the Georgian Bay area is talking; I heard that in Dayton and Cleveland last week. Gentlemen, do not underestimate your advertising.

Mr. J. FISHER: Could I answer Mr. Coates' question by reading a quote:

> A glance at the advertising budgets of certain leading American industries will give some idea of the formidable nature of the sales efforts put behind products that, in effect, are competing with travel for the consumers' spare dollars. In 1954, out of 259 organizations spending $1 million or more each in national advertising space and time, only 9 were classified under travel.

You can see by this, gentlemen, if you are going to educate them about Canada, you have to talk in huge figures, and none of us is thinking in these terms. There is a difference between influence and education.

Mr. COATES: Mr. Smith, who appeared as a witness yesterday, was disturbed about the D.B.S. figures. He said they gave the impression that Canada's tourist industry is going downhill. He more or less said the bases on which they produce the figures for the tourist industry were archaic, that if a realistic approach were taken by D.B.S. we would have a much better picture and, therefore, we would create a much better picture for Americans. Is there any truth in this?

Mr. J. FISHER: I have not read Mr. Smith's full testimony and I am not a statistician. I think there is room for review of our whole approach to the statistics in connection with travel coming into Canada; and we have practically no statistics for interprovincial travel in Canada. The number of international visitors coming into Canada is still just a guess, as far as I am concerned. The man is stopped and asked by an official how much he spent. Well, he might have spent $200, but he is frightened to death of the United States border and he says: "Maybe I spent $50." The Canadian official puts it halfway in between and makes it $100. I think it is a guess. I think in this modern age of computing machines we could develop a more effective and a more accurate system than we are now using.

Mr. SLOGAN: You said in your brief that the latest figures indicate that the value to our economy is in the neighbourhood of $1.8 billion; that would be about five times the $252 million the D.B.S. gives.

Mr. J. FISHER: That is within Canada.

Mr. SLOGAN: Would you say there is four times the amount of travel within Canada by Canadians than by outsiders?

Mr. J. FISHER: That does not mean within provincial borders. If tonight I go down to Hawkesbury and have supper, I am doing what a tourist does; it depends when you start to define a tourist. Is it for a period of two days and more? If that is the case, it might happen that ten or twenty times a year we become tourists. That is the closest case I could come to without including the capital equipment of the railroads, airlines and so forth.

Mr. MARTINEAU: Would you consider the members of parliament tourists when they are returning home from parliament?

Mr. MCAVITY: Anyone living away from home and living in hotels and so forth?

Mr. AIKEN: There was a subject raised about hospitality, and I have seen some reference to a film that was put out by our National Film Board and the tourist associations which was called "Tourists, Go Home". Has that film been given some showings throughout the country?

Mr. MCAVITY: Twelve months ago as vice-president of this association I met with the commissioner and other officials of the National Film Board in Montreal. I pointed out to them, as we do in this brief, the need for some films, one or more films, illustrating the problems which are too common in our dealings with visitors. The National Film Board took this seriously and asked our office, namely John Fisher, to submit ideas for a script, which we did. Then

the board prepared the film, and recently it was screened for the first time and is now being shown all across Canada. It was not sponsored by, nor is there any reference on the title pages of the film to, the Canadian Tourist Association, so it is not a thing to be connected with us. Our contribution was the suggestion that a film was needed.

We have had further talks with the National Film Board about the need for more good instructional films. This one is rather a documentary, a good one from the technical point of view, but not an instructional film such as we needed. Recently the deputy minister responsible for the provincial government travel bureau told me in a letter, when we were discussing this, that he got one from Cornell University which is entitled "Alice, a Good Waitress". Obviously, that is a very valuable film, but we should have Canadian films of this nature.

I have two complaints; first, our provincial governments and regional associations of all sorts have to go outside this country to find such material, and, secondly, the imported material does not fit our needs. I have scanned all the American films on lists, available through commercial sources, and some go back to 1941, before the war, and they are still being used. An example of this is "The Dangers of the Common Housefly". They are not suitable for the purposes we have in mind. We are striving to bring more money into the country through improved hospitality, and this will not do it.

Mr. AIKEN: This would be part of the second question you raised in your brief concerning instructional aids.

Mr. MCAVITY: Yes.

Mr. AIKEN: Where you think the government could be of great assistance in processing films which would improve the standard of service in Canada?

Mr. MCAVITY: Yes.

Mr. HERRIDGE: I would like to ask two questions. I am very interested in your suggestions on pages 5 and 6 with respect to the training of personnel and the possibility of technical and university courses. I think that is very necessary, because I have seen so many excellent people fail because they have little knowledge of the industry. What is being done at the present time to develop some support for training? I think it is most necessary. I know a number of people who would have had much better success, had they had a course of some kind. Also, I notice a great diversity of architecture. Many do not know how to utilize money to the best advantage. Does your association do anything to provide stock plans for certain types of tourist cabins or small motels or provide information that would enable people to get the information before they commence to build? I have seen a lot of mistakes made in construction, and people regret it because they lack the knowledge.

Mr. MCAVITY: I will answer your second question first, because it will be brief. No, we have not, because with our limited budget it has not been possible. Because of our limited staff we have not the people to work on such programs. However, we are very aware of the need. The questionnaire to which I have referred just briefly was sent out to a great many provincial bodies, including the provincial government travel bureaus. We gave a list of subjects we felt should be dealt with by film. Among them was one dealing with outdoor and indoor decoration, design and so forth. I have discussed this with some people in the building products industry, and I have tried hard to raise the money. It would cost a few dozen thousand dollars, probably $8,000 to $10,000 each for the kind of films we have in mind. I have not been able to find the money. They all agree they would benefit. A survey conducted last year by Mr. Fisher's office brought forth the information that $22 million was spent last year on improvements, new build-

ings, accommodations, restaurants and so forth. $22 million is a lot of money. That figure represents a lot of bath tubs, doors, roofing and so on. So, we have not; but we would like to do what you have suggested.

Now, in answer to the other question, in connection with personnel training, I can tell you what is going on now in at least some places and this extends over several provinces, from New Brunswick west to the west coast. One large resort hotel operated in western Canada, not too removed from your constituency, has a problem every year of training some hundreds of part-time university people who are going to act as chambermaids, bell boys and the like. The manager's job is a tremendous one. He brings in a staff a few days before the doors are opened for the first time. His job would be simple if he could put them into school for one day and have pamphlets and a regular plan of training for them through the use of instructional material, such as films and slides. He has a few American ones which he has used for years and years. He does not do a sufficient volume to warrant his producing films for that purpose. We are trying to do that. We are trying to raise money through industry and new memberships; we are contacting the food and textile industries, building products, paint and varnish firms, and the like, and trying to show them that they should help us; but we are very few in numbers. There is John Fisher, myself and a small membership committee of busy private-business people.

I would like to make one other point and it would fit in here. We have talked about the beneficiaries of this tourist revenue. The people with the cash registers in the front line are not the only beneficiaries. They turn the money over. As we have said, they are buying goods and services and paying taxes, and it goes back to the farmer, the forest products people, and all phases of industry. That is why we have firms like the Bank of Montreal and the Sun Life paying fees to our association on the same scale as Imperial Oil; they realize the need. What is needed is the pump—priming. We have to do things to sell industry that we are a worth while body. To produce things costs money. It is like having the cart before the horse, the chicken before the egg; that is our problem. We are in the position of the resort operator described by Dr. Mackle. We have no funds and are facing a frustrating future. We are trying to do a job to back up the advertising that is being done by our governments and transportation companies to make visitors to this country, no matter whence they come, want to come back. That is our objective in a nutshell. So I wish we could find a way to produce these things we are talking about.

Mr. HERRIDGE: That means there are a number of industries in Canada who benefit directly and who are not subscribing to your organization?

Mr. MCAVITY: All these people I have talked of are subscribing. We have not been able to go beyond them. Yes, I can go further. I stayed at Port Hope, in Ontario, at a motel a short while ago. The manager of this motel—a very nice shap—told me he had $175,000 invested in that motel. He was disturbed about the relocation of the highway going through. He knew my name because he had seen me on television. So, talking about the tourist business, I asked him about the Junior Chamber of Commerce, Jaycees—and about 70 branches of the Junior Chamber of Commerce are taking on the tourist hospitality program this year—and, if he were to get a notice from the local junior chamber that there was a film showing—a little instructional film—some evening at, say, 8 o'clock, whether he would allow some of his chambermaids and waitresses to go to that. He said, "I would close the door and take them down in my own station wagon; that is how important it is to me". So I think the need is clearly established.

Mr. COATES: In this regard, how would the witness expect the federal government to assist, unless it was by direct approach to their organization?

Mr. McAVITY: The only way we can see—

Mr. COATES: These matters that you bring up that have no real federal significance are brought up in order to stress your needs for a better linking; is that correct?

Mr. McAVITY: Could I add one thing, Mr. Coates? We do not visualize this coming out of the Canadian Government Travel Bureau's present budget. We have not discussed this in my directors meetings, because it has not been brought up to us in this way before. The Canadian Government travel Bureau's expenditures now are all for promotion outside Canada,—advertising and sales offices, if you like, outside Canada. I would not like to see that cut away, but some department of government should make available the "pump priming" money necessary for this.

Mr. COATES: How much?

Mr. McAVITY: I have some figures, but I do not propose to discuss them here, because we intend to come back to Ottawa on a formal presentation at a later date, and I think the publicity at this time would be bad for us—if you do not mind.

Mr. FLEMING (*Okanagan-Revelstoke*): There was one point brought to my mind by a sentence on page 4 under the "improvement of plant"—that is, the reference to the shortness of season. All of our concentration—and understandably so—at the present, in the United States, is on the summer season; that is where the big business is going to be done. But the problem, apparently, of the resort operator is that he has only a limited season in which to get a return on his very heavy investment. He could go on from this point and do, as the province of Quebec has done so notably in developing a longer season—principally, a winter recreation season—and get a share of this tremendous interest in the United States, say, in skiing and winter recreation.

Apparently in the province of Quebec we have an example of a developed plan, and they are making money out of it. But there seems to me to be relatively little of that in other areas of Canada where there is a potential. Has your association given any thought to promotion along that line?

Mr. J. FISHER: Yes, we are constantly encouraging area organizations to see the light and to extend their season. I could give you illustrations *ad nauseam* of going to these people and advising them how they could make money out of their snows, working with the winter carnival in Quebec, or some organization in Nova Scotia, and so on, where they are conscious of the off-season, and the interest of attractions all the year round to keep their plant occupied. But with a staff of three girls and two men we can only do so much exhortation.

Mr. FLEMING (*Okanagan-Revelstoke*): I realize that. Do you feel that the Canadian Government Travel Bureau should be given an opportunity to start doing some winter advertising? At the present time their budget does not permit it. Have we arrived at the point where there should be some of this selling in the United States with regard to the advertising of the winter potential?

Mr. McAVITY: Our present facilities are very, very busily occupied right now. They are limited—I will not say "only limited" to the province of Quebec, because there is, in Ontario, Collingwood, and so on. But they are not designed to compete with Squaw Valley and Sun Valley, for example. We could not handle too many more.

One transportation company tried to make a package tour arrangement with some of the Laurentian resorts people, but could not get to first base because of the season. They wanted to arrange the package tours in the busy winter months, but the Laurentian resorts were booked, with long waiting lists. In that connection, while the association has not done anything officially

other than the very valuable work Mr. Fisher mentioned, I would like to draw attention to folders that have been put out.

Here is an area promotion contest for which there is a prize given every year. Last year it was won by Saint John, New Brunswick.

If some smart people got in in Banff Springs, and offered good accommodation and big ski tows, they would fetch people there. I know of some people who have an interest in spending a considerable sum of money in Banff Springs. It has not materialized yet. Some places with glamorous names such as Squaw Valley or Sun Valley are not nearly as good as Banff Springs; but our potential has not been exploited generally across Canada. The great complaint is with regard to the investment in tourist accommodation A great deal of this motel accommodation is winter accommodation, because operators seek to get additional revenue and often rent at low rents during the winter.

Mr. FLEMING (*Okanagan-Revelstoke*): They could accommodate more people if greater stress were laid on the winter recreational potentiality in these areas where there is a potential?

Mr. MCAVITY: I would take an even money bet that within five to ten years you will see a greatly expanded winter resort area in Banff. Whether the money comes from Calgary or from outside this country is just a matter of free enterprise. Some people will seize this opportunity, because money is being made today in the free enterprise system prevailing in the Laurentian mountains and in many places throughout the United States.

Mr. FLEMING (*Okanagan-Revelstoke*): There is a potential here for the smart operator in an area where they have something to exploit, if they will do it; but is that being done?

Mr. MCAVITY: No, we have not the facilities.

Mr. FLEMING (*Okanagan-Revelstoke*): That seems to be an area where there is something lacking, and yet it is part of the answer to this short season.

Mr. J. FISHER: Yes. But Dr. Lawson Mackle has looked into this question of the peak season for some years and its relation to industry: he has been making a survey in that regard for years, and he is here. He has been making this survey in Canada and the United States, and at the same time showing tens of thousands of people what our resort areas are.

The CHAIRMAN: You are on a very important subject. Is it possible that you gentlemen could come back here this afternoon?

Mr. J. FISHER: Yes.

The CHAIRMAN: We certainly appreciate what you have been doing for this committee and, I think, for the Canadian Government Travel Bureau. Your brief is full of—

An hon. MEMBER: Meat!

The CHAIRMAN: Yes, meat; that is a very good term. Then, gentlemen, we will have a meeting immediately after orders of the day. The meeting will be called for 3 o'clock, but it will be dependent upon the length of the question period on the orders of the day in the house.

Mr. MCGREGOR: With regard to the answers given the other day regarding the Inuvik site, I was not given the information I wanted, and I am trying to get an intelligent answer on this. I will try and put this so that is will be clear. What I want to know is, how many piles were bought, or procured; how much per foot, how many from British Columbia, and the names of the firms from British Columbia. Then I want the total cost of British Columbia piles delivered on the job and the total cost of other piles delivered on the job. Mr. Coates, did you ask a question as to the quantities?

Mr. COATES: You go ahead and ask that.

Mr. McGREGOR: On this question of Mr. Coates' in connection with the bridge at Mayo River, here is a question. He asked the question concerning the cost of the bridge. All they have given are the unit prices but no quantities. I want the quantities filled in; that is all.

AFTERNOON SITTING

TUESDAY, June 9, 1959.
3.10 p.m.

The CHAIRMAN: Gentlemen, we have a quorum. I want to mention, gentlemen, at the beginning of this meeting that, during the lunch hour, I had the time to look over hurriedly, of course, the Jaycee Tourist Hospitality Program produced by our friends this morning. I hope every member of the committee can be provided with this brochure.

Gentlemen, you may proceed.

Mr. COATES: Before the adjournment, Mr. Chairman, I was questioning the witness in regard to the hope for a grant that was suggested. I was wondering if either one of the gentlemen might be able to provide the committee with any information of any grants of a similar nature awarded to similar types of associations in other countries?

Mr. J. FISHER: We mentioned this morning that the United Kingdom government gives up to 85 per cent to the British Travel Association. However, most of that is spent on advertising. They also have a British Holidays Association. The Mexican government makes a heavy contribution to their association. Bermuda, Nassau, Hawaii and the Japanese governments make grants to their associations; there are a raft of them. Even Greenland has a tourist association. Iceland has one and also isolated islands in the Pacific. I think there are many precedents for governments giving grants to tourists associations.

Mr. COATES: Have you any idea of the size of the grants awarded?

Mr. J. FISHER: Which ones?

Mr. COATES: Any of them.

Mr. J. FISHER: No. Mr. Field, you might know the United Kingdom figures.

Mr. FIELD: I think the last time I saw it, the grant by the British government to the British Travel and Holiday association was something like $2 million. The B.T.A. does all the advertising, and I think the B.T.A. budget at that time was something around $3½ million.

Mr. COATES: But as Mr. Fisher pointed out, you people want to be kept apart from any advertising.

Mr. J. FISHER: Yes, we are a service organization.

Mr. COATES: Providing better service for the tourists in Canada?

Mr. J. FISHER: Yes. Now, there are some precedents in provincial grants to associations. Mr. Mackle represents a joint board and they receive grants from Ontario. In New Brunswick the government instituted a system of sixty-forty donation; in other words, if you have a chamber of commerce in "X" community and want to increase your budget another $1,000, the government will put in 60 per cent of that. We could give you many illustrations in the province of Quebec and throughout Canada of grants which are made.

Mr. FLEMING (*Okanagan-Revelstoke*): Before we adjourned for lunch, we were on the verge of getting further information on the questions I raised in connection with this winter travel program. Could we have those answers?

The CHAIRMAN: Yes. However, before you answer that, you mentioned a minute ago that they had an association in Mexico. I think recently they have lifted that to a ministry of the government.

Mr. J. FISHER: Yes, it is a full ministry of the government now.

Dr. MACKLE: A question was asked before lunch in regard to winter sports. I can speak with some authority on the province of Ontario. I do believe that we will have to upgrade our places so that we can take visitors for a twelve-month period. Of course, that means insulating and putting in heating in many of our resorts. At the present time we are operating twelve or fourteen resorts in northern Ontario during the winter months and deriving a very substantial income from them. But, unfortunately, any person in the tourist business today cannot borrow money from the Industrial Development Bank or our chartered banks or loan or insurance companies, because they do not want to have long-term mortgages, which we call for ten to fifteen years, on any business that consists almost entirely of real estate property. So, therefore, if we hope to accomplish what you suggest, it means our operators have one of two ways of doing it. They can improve their premises out of capital gains, which will be a slow progress. It is either that, or as some have done, go to the black market and borrow money. I can tell you many instances where our operators have paid 25 per cent bonus on their mortgages and 8 per cent interest, and the total paid back in a period of 10 years. I can take you to others who paid as high as 14 per cent interest in order to borrow money to improve their premises. But I will say this, although I do not think any legitimate business in any country should have to resort to that method of financing to improve their premises, I will say that the people who have done that and stuck their neck out a mile are the ones who are getting the large volume of the business. Last year when the business was down 10 per cent in Ontario, those who had the up-to-date accommodation, such as providing baths, hot and cold running water, lined rooms and so forth, did not suffer and, in many cases, increased their business. We are trying to reach that point, but until such time as we can make arrangements with our provincial government to follow the example of Newfoundland, Prince Edward Island, Nova Scotia or Manitoba, it will be a long time before we reach the objective you want. I do think that possibly we should be under the Industrial Development Bank, and allowed to borrow money the same as any small business. Does that answer your question?

Mr. FLEMING (*Okanagan-Revelstoke*): Yes. I gather the thing that is holding back winter recreation is this business of adequate accommodation, and if we did bring them in we could not provide them with accommodation throughout the country at the present time, except in specified areas where this has been a long-range program, and they are specifically promoting winter recreation.

Dr. MACKLE: It goes further than that. I think in some cases we have the cart before the horse. I think we are trying to sell our places of business through different advertising, governmental and private, before we have the accommodation that the people expect when they come over here. That goes for summer and winter. We have found that a person who comes to a place he likes and which has all the conveniences of home he will stay longer; and I think that is why the Americans are not spending as long a time in Canada as they used to. There was a time when a person would go to a summer resort to rough it, but today they do not want to be mildly inconvenienced. The accommodation has to be like home or they will not stay with you. I know of one resort operator who went to borrow money last year at 14 per cent. He had trouble with his painters and plumbers, and he lost the last week in June and the first week in July. He did not finally get into operation until

July 19th, but his dollar-take for 1958, when the average business was down 10 per cent, was 22.91 per cent over his 1957 figure, and that is after he had lost three weeks.

Mr. HERRIDGE: That was as a result of improvements?

Dr. MACKLE: Yes.

Mr. AIKEN: You were about to detail to the committee something about your efforts to lengthen the tourist season, which is something along the same line.

Dr. MACKLE: I will do that now, provided I have answered this question satisfactorily.

Our association went out on the road in 1954 to see what was wrong with the tourist business. It appeared static. We came to the conclusion that the chief reason was due to the fact that 80 per cent of all the industries that I called on were on their holidays between July 15 and August 15. Consequently, we cannot take care of them at that particular period of the holiday season. And, when I say that, I do not mean only resorts but I mean hotels, restaurants, the airlines, railways, and even our roads cannot take care of it. We put on a campaign to convince industry that if they gave their employees the last week in June or the first week in July, or the last two weeks in August, they would have a wider choice and a better holiday for the same or less money. We do not want to adopt the Florida scale of rates. You might think that was a hard thing to sell; it was not, for this reason. Industry is today spending hundreds of millions of dollars in vacation pay, and they are doing it for a purpose. The purpose is that their employees will have a holiday and will come back refreshed, in a better mental and physical condition, to do a better job for the company. They will work better and keep their fingers out of the machinery. Therefore, our argument to them is this: if you continue to have your employees take your holidays at that peak period between July 15 and August 15, they are not going to get the type of holiday they should get for the money they have and, therefore, a high percentage of the money you are spending is not going to accomplish the purpose for which you are spending it. We have been tied up in many cases by trade unionists; they set the holidays. But it is not too difficult to sell industry on that point. In the last three years we have succeeded in removing three million employees from the peak period.

Mr. SLOGAN: In what area?

Dr. MACKLE: In the whole area.

The CHAIRMAN: Of Ontario?

Dr. MACKLE: From Windsor to Quebec City, from Lake Placid to Pittsburgh, to Lansing, Michigan. We are not too happy about the situation because by 1960 approximately 70 per cent of all the male employees in industry today will be senior men. They will be on three weeks holidays or more. Therefore, while we have taken three million off one end seniority has put half a million on the other end by increased holidays. Now, we are still carrying on the campaign and we have just about arrived at the point where trade unionists have gone to industry and said: "Here, we cannot get a good holiday between July 15 and August 15; do you mind if we change it back to the first two weeks in July?" The reason why we have gone to industry is to acquaint them with the facts, so that when trade unionism brings the point up the management will know the answer. Are there any other questions?

Mr. COATES: I would like to know how much effort these different organizations have made to try to convince the six provincial governments who have not passed legislation to assist the tourist industry by passing such legislation. How much effort has been made to try and convince the different governments to pass the necessary legislation?

Dr. MACKLE: I have made three or four speeches in the last few weeks, and I hesitate to get into that because a provincial election is coming up. However, we have been hammering away at it for four or five years. We go to the standing committee and tell them our troubles. They say they are going to appoint a committee, but nothing happens. I hope this does not lose votes for Mr. Frost! However, we do think we are making some progress and I think that when the Ontario government realizes that it has been successful in these other provinces, and when they realize that Manitoba is the only province that has increased its tourist business dollarwise last year, they will take some action.

Mr. COATES: I know, for instance, that Nova Scotia provides—

Dr. MACKLE: I just used Manitoba as an example because they passed a tourist development act with a minority government last November.

Mr. SMITH (*Calgary South*): You seem to be rather political by conscious today.

Dr. MACKLE: I am politically conscious to everything. I have been in politics for over fifty years.

The CHAIRMAN: Is the Ontario budget for the tourist bureau $750,000 for this year?

Dr. MACKLE: No, it is over $1 million this year.

Mr. MCAVITY: That includes the theatres branch.

The CHAIRMAN: It has increased over last year?

Mr. MCAVITY: Yes.

Dr. MACKLE: I went to the manager of the Toronto Board of Trade and although he listened to me I knew by the look on his face he was not paying too much attention. However, they took a census of the industry in Metropolitan Toronto and had 266 replies. In the following year they had 366 replies, and to his amazement 63.1 per cent of all the people employed in these 366 factories were on their holidays the first week in August.

Mr. COATES: Could you give us some idea of the provinces in Canada who are best organized from a facilities point of view?

The CHAIRMAN: What is your question?

Mr. COATES: I would like to know if the facilities provided for tourists in the provinces—

Dr. MACKLE: Do you mean plant facilities?

Mr. COATES: Yes. I am wondering whether these provinces that have legislation assisting the tourist industry are in a better position to handle the tourists than the other provinces?

Dr. MACKLE: I can answer your question this way. Again, I am getting back into politics. We had a grading system in Ontario for thirteen months, and there was more improvement in the standard of our accommodation during that time than in the four or five years previously. Everybody tried to get themselves up to the next star. That was washed out completely. I think you will find that the provinces that have some form of grading system have a better type of accommodation than we have. I do not know whether or not Mr. Fisher will agree with me on that.

Mr. J. FISHER: Of course; four western provinces have a grading system.

Mr. MARTEL: In connection with the question of facilities, improvement of facilities, improvement of property, additions and so forth, you say there was some kind of a rating. Do you have a breakdown of your members; do you have an A-B-C rating?

Dr. MACKLE: No, they have to reach a certain standard to be a member, and that is it.

Mr. MARTEL: Do you think it would be a good idea to give a certain rating?

Dr. MACKLE: You are getting into the individual organizations. We police our own.

Mr. GUNDLOCK: If you did this, it would be a good form of advertising.

Dr. MACKLE: There are certain things we are thinking of doing this fall in order to encourage our operators to upgrade their places, or to give them some sort of recognition for it, but it is difficult when you have not any money with which to do it.

Mr. MCGREGOR: It seems to me that probably there are several different bodies who are interested in this industry, the federal government, the provincial governments, the railways, and others, and all do a certian amount of advertising.

Mr. J. FISHER: Yes, then there are the banks, stores, industrial associations and so on.

Mr. MCGREGOR: What I had in mind was this. In a case like that there must be a lot of overlapping. Would it not be a good thing to have one overall committee to decide what kind of advertising and so on should be put out? Could you not make arrangements with the federal government and other organizations to have a central committee, and have one line of advertising going out? Would that not stop this overlapping business?

Mr. HERRIDGE: I think that was explained to some extent yesterday.

Mr. CÔTÉ: So far as films are concerned, Mr. Chairman, we have a committee for the screening and selecting of films that are used, but not on publicity and general advertising

The CHAIRMAN: Mr. McGregor, you are interested in the coordination of the different interests in the tourist industry?

Mr. MCGREGOR: That is what I have in mind. Could there be any objection to that? Do you think it would help in avoiding the overlapping and so on?

Mr. J. FISHER: Are you referring to advertising?

Mr. MCGREGOR: I am referring to whatever you fellows have to do to get tourists into this country.

The CHAIRMAN: The promotion of the tourist industry.

Mr. SMITH (*Calgary South*): Is not one of the reasons the fact the tourist association, together with the Canadian Government Travel Bureau, plus the railways, do meet annually, and those problems are resolved to some extent?

Mr. J. FISHER: Yes, to some extent.

Mr. MCGREGOR: They have nothing along the line which I have suggested?

Mr. J. FISHER: I do not see how anyone could object to it; it is common sense.

Mr. PAYNE: At our meeting last year, and in keeping with what Mr. McGregor has been asking, specific questions were asked regarding an effort to coordinate the maps provided by industry, the provinces and the federal sources. I am sure the committee felt at that time that if there was coordination it would free a great deal of money for such purposes as assisting associations such as this. Has the deputy minister any additional facts relative to this? He told us that this was discussed at the last tourist association gathering, last November, I believe. Has anything been done in this regard?

Mr. CÔTÉ: Well, the matter has been considered by the federal travel bureau and the other provinces and there has been consultation as to what maps should be published. There was agreement that the federal government

should produce one highway map and that the provinces, knowing exactly what the federal government is doing, are printing their own to match or exemplify what they want in their area. That is as far as it has gone.

The CHAIRMAN: Mr. McGregor, will you pursue your questions further after we return from the vote?

At 3.30 p.m. the committee recessed to attend the House.

At 3.55 p.m. the committee resumed.

The CHAIRMAN: We again have a quorum.

Just prior to the vote in the house, gentlemen, Mr. McGregor and others were concerned about the coordination of the different enterprises, federal, provincial, and others, including hotels, railways, and the associations. The assistant deputy minister is now prepared to give us his ideas.

Mr. CÔTÉ: Mr. Chairman, I was going to suggest that Mr. Field might tell us precisely how the travel bureau coordinates the advertising programs of the federal government with those of the provinces and industry.

Mr. ALAN FIELD (*Director, Canadian Government Travel Bureau*): Well, Mr. Chairman, the coordination that has been achieved in respect of advertising Canadian travel attractions has been done principally by means of the federal-provincial tourist conference.

That conference is called, and has always been called, for the primary purpose of exchanging basic information on travel promotion plans. The bureau presents its schedule of advertising in the nawspapers and magazines, in pretty well completed form, to each of the provinces and transportation companies attending the conference, which is called about the first week in December of each year.

We usually have about 2½ days of discussion but we deal with all kinds of travel matters as well. Principally our discussions revolve around advertising and promotion plans.

The basic document that the bureau provides is its proposed schedule of advertising plans for the coming year which enables each of the major advertisers—the provincial governments and the transportation companies—to take back to their advertising departments and to their advertising agencies information which may help them to plan their programs.

They can at the time of the federal-provincial conference ask any questions they wish of the bureau as to why we have chosen this market rather than that market, and we generally have the market and media advice to enable us to give a pretty complete answer.

During the year the bureau has continuing consultation with advertisers by smaller meetings, by letter, and by telephone in some cases, where they have specific questions to ask us.

We do not ask any of these organizations, be they provincial or transportation companies, to come back to us with their scheduled plans for their advertising. Some of these organizations are in competition with each other and it would not be fair to ask them to reveal to us exactly what it is they plan to do.

But since we are the major advertiser in this respect we feel we can provide basic information which helps them to build their campaigns. If a province or a transportation company feels there is business to be had—for example, in the city of Cleveland, Ohio—they can look at our schedule and they will know the day that the advertising will appear, its size, and whether or not it is a special issue.

They can then ask their agency to place their advertising alongside ours, or they can take the issue following the day that our advertising appears, and so on. They can make, in this way, the best use of their advertising money to supplement what we are doing to promote travel to Canada.

Consultation of this kind goes on pretty much throughout the year following the three-day meeting in Ottawa. In addition to that we have arranged for some informal discussions on advertising at scheduled times in the year.

It has been suggested to us by the Canadian Tourist Association and we are happy to accept it. We have formed a committee which will be meeting here in Ottawa sometime in June to discuss the results to date of the advertising campaign of the various Canadian organizations. At that time we may deal with advance plans for the season of 1960. At that time, also, some of the organizations concerned will ask us for information about the various media used this year, and we hope to be in a position to answer them.

This, in substance, covers pretty well the kind of cooperation which has been achieved in coordination of travel advertising.

The CHAIRMAN: Mr. Field, have you a record in your department of the money spent by each province in advertising?

Mr. FIELD: Yes, sir, we have.

The CHAIRMAN: Do you have it with you?

Mr. FIELD: No, I do not have it here, but I could obtain it from the reports which come in at the time of the federal-provincial tourist conference. We could have it for you probably by tomorrow morning.

Mr. PAYNE: Have you any form of breakdown which would indicate, for instance, the amount spent by the provinces on maps, brochures, and newspapers?

Mr. FIELD: No, I have been dealing here with advertising. But the amount spent by the provinces on publications could also be secured if you wish it. You are asking me about the coordination of advertising?

Mr. PAYNE: We are getting back to the subject we discussed last year, and in view of the great duplication which appears to exist—I do not state this is a dogmatic way—but a motorist in driving from here to the coast will find a fund of maps which duplicate one another and which are positively frightening. Would it be possible in June for you to do a survey so that in another year we may have a report of the savings which could be effected by virtue of having something more standard in the way of a map, and to include the publication, and perhaps produce them for the various sectors, and which might possibly have the objective of commercial as well as other government agencies? My reason for asking this question is that it seems to me that here we have a field where a great deal of money is spent in needless duplication, and the amount of money saved could possibly do tremendous good in the field of effort that the association has presented to us at this time.

Mr. FIELD: Perhaps I could answer the question if I were given one of our United States-Canadian highway maps. I do not know whether you can see this map, Mr. Payne, but here is an example.

Mr. PAYNE: We were provided with one of them yesterday.

Mr. FIELD: This map attempts to give a general Canadian travel highway map to the American inquirer. On one side of the map we have the eastern Canada section, and on the other side, the western Canada portion and part of northern Canada.

To supplement this map, the province of Ontario produces its own large scale map. But the province of Ontario naturally feels that their map should give in the greatest possible detail an outline of the province and the condition of the highways and so on. So they produce their own map for the province of Ontario. Each province does the same. I really do not think, if I may say so, that you could do without any portion of this map work, whether it is from the federal government office or from an individual provincial office.

Mr. PAYNE: I do not question that at all. But what I do question is where you have a provincial map—take Ontario for instance—or covering Alberta province, or covering the province of Ontario, and, at the provincial level, they provide the necessary facilities for printing and so on. Similarly, from the dominion coverage, it is assumed by your bureau. I am concerned about the waste by industry which could be diverted to other more useful and promotional media or means by virtue of having a provincial map for Alberta, or a provincial map for Ontario, with gaps at the bottom for "Esso" for example, or for "Shell oil", or for the province of Alberta, to be handed out through your bureau or by your bureau. This would coordinate lessening the spending on some of this duplication which exists, and which could be diverted to more worthwhile causes.

Mr. FIELD: Surely you mean multiplicity, not duplicity?

Mr. SIMPSON: Is the information in these maps, and in the road map pertaining to the provinces supplied by the province concerned?

Mr. FIELD: You mean the information that is on our highway maps?

Mr. SIMPSON: Yes.

Mr. FIELD: Yes, we keep in constant touch with the provincial highway departments to get any information from them on changes that occur in their construction year. And as we bring out our map every year we incorporate those changes to keep our map up to date.

Mr. SIMPSON: I notice on the province of Saskatchewan map there is shown coming southwest out of Flin Flon, Manitoba, a road which would appear to be an ideal setup for tourists—but in fact it is not so. The road southwest is shown as linked up to the Saskatchewan highway system. It would look to the tourist as if the road was going in one way and coming out the other. The map shows the road as being under construction, but the Saskatchewan government have made it well known to everybody for the last two years that they have no intention of constructing through that area whatsoever. We have been after them repeatedly to do the work on that proposed No. 35 highway, but there is certainly no work whatsoever being done on it over the last four or five years.

Mr. FIELD: I am glad you mentioned it. We will take it up with the highway department.

Mr. SIMPSON: There is a proposed road going west out of Flin Flon into Saskatchewan. If it was put on the map you could carry it down.

The CHAIRMAN: Mr. Field referred to the brief presented this morning, and there are some points in it which the members would like to discuss.

Mr. HERRIDGE: Before you do that, I should like to have an explanation given by the director of the travel bureau. This clearly indicates there is duplication between the federal and provincial activities with respect to the issuing of maps. I am very surprised at Mr. Payne's suggestion that we should try to take the initiative in that respect.

Mr. J. FISHER: We had a committee last year called "Roads and Signs", and it had some discussion with oil companies about trying to get greater standardization. That is a pretty rough road. They do not even have an organization of their own. But it is a thing we are very cognizant of and we will continue to work for it. I still do not know how we can get that money from the C.T.A.

Mr. SIMPSON: The people who issue these maps put their own advertising on them and they will stress a certain area particularly for their own purpose.

The CHAIRMAN: I refer to page 8 of the brief. It came up before the committee before and it was referred to in the house over the last 15 years

to my knowledge. In addition to your advertising and the opening of offices in the United States to promote tourist industry into Canada, there are other questions which I know the members of the committee want to ask you. How long have you been direcor of the travel bureau, Mr. Field?

Mr. Field: I have been director since March, 1957. Prior to that I was manager of the New York office for 7 years.

The CHAIRMAN: What program can you tell the committee that you have in mind as a program of the travel bureau to increase the tourist industry in Canada? What ideas have you to increase the tourist industry for Canada?

Mr. FIELD: I think that any questions relating to that should really be answered by my minister. But we do make recommendations from time to time. However, speaking generally, I believe that the bureau should expand its operations in advertising and in all lines and avenues of promotion work. I think we have done a reasonably good job with the money that has been provided to us. But I would like to see an extension of our advertising year.

Our surveys how that people do not wait always until the spring of the year to plan their vacations. I think there would be considerable advantage in having a year-round advertising program. We know the markets where money could be spent most effectively.

I think the bureau must recommend—and it has been recommending—the opening of more offices in the United States where our major market exists. Once we are reasonably sure we have covered the American market, this great 172 million market in the United States, once we are convinced of that, then I think, as good businessmen, we should turn our attention to other areas where there exists a good potential for travel traffic to Canada.

There is no doubt that there is a growing market for Canada in Europe. If you look at the statistics which are provided to us by the Dominion Bureau of Statistics, you will see that in the last 10 years European traffic to Canada has increased by 300 per cent, and in terms of dollars, it has gone up from $13 million to $39 million.

That is not tremendously large, but it is important money. Canadian carriers, such as Trans-Canada Airlines, have done a lot of pioneer work in developing traffic to Canada from Europe; and I believe that we must look forward to supplementing in a basic way their efforts in Europe.

I would point out, also, Mr. Chairman, that there are other rich markets in Europe which hold a good prospect for Canada. One of them of course is Western Germany where they have the advantage of fewer exchange or currency restrictions.

I believe that we have ultimately to do something about interprovincial travel in Canada. There were some questions asked here in the last two days about what the bureau should be doing. I tried to explain how the bureau's terms of reference have been interpreted over the years where we divide the responsibility with the provinces. Our responsibility in the past has always been interpreted as being that of bringing Americans into Canada, and when they get into Canada it is the responsibility of the provinces and the transportation companies to look after them.

Now I make the point, Mr. Chairman, that the bureau has done a good job for Canada, and that it is an efficient organization. I know that people come from other countries to study our operations. And those members of the committee who have been over to the bureau have expressed some measure of surprise at the kind of efficient machinery that we have there.

In the last two years we have installed all kinds of modern machinery for the handling of mass quantities of mail. We are handling more inquiries than any other national travel office in the world. We handled something like 15,000 inquiries in a single day, and we have reached a peak of efficiency

where we can actually process most of the inquiries within 24 hours. In other words, from the time the inquiry is received in the office, within 24 hours the answer and the literature is on its way back to the United States.

The CHAIRMAN: I think you have covered it as far as you can go, Mr. Field, but if it is not satisfactory to me, I do not think it is to the members. I think we would like to know more about what the department has in mind. We are here as a committee to study the estimates of this department. I think we must be given better answers than that.

Do you have a research team in your travel bureau? The reason I am asking you if you have a research team in this: I will take an illustration; I will take the border at Sarnia—I know that area. In the United States within 300 miles there are more people than live in the whole of Canada.

Do you have a research team to advise you about advertising for that area or for any other areas in the United States, based scientifically?

Mr. FIELD: Yes sir, we have our own research section. It has been recently reorganized under Mr. H. L. Crombie. We have in addition the services of our advertising agencies who do very thorough media analyses. The advertising agencies can tell us the effectiveness of our advertising in any given market in the United States.

Now, we are limited, sir, when we look at a rich market such as the one you have outlined, which is one of the biggest in the United States, or in fact, in the world. We are limited by the amount of money we can spend in that area.

The CHAIRMAN: In other words you are too limited? Let us be frank about it; we want the answers.

Mr. FLEMING (*Okanagan-Revelstoke*): Do not be afraid to tell us what you think.

Mr. FIELD: I think we could spend a great deal more money in advertising promotion in the United States which would bring important sums of money into Canada.

Mr. HERRIDGE: How much do you spend now?

Mr. FIELD: $1½ million for advertising, with an additional $800 thousand for the preparation of publications, films, administration, salaries and so on.

The CHAIRMAN: I wonder if your office could give us the information at this meeting as to the amount that is spent by each province in advertising in promoting the tourist industry?

Mr. FIELD: Yes, we can get that.

Mr. AIKEN: Have you done any work in connection with television advertising?

Mr. FIELD: We have not spent any money on direct advertising, that is, we have not sponsored any commercial shows.

Mr. AIKEN: Would you like to do so?

Mr. FIELD: Yes, sir, I would like to begin here in Canada in a coordinated sponsorship effort with the provinces to help develop interprovincial travel.

The CHAIRMAN: Have you asked them?

Mr. FIELD: Asked whom?

The CHAIRMAN: Have you asked the provinces?

Mr. FIELD: It is to be discussed at the forthcoming federal-provincial tourist conference. We hope to have a proposal from the C.B.C. as to the general makeup of a show which would help to promote interprovincial travel.

Mr. PAYNE: Have you a liaison with the National Film Board?

Mr. FIELD: Oh yes, it is very close. The bureau over the past years has built up a library, as I told you yesterday, of films in the United States which probably has cost in excess of $2 million.

Mr. COATES: Have any members of this committee ever been invited by your bureau to any of the conferences you hold?

Mr. FIELD: Yes, they were invited last year. This came up at a meeting of the standing committee last year—I am not sure as to the number. I think one or two dropped in during the sessions which took place the first week of December.

Mr. PAYNE: Were notifications sent to them?

The CHAIRMAN: Were the members notified?

Mr. FIELD: I am advised that we did send out invitations to the members of this committee to attend the conference.

Mr. COATES: I do not remember receiving one, but I did receive an invitation to go to the New York opening of your travel office there. I think that was the only one I had.

Mr. AIKEN: When was the conference held?

Mr. FIELD: In December.—After consulting with my staff I find that members of the committee did not receive official invitations to attend that conference.

Mr. PAYNE: I do not think they were notified in any way.

Mr. AIKEN: The house was not sitting in any case, in December.

The CHAIRMAN: Mr. Payne asked if the members were asked to attend this conference, and the answer was no.

Mr. PAYNE: Last year in the testimony—it may be an error—but it was my fixed impression, that after considerable questioning a travel bureau office was to be opened late last fall in San Francisco, and was to be organized and ready to go early and well in advance of any tourist demands—what has happened to that function?

Mr. CÔTÉ: The recommendation for the opening of an office of the bureau in San Francisco was made by the Canadian Government Travel Bureau. It was considered by the department and the government as to whether in the 1959-1960 estimates the government would agree to the opening of the office. The government considered the matter and decided in the circumstances the office in San Francisco should not be opened.

Mr. PAYNE: Was it submitted to Treasury Board?

Mr. CÔTÉ: Yes.

Mr. PAYNE: And turned down by Treasury Board?

Mr. CÔTÉ: Yes.

Mr. COATES: Is that the end of this office?

Mr. CÔTÉ: No; only for the 1959-1960 operation.

Mr. FLEMING (*Okanagan-Revelstoke*): As a member from British Columbia and knowing the interest which exists in the province of Alberta, and in view of the statements made in the Canadian Travel Association brief, I will now register my impression that this is a completely incredible decision from the standpoint of anyone who comes from the west coast province or the province of Alberta. We know, if it is not recognized here—and this is no criticism of the gentlemen present—that there is a tremendously developing market in California and that that market is one of the most valuable sources of tourist money we have. I believe that any failure to exploit that is completely short-sighted. I have no hesitation in saying that I feel this recommendation of the

establishment of that office in San Francisco must continue to go forward from this committee until the impression is made upon the government.

From my own experience I can tell you that the most frequent tourists seen on the highways in British Columbia—the greatest number of licence plates—are from California. It is a tremendous market.

If I am correct, I believe it was mentioned in the evidence last year that you have a very limited staff in the office in Los Angeles.

Mr. FIELD: There is one person there who is not a Canadian government travel bureau employee. It is a clerk in the consulate there.

Mr. FLEMING (*Okanagan-Revelstoke*): Who handles 12,400 inquiries?

Mr. FIELD: I think it is on that scale.

Mr. FLEMING (*Okanagan-Revelstoke*): There is only one clerk who is attempting to look after that area?

Mr. COATES: Can you give us any idea of the cost involved in setting up a travel office in San Francisco or in Boston?

Mr. CÔTÉ: It would take $40,000 to establish an office, and it will cost that about every year.

The CHAIRMAN: Mr. Fleming, your statement corroborates what I said yesterday to the effect that the travel bureau has been treated as a "Topsy" ever since it was created.

Mr. HERRIDGE: I want wholeheartedly to support what Mr. Fleming has said.

The CHAIRMAN: All you need to do is to look at the figures over the last fifteen or twenty years which have been appropriated for this travel bureau. They have been expanded year by year, but in very trifling amounts.

Mr. J. FISHER: I have an observation in respect of this. Great Britain has four travel offices in the United States and has an enormous centre in New York.

Mr. FIELD: There are 172 persons employed in the British Information Office in New York City.

The CHAIRMAN: I believe they occupy a whole floor of a building?

Mr. J. FISHER: Yes. How many persons have we in New York?

Mr. FIELD: We have four permanent employees in New York.

Mr. J. FISHER: Mexico has seven travel offices in the United States and 52 consulates.

Mr. COATES: How many consulates have we?

Mr. J. FISHER: Ten consulates in the United States. Japan has four travel offices in North America. West Germany has four in North America. Greece has as many as we have. New Zealand has two, and Switzerland has two in the United States.

The CHAIRMAN: I think that illustrates the point made yesterday about the 80 per cent increase in the Mexican tourist business over the last few years compared to 12 per cent for Canada?

Mr. MCAVITY: The following is the average promotion expenditure per tourist for different areas. This was submitted to the Royal Commission on Canada's Economic Prospects in January, 1956.

Nassau	1952 —	$10.00
Bermuda	1953 —	7.24
Hawaii	1953 —	6.96
France	1953 —	1.86
Jamaica	1953 —	1.41
Great Britain	1953 —	1.23
Netherlands-West Indies	1953 —	0.90
Haiti	1953 —	0.70
Canada	1953 —	0.64
AVERAGE	—	$ 3.45

The above, prepared by Caples Company, appeared in *Advertising Age*, April 5, 1954. Expenditures are based on what the countries spend exclusive of promotion done by transportation facilities serving each area.

It was also very discouraging for us, at least in western Canada, when we heard this office in San Francisco is not to open in this fiscal year. This is a very critical fiscal year for Canada's travel industry. The year 1960 has been selected for a special promotion south of the border. They have a very strong slogan which is being widely publicized, "Travel in the United States in 1960".

I have already heard from one of our large metropolitan convention bureaus, the people who solicit convention business, that three which they thought they had lined up to come to Canada in 1960 have said they are not coming because of the pressure on them to stay in the United States in 1960. This is a very critical year.

On the west coast we are conducting our advertising in the daily newspapers and in a national magazine. Without a sales force on the ground, we are doing a mail order operation. However, I think we must also have a sales force on the ground through such organizations as the chambers of commerce and the service clubs representing Canada in the flesh.

Mr. COATES: I would like these gentlemen to give us their impression as to how valuable a travel office would be in Boston. We have heard about the west, and I am interested in the east.

Mr. MCAVITY: There are more people who came from the maritime provinces living in Boston than there are in the maritime provinces. They go home every year. However an office there would be very valuable indeed.

The CHAIRMAN: How long has the office in New York been open?

Mr. FIELD: I went down there to open it in 1950. It was the first permanent travel office which the Canadian Government Travel Bureau established. The province of Quebec had an office in New York city back as far as 1941.

The CHAIRMAN: In addition to establishing the office, does the manager of that particular office, apart from handing out advertising and seeing people who come in, show films to clubs, groups, and make public appearances?

Mr. FIELD: Yes. He does a good deal of that. I was in New York and I averaged four or five appearances on television or radio throughout the year. I also had many interviews with newspapermen and writers.

The CHAIRMAN: Were those interviews published?

Mr. FIELD: Yes; I recorded something like 368 interviews with newspaper people, magazine people, and television writers in the course of a year.

The CHAIRMAN: What about our offices in Latin America, airline offices and so on? Do we have any literature on Canada in those offices?

Mr. FIELD: Yes, sir.

The CHAIRMAN: Are there any Canadian newspapers?

Mr. FIELD: Yes.

The CHAIRMAN: I have not found any.

Mr. FIELD: We distribute our literature through the Canadian Pacific offices, the Canadian National Railways and the Canadian Pacific Steamship offices all over the world.

Mr. COATES: Naturally I do not want to play down advertising in other countries of the world or the money spent in other countries of the world. However, it is my opinion we still have a great deal of work to do in the United States.

I would think, although I do not know for certain, that we could still get a great deal more per dollar from the United States than we could by spending that dollar in some other country.

The CHAIRMAN: Will you ask Mr. Field if he agrees with you?

Mr. COATES: Do you agree with me?

Mr. FIELD: Yes; I think it is sound business practice to make sure you are getting the most out of the largest and most immediate market before you turn your promotion to other places.

Mr. COATES: Would you agree that if the travel bureau continues on under the present arrangements we will never be able to conquer our major market?

Mr. FIELD: I would say this: I think we could get more travel money spent in Canada if we had more money for promotion purposes. It is a matter of getting a return for what you spend. If you want a grab-bag figure, if you spend $1½ million on advertising in the United States and get 7½ million Americans who spend part of their vacation in Canada, or if we get 750,000 inquiries every year, it might lead to a conclusion that one person in every 10 who comes to Canada writes to us for information. If we spend more money I think we will have more tourists coming into Canada.

The CHAIRMAN: Did you ever make any effort to cooperate with the motion picture business? For instance, a film was made in Hollywood to show in our theatres. Has any effort been made to get some reciprocal arrangement with the United States theatres?

Mr. FIELD: Yes, sir. Until a few years ago there was a fairly good distribution of Canadian travel pictures in the United States.

The CHAIRMAN: I do not mean distribution. What good are they if they are not shown?

Mr. FIELD: I am speaking of actual exhibition in theatres. For the most part, however, these films are short subjects and in the motion picture industry the use of short subjects in United States theatres in recent years has dropped off considerably. As a consequence, our film exhibition in United States theatres has dropped.

Mr. AIKEN: May I point out something which was recently done in Ontario. The province of Ontario has taken the motion picture branch out of Censorship and put it under the Travel and Publicity Branch. The head of that motion picture bureau told me they are trying to get away from the censorship angle. They are cooperating with the suppliers of American films in order to have Ontario travel films shown in the United States. It is an indication that in this one province this problem is being placed under travel and publicity rather than under censorship or treasury.

Mr. COATES: What efforts have been made with the three major television networks in the United States in an endeavour to have films placed in those networks in respect of Canada?

Mr. FIELD: A chart has been tabled which I think reported on television distribution of Canadian films in the United States. I believe we have 70 films currently being shown on television stations in the United States which reach an estimated audience of 60 million. We have an increase over the previous year of 25 per cent in number of screenings. We are spending about $115,000 each year on films—that is in colour and black and white films—for use in television and in our travel film libraries in the United States.

Mr. FLEMING (*Okanagan-Revelstoke*): When I was in New York last November at the Roxy theatre, the show was built around the admission of Alaska as a state. One of the films was entitled "City of Gold", which is, of course, Canadian, and it was used in welcoming in the forty-ninth state.

Also featured were the Royal Canadian Mounted Police, or a facsimile of them, plus the "Shooting of Dan McGrew" which is also Canadian. This Canadian propaganda, if you like, was being used to welcome the forty-ninth state of Alaska. This sort of thing, amusing as it is, is one of the reasons there is a distorted view in the American mind as to who belongs to whom or what is up here. Apparently their education still has a long way to go.

Mr. AIKEN: My wife mentioned to a taxi driver about seeing the Mounties and he said, "Lady, we have our Mounties."

Mr. HERRIDGE: I enjoy the inquisition of the deputy minister and the officials, but I would like to ask a question of these representatives of the Canadian Tourist Association. I think we should get their ideas as much as possible while they are here.

The CHAIRMAN: Would you permit me to ask Mr. Field if he has any direct mailing list in the United States? The reason I am asking that is that I know that in one country south of the United States, where they are apparently very tourist-conscious, and have some original ideas. Actually through their banks, or some sort of association, they are writing to a number of persons in the United States who are retired. They get these names through reliable sources. They suggest to them that they spend their winter, or live, in that particular country. They tell me they are getting a terrific response. Furthermore, if you have an account in a bank in a small town there, and want to go to another larger place, the bank will make reservations for you in the other place. I think that is the sort of thing which develops the tourist industry in any country. In my opinion this department of the goverment, ever since it was formed, has been lacking in ideas.

Mr. HERRIDGE: I was very interested in Mr. Fisher's comments on the potential number of winter tourists which could be brought into Canada if we had propert facilities. I am interested in that, and I know Mr. Fleming is also. We have marvelous ski-jumps in the west, and there are many small places which have wonderful physical features suitable for development in the future. I would like to ask Mr. Fisher this question: I am looking to the future. I am not suggesting this could be done overnight. I think this is of great importance in building up stability in the tourist industry in Canada. What do you think can be done as a result of cooperation between the travel bureau, the provincial travel bureaus and organizations such as yours to promote an appreciation amongst operators of resorts, and so on, of this potential market, and also what can be done to offer guidance with regard to improvement and expansion of winter tourist facilities? Also, what more could be done to make Canadians aware of the opportunities for winter tourism, shall we say, once the facilities are provided? I suggest it is something to be worked at over a period of years.

Mr. J. FISHER: I am certain the potential is there I can cite some very practical illustrations in the Laurentians. A few years ago it was an area of habitant farms. Today it has a business in all four seasons. They have developed it. In Florida we have the same thing in reverse. There was a time in Florida, not many years ago, when hotel operators threw away their keys in the late spring. Today more tourists go to Miami in the summer than in the winter in numbers, although not in spending power; it is a different class of people. However, they went out and built up that trade. They broke down the resistance that it is hot in Miami in the summer. The same thing can happen in Kamloops, the Kootenays, Rossland, or in any other place, if we go at it. It is a question of encouragement in following through and changing the habits.

Three years ago in Quebec city they revived their winter carnival. People said you will not get anybody to come. The sales tax figures indicated that

something like $5,000,000 was brought into the Quebec city area as a result of the promotion of the winter carnival.

Another classic illustration is the city of New York. The New York hotel operators complained that their rate of occupancy went down in the summer because it was said it was too hot. The local hotel people got together and started their summer concerts over a period of years—you cannot do it immediately. Their rate of occupancy has gone up in the summertime. It can be done in other areas of Canada also. It must be done slowly. We have been doing that and have been helping some communities with advice, such as the province of Manitoba. They have a big splurge at one time in the year during the trappers' festival. It was suggested that if they built the biggest paper-mache husby dog that has ever been seen, the biggest Indian and the biggest canoe, people will come up in the summer-time to see the places where the festival was help in the winter. This can be done.

Mr. HERRIDGE: Do you say that an approach like that could be taken over a period of years in cooperation between the Canadian Government Travel Bureau, the provincial travel bureaus and the organizations such as yours?

Mr. J. FISHER: Yes, I think we could be the catalytic agent and, if it is a community in Manitoba that we are trying to help through working with Mr. Field's office and the government of that province, we might get increased and specialized promotion on that project. There are many ways.

Mr. HERRIDGE: Do these areas, cities or regions that have these facilities—the physical features, ski runs and all that—notify your organization of the facilities they have so as to give you an opportunity to advise as to the dollar potential?

Mr. J. FISHER: A great many who are members do this, like the Penatanguishene winter carnival, and other things. Here is another illustration which might prove our contention. Heretofore things closed up in the Muskoka and Haliburton country in the fall; and now, Mr. Aiken, you have extended your season by two or three weeks, or possibly a month because of your colour cavalcades which are sponsored out of Toronto. We have been connected with that and work closely with them.

Mr. MITCHELL: And fish fried in April?

Mr. J. FISHER: Yes, and big fishing trips in the spring. Another thing; when they give a prize for the biggest fish, do not give them a trip to Miami or New York, but a free trip to the Rocky Mountains or Nova Scotia. It all ties in with the "Know Canada Better" program. There are many ways this can be done. One of the greatest tragedies recently in the accommodation industry has been that Canada's big money, apart from our modern hotels, has been moving to Nassau, Jamaica, Florida, and so on. There are tens of millions of dollars of Canadian money invested there.

Mr. HERRIDGE: I have noticed in the States a great ignorance of the hot springs we have in Canada. What is being done in that respect?

Mr. J. FISHER: Would you repeat your question, Mr. Herridge?

Mr. HERRIDGE: I have found a great ignorance amongst Americans in connection with the number of hot springs we have in British Columbia and, particularly, in the Kootenays, of course. Some are publicly owned and some are privately owned, but what is being done in respect to that? I have found Americans very interested in that, and I have had thousands of Americans tell me if they had known that they would have gone there.

Mr. FIELD: In answer to that question, we do not advertise in paid advertisements the hot springs and spas of Canada. We have a good booklet on hot springs in the national parks in connection with our national parks promotion.

Mr. HERRIDGE: We have four hot springs in my constituency, Ainsworth, St. Leon, Nakusp and Halcyon. Have they ever appeared in your booklet?

Mr. FIELD: No, sir. We do receive a booklet from Harrison Hot Springs which we distribute, but we have no booklets on the other places that you mentioned. My suggestion would be that if these places would produce a booklet we will make use of it and distribute it.

Mr. AIKEN: We have had two very good days on this subject and we are coming close to the time when we should adjourn. I would like, if you would permit, Mr. Chairman, to ask Mr. Fisher one closing general question which, I hope, will sum this whole thing up.

The CHAIRMAN: Proceed.

Mr. AIKEN: Mr. Fisher, during the last two days there has been a feeling in the committee, and there have been questions directed in that regard, that the Canadian Government Travel Bureau has not received sufficient attention from government over the years. There has been a feeling that, even regardless of the fact that the provinces are responsible for individual promotion, the staffs of the travel bureau should be raised in the government field to the point where it may be under the supervision of a deputy minister or, perhaps, a separate department of government. I know that is one of the things the chairman has had in mind, and the rest of us are beginning to have that general feeling. Would you care to comment on this subject?

Mr. J. FISHER: Yes, I would and I know our president, Mr. McAvity, who gives his time voluntarily to this organization, would like to comment as well.

During the last three years we have been preaching basically one thing, to try and create an awareness of the importance of tourism to the country's economy and way of life.

Generally speaking, in answer to your question, few governments have given the travel industry its due recognition. Provincially, this has improved a great deal in the last few years. We have now a fully-fledged department in British Columbia, and their conservation and recreation department's chief concern is tourism. In Saskatchewan we have the Department of travel and information which is completely concerned with tourism, except that the minister there is also in charge of the hydro-electric resources. In Manitoba there is a new awareness and the government has encouraged the development of a Manitoba Visitors and Tourist Association. In the province of Ontario there is a fully-fledged Ministery of Travel and Publicity. There is a greater awareness in New Brunswick, in Nova Scotia, Prince Edward Island and in Newfoundland.

It is our thought that the Canadian government must recognize the importance of its travel bureau. This bureau has been very busy, and I agree it should have increased status. I have heard it said that it should be in with Trade and Commerce, and I have heard it said that it should not be in a department concerned with Esquimos and northern affairs. We do not care where it is as long as it gets its full recognition. Whether it has a deputy minister or not is none of our concern, but we do not think it has received sufficient support, status or anything else.

The CHAIRMAN: I wonder if Mr. Aiken would like to ask either Mr. Fisher or someone else what foreign countries have in their governments in the way of ministries or deputy ministers in charge of their travel bureaus?

Mr. J. FISHER: I have not that list with me. However, we could get it for you.

The CHAIRMAN: There are several?

Mr. J. FISHER: Yes. Japan has a ministry of tourism, as well as Spain, Portugal and several other places in the world. Mexico has one. I would like

to give you this quote. It is by Professor L. Dudley Stamp of London University, London, England. It reads as follows:

> Tourism is the most important industry today without any exception whatever. It employs more people and has a larger turnover of money than any other.

Mr. COATES: Could I ask Mr. Field one other question?

The CHAIRMAN: Proceed, Mr. Coates.

Mr. COATES: Will we not fall behind, Mr. Field, if the consideration given to the travel bureau is not increased?

Mr. FIELD: Are you speaking in connection with financial consideration?

Mr. COATES: Financial and all other aspects as well. Will we not lose our market to countries, such as Mexico, which is increasing its spending in this connection? Our main competitor appears to be the United States; will we not lose out to them if we do not give greater attention to our travel bureau?

Mr. CÔTÉ: I think the answer to that, Mr. Coates, is that we believe that unless the budget is enlarged to take account not only of the increased expenses but also to provide for the possibility of increasing our promotional activities, we shall indeed fall behind.

Mr. COATES: In that regard, has the department given any consideration to appointing a deputy minister?

The CHAIRMAN: Well now, Mr. Coates, Mr. Côté could not answer that question. I believe Mr. McAvity would like to make a statement.

Mr. MCAVITY: Just to add to what Mr. Fisher has said, I would like to say this. The government is in business and it is a very competitive business. Coordination is needed between the improvement of plant, the expansion and promotion of advertising and sales effort.

I would also like to say that any increase in status of the travel bureau so far as this association is concerned—and we speak for Canadians, business people who are interested in the travel industry—anything that would tend to produce a more effective final result from Ottawa would be greatly appreciated.

Mr. FLEMING (*Okanagan-Revelstoke*): When we deal with the Canadian Government Travel Bureau we have to remember that in the last two days it has been brought out that a certain proportion of the National Film Board budget and a proportion of the C.B.C. budget is devoted to tourist promotion activity, as well as a certain amount of the National Parks Branch budget. Could you put into evidence either an estimate or firm figures of how much of these extra expenditures actually are directed toward tourist promotion in other branches that work in coordination with other branches?

The travel bureau figures appear to be only one of the federal government's expenditures in this regard, and I would like to know the others; also how much the total is.

Mr. MACKLE: I have one thing I would like to mention, apropos of what Mr. Fisher has said about the province of Quebec. I heard the whole history of that carnival down there. This carnival in Quebec city was the brain child of two men; then they got four men and then went to the government and got financial assistance and an advertising appropriation. It shows how they get along. They are not "asleep at the switch".

We have been advocating that our operators stay open on Thanksgiving Day. Every operator who had his place open last year and the previous year had his place filled to capacity. It meant a difference between profit and loss on the operation for the year.

You have mentioned Florida. The fault does not all lie within what the government does, or does not do. We have our troubles in the business. I am talking about our cross-roads. We cannot get the support from industry that they get in the United States.

In connection with that large hotel they built in Florida, the company that supplied the glass gave them 21 years to pay for it. In Canada you cannot get more than 60 days to pay a glass bill. The last few weeks I have been in communication with the governors of North and South Carolina and the governor of Virginia and I have received nice letters from them. There is a field there which has not been developed. We must realize that those states, particularly the New England states and the northern part of the United States, are becoming highly industrialized.

They close the schools around June 10 and return about August 20. There is a very fertile field for us to cultivate. Florida sells our people on going there because it is warmer in winter; we can sell them on the idea of coming to Canada because it is cooler in summer. That is the season of the year when our operators can handle all the people that want to come. Our plants at that season are working at about 20 per cent of their normal occupancy. However, we need funds to do this work.

We have approached the Ontario government and laid out plans; we are receiving some encouragement.

Gentlemen, I am going to throw this out for what it is worth. I do not want Mr. Field to think that I am critical of any travel agency or bureau at all. When I have travelled through the country I have often sat down and discussed this matter. I have spoken to groups of 10, 20, 40 or 100 people. I will speak to anyone who will stand still on the street and listen to me. I even mix among the policemen and get them talking.

Mr. AIKEN: I am sure that our reporters will admit that our tourist promotion people are fast talkers!

Mr. MACKLE: In our business we have to be fast talkers.

Mr. HERRIDGE: You would make a good member of parliament!

Mr. MACKLE: Do not wish that on me.

Gentlemen, the thing we have to consider is this. Are we as provincial travel bureaus and federal travel bureaus getting our message across to the masses of the people in all our advertising, in our magazines and in our newspapers? Are we getting down into the grass roots? I will take you to Youngstown, Ohio and show you a man who works in the steel mills and earns $242.42 for ten days after all deductions. That is where the money is today. I do not think all our advertising is getting to that particular type of person. They do not read it, and I will tell you why. I was approached by a large corporation in Canada some time ago. I had several meetings with them. Their idea was to equip a trailer with a motion picture machine and films of different sections of Ontario. They asked me if I would take that into the States and make arrangements to show the films at high schools, clubs, garden parties and so on, and at the same time draw the people around and hand them out folders about the province of Ontario. They did not go through with it, but I still think an idea such as that can get our message across to the rank and file people who have the money to spend on a family vacation. So far as the top brass of industry is concerned, they are not coming today to the summer resorts and staying for a month; they are touring Europe, Mexico and Asia. Our business has to come from the wage earner; he is the big spender. He is not reading the brochures, like the top brass. I am not being critical of any department; I am just throwing it out as a suggestion. I do think it has some small quantity of merit.

The CHAIRMAN: They all have automobiles and our tourist industry has developed mainly on rubber.

Mr. MCGREGOR: Would it not follow that some kind of organization should be set up to go into this?

The CHAIRMAN: Mr. McGregor, I think I must agree that we have hardly scratched the surface of some of the most important aspects of this development of the travel bureau. I think, as has been brought out here several times, that coordination is so important, and now we have associations claiming that they could do a better job than somebody else, and we have provincial organizations. Personally, I do not think we have had enough evidence. The importance of the subject is so great that I do not know whether we should adjourn without further considering or giving further thought to this.

I think this is a most important part of our economy, the tourist industry. I have always said so.

Let us not pass over the item without giving it the full treatment. That is what we are set up to do. You have done a good job previously, and I hope that you will leave the item open and let us get our teeth into this thing this time.

Mr. COATES: Mr. Chairman, do you think it would be possible to have the minister here?

The CHAIRMAN: I agree that the minister ought to be here for one meeting. I think it is important because the committee is entitled to know government policy. We do not expect him to reveal what they particularly have in mind. However, I think it would have been a good idea if he could have been here today. Mind you, he will read the evidence, he has lots of experts here to advise him on the important points, and he cannot be in two places at once. It would be a very fine gesture if he should be present for one meeting, and I think with your approval—and I know you are all seriously considering the importance of this tourist industry—that you will leave the item open and have another one or two meetings, if necessary.

Mr. COATES: With the minister present?

The CHAIRMAN: I think he should be here, and I am sure he will be, because I know his feelings about the tourist industry.

Mr. FLEMING (*Okanagan-Revelstoke*): We are getting to the point where we need him here.

Mr. CÔTÉ: May I suggest that you leave this item open, and I will pass this message to the minister?

You requested, Mr. Chairman, a few moments ago the figures of provincial expenditures on travel promotion. I have the figures here which were provided the federal-provincial tourist conference by each province on advertising, be it newspapers, magazines, literature or what have you.

These are for 1958, and the expenditures proposed for 1959. I would like to table that now if you agree.

Agreed.

The CHAIRMAN: That will be printed in our proceedings.

PROVINCIAL EXPENDITURES ON TRAVEL PROMOTION PROVIDED AT THE FEDERAL-PROVINCIAL TOURIST CONFERENCE

Province	Advertising 1958		Literature 1958	Proposed Advertising 1959	
Newfoundland			$ 42,000		
Prince Edward Island	Newspapers	$ 10,000	30,000	Same	
	Magazines	5,000			
Nova Scotia	Newspapers	34,689	100,000	Expected increase	
	Magazines	56,280			
	Other media	5,838			
New Brunswick	Newspapers	40,000	150,000	Expected increase	
	Magazines	87,000			
Quebec	Newspapers	108,748	278,000	Newspapers	$130,779
	Magazines	112,625		Magazines	108,409
Ontario	Magazines	225,000	300,000	Magazines	275,000
	Newspapers	75,000		Newspapers	125,000
	Other media	35,000		Other media	50,000
	Radio	20,000			
Manitoba	Magazines	40,016	100,000	Magazines	40,000
	Newspapers	28,457		Newspapers	25,000
	Other	2,340		Other	3,000
Saskatchewan	Magazines	8,500	50,000	Magazines	14,500
	Newspapers	3,500		Newspapers	5,000
	Other media	500		Other media	1,000
Alberta	Magazines	15,000	65,000	Same as 1958	
	Newspapers	7,000			
	Other	3,000			
British Columbia	Magazines	54,000	90,000	Magazines	35,000
	Newspapers	70,000		Newspapers	1,500
	Other	22,000		Other media	12,500

(British Columbia expenditures in 1958 enlarged for Centennial Celebration).

The CHAIRMAN: Before we adjourn, I know some would like to express their appreciation.

Mr. AIKEN: Yes, I for one, Mr. Chairman, would like very much to express the appreciation of the committee to Mr. McAvity, Mr. Fisher, and Dr. Mackle for appearing here, and also to the witnesses who were here yesterday.

This year, I think, in planning the persons who were to be asked to give evidence we were trying to keep to national organizations. In future it might be possible that representatives from east and west might want to come and give evidence. Mr. Fleming and I, on thinking it over, when considering the people to be asked, considered national organizations or those who were close by, who could represent the industries. I think it should be left open and in another year we might invite provincial organizations, if they desire to appear.

Mr. HERRIDGE: Mr. Chairman, I want to endorse what has been said with respect to the contribution the witnesses have made and the information the committee has in hand as a result of this meeting.

The CHAIRMAN: Thank you very much. I know on behalf of the committee I can say that they have been very modest in their expressions. You, gentlemen, have made a marvellous contribution to this committee, and we appreciate your being here.

The meeting is adjourned until tomorrow, at three o'clock, when we promised Mr. Argue that we would take up the item about the National Museum of Canada. It was agreed that we would have to meet in the afternoon. Mr. Argue was put on the committee, I think, for that purpose.

The meeting is adjourned then, until three o'clock tomorrow.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 35

RECEIVED
JUN 22 1959

WEDNESDAY, JUNE 10, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources; Mr. R. G. Robertson, Deputy Minister; Mr. E. A. Côté, Assistant Deputy Minister; Mr. L. S. Russell, Director, Natural History Branch, and Mr. W. E. Taylor, Archaeologist, Human History Branch, both of the National Museum of Canada.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21457-7—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Argue,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

WEDNESDAY, June 10, 1959.
(46)

The Standing Committee on Mines, Forests and Waters met at 3.25 o'clock p.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs Argue, Cadieu, Coates, Fleming (*Okanagan-Revelstoke*), Martineau, McFarlane, McGregor, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen and Slogan. (11)

In attendance; of the Department of Northern Affairs and National Resources: The Honourable Alvin Hamilton, Minister; E. A. Côté, Assistant Deputy Minister; G. M. Carty, Chief Administrative Officer; M. A. Currie and I. G. Imrie, Administrative Officers; and L. S. Russell, Director, Natural History Branch, and W. E. Taylor, Archaeologist, Human History Branch, both of the National Museum of Canada.

The Chairman stated that there was a deficiency of certain of the printed proceedings of the Committee relating to the consideration of the estimates of the Dominion Coal Board and the Department of Mines and Technical Surveys.

It was thereupon moved by Mr. Coates, seconded by Mr. Muir (*Cape Breton North and Victoria*), and *Resolved*,—That, to take care of a deficiency of certain issues of the Committee's proceedings, there be printed in English 100 additional copies of Issue No. 11 and 250 additional copies of Issue No. 25.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

Continuing on Item 293 relating to the Canadian Government Travel Bureau, the Minister made a statement of the operations of the said travel bureau in relation to the tourist industry in Canada.

Further consideration of the said item was deferred until 11.00 o'clock a.m. on Monday, June 15, 1959.

Item 292 relating to the National Museum of Canada was called. The Minister made a statement on the responsibilities and operation of the said museum. Questions arising therefrom were asked of the Minister and his officials. Questions were also asked of Mr. Russell and other officials on the details of services covered by the said item.

The Chairman spoke of plans for a trip by the Committee to the Yukon and to part of the Northwest Territories, which had been discussed by members of the Committee of all parties with a view to members being given an opportunity of seeing on the ground projects, both completed and under way, which related to the estimates of the department.

On motion of Mr. Coates, seconded by Mr. Argue, *Resolved* (unanimously), —That the Committee are in favour of making a trip to the Yukon and part of the Northwest Territories, details for which are to be worked out by the Committee.

At 5.25 o'clock p.m. the Committee adjourned until 9.30 o'clock a.m. on Thursday, June 11, 1959.

Eric H. Jones,
Clerk of the Committee.

21457-7—1½

EVIDENCE

WEDNESDAY, June 10, 1959.
3.25 p.m.

The CHAIRMAN: Gentlemen, we have a quorum. I am sorry we are late in starting. We have a deficiency of printings of the committee's proceedings on the estimates of the Department of Mines and Technical Surveys and the Dominion Coal Board. Printing No. 25, comprising the report of the committee to the house on the above-mentioned estimates, and printing No. 11, covering discussion of the coal board estimates are exhausted. All other printings are in reasonable supply and no additional copies of them are likely to be required to be printed. The committee had ordered to be printed 750 copies of its proceedings on those estimates. I suggest that the committee order a further moderate quantity of these two printings. Would someone move that we have printed, say, 100 additional copies of issue No. 11 and 250 additional copies of issue No. 25?

So moved by Mr. Coates, seconded by Mr. Muir (*Cape Breton North and Victoria*), and agreed.

The CHAIRMAN: We will today take up item 292 concerning the National Museum of Canada. This meeting is specially held today at the request of Mr. Argue, or at least we have endeavoured to accommodate him in view of the fact that he is leaving at the end of the week on other business. We are very glad to accommodate you, Mr. Argue.

Before we go into item 292—yesterday the committee were anxious that the minister attend and answer questions relative to the tourist bureau on item 293. Perhaps the minister may make a statement on this now.

Hon. ALVIN HAMILTON (*Minister of Northern Affairs and National Resources*): I gather from the press accounts, which is all I have heard on this, that the question asked was why did we not go further with the office at San Francisco last year, as we had in our plans from the previous year.

Were there other questions?

The CHAIRMAN: They wanted you to answer questions regarding policy and justification for the existence of the Canadian Government Travel Bureau.

Mr. HAMILTON (*Qu'Appelle*): I will start off this way. The Canadian Government Travel Bureau under its present terms of reference, as set by government policy, is only allowed to advertise Canada in general in the United States. The purpose of this policy is to attract United States tourists to Canada. I understand that there was some criticism in the committee on the subject of the travel bureau not advertising among Canadians in order to encourage Canadians to travel in Canada.

At the present time each of the provinces has some form of travel bureau or agency and they are held responsible under the constitutional set-up for advocating attractions in their province to other Canadians.

I think a fair statement of the whole situation would be as follows. Certainly, in our department we are not content with the amount of money being spent on our part of the bargain now in respect of the advertising in the United States. I think the provinces could also do more in advertising their respective province to other Canadians as well as Americans. This summary

of the situation is a little brief both on the federal government and the provinces. I think it comes down to the fact that the general policy of each of the provinces and the federal government is the tendency to put first things first.

In the minds of the policy makers the tourist industry has not yet been appreciated as a potential revenue maker for the country as a whole. I think the persons working in departments across the country and at the federal level here certainly are putting forth the best that they know how for us to spend what we think would be a satisfactory amount on advertising.

This type of pressure has been put forward. We were faced last year, as you all know, with the fact that there was a sizable deficit. Every effort was made in the budget to keep this deficit down to a proportion which would be overcome in a short space of time. I support that policy in the interest of the fiscal needs of the country.

At the same time, however, I would pledge myself and my department to do everything we can to bring the needs of the tourist industry before the federal government.

The second thing I would like to say is that some of us are beginning to conclude that just advertising is not enough for a national policy on the tourist industry. We will have to go beyond that. We will have to go beyond it in seeing what we can do to assist the industry in developing plans to handle the flow of tourists both Canadians and outsiders.

We will have to take a brand new look at the type of things the governments are doing. In this case, I previously suggested under the national parks vote that I think a great deal of the pressure which is on the parks now to provide recreational services, for which many of the parks never were intended and are not really suitable, could be eased if we could work out with the provinces some sort of a concerted program of setting aside recreational areas. These recreational areas would be for the primary purpose of advancing recreation within the reach of the large urban population of Canada.

These urban populations are bound to grow and, in the industrialized type of life we have in Canada, it is absolutely mandatory from a mental and physical health point of view that we have recreational areas at reasonable distances from these urban areas.

The second reason for suggesting recreational areas as a type of thing which the provinces and the federal governments could look at is that the standards required by custom in the provincial parks and, by law, in the national parks would not have to be maintained. The limitations imposed upon the national parks branch of my department are such that there is a heavy expenditure of money to keep them at the standard required in a national park. These standards would not be necessary in a recreational area. It would not be necessary to set aside the resources of the area for exemption for use by the general public, and you could work out more freely and more fully a better multiple use of all the resources of these particular areas.

I could give another reason why we should have these recreational areas, to cover the needs of the travelling public away from home. In the United States and Canada there are people with very moderate incomes taking to the road with their boats on the tops of their cars or on trailers behind their cars. This trend is bound to multiply in Canada several times over the next few years. Personally, I believe that this trend has become very apparent in the United States in the last four years and could be utilized by Canadians as an additional attraction for encouraging tourists who come to Canada, because boating associated with and separate from fishing is probably the newest and biggest force in the tourist business.

Now I could go on and name other things that could be done by the national government to help in the drive to build up the tourist industry in Canada. But I think I have said enough to make my general thinking clear. However I would like to conclude with these words: Taking in consideration the government's fiscal needs for some years ahead it is obvious that we are going to have to take advantage of the situation if we are going to help balance our budget and to make the tourist trade a net revenue producer for the people of Canada as a whole. This is one place where a small expenditure of money would give sizeable returns to the economy.

At the present time we are running a deficit on the tourist industry with the United States and other countries of about $160 million a year. Years ago there used to be a surplus. But there is no use quarrelling with the fact that Canadians are going to Florida, California, Nevada, and other states in the union for the winter. This is a very natural phenomenon. Just as we go to some place in the south for a little warmer weather in winter time, so it is only natural, if we handle this thing right, to expect that the great rank and file of the United States would come in their millions to this country if we could provide them with cool lakes, rivers, and forests to visit in the summer months.

Therefore, from a strategic point of view, the tourist industry would help us balance this item in trade and at the same time help us physically here at the national government level as well as at the provincial and local government levels.

I think that is a sufficient statement of our intention to take advantage of the situation and to achieve the ends which the committee has in mind.

Now, in relation to the individual question about the San Francisco office—

The CHAIRMAN: I wonder, Mr. Hamilton, if questions like that, and others, could be asked of you if and when you would be good enough to appear at your convenience next week, because I think some members of the committee would disagree with what you have said today. I hope they do. That is the purpose of the committee.

Would you be available next week if we set a day, perhaps Monday or Tuesday?

Mr. HAMILTON (*Qu'Appelle*): I would try.

The CHAIRMAN: The members have expressed the hope that you would be present for one meeting, and we will make available to you Monday or Tuesday, whichever day is suitable. The meetings on Monday and Tuesday will be at 11 o'clock. Perhaps Tuesday at 11 would be satisfactory?

Mr. HAMILTON (*Qu'Appelle*): There is a cabinet meeting on that day.

The CHAIRMAN: What about Monday? Would Monday be all right?

Mr. HAMILTON (*Qu'Appelle*): Yes.

The CHAIRMAN: Very well. We shall set aside Monday morning at 11 o'clock gentlemen. Now, we are here to discuss item 292, and it has been the practice of our committee in discussing divisions of a department, for the minister to make a statement. So I shall now ask the minister to make his statement on the National Museum of Canada, item 292 in the estimates.

NATIONAL MUSEUM OF CANADA

Item 292. Administration, Operation and Maintenance $675,776

Mr. HAMILTON (*Qu'Appelle*): The National Museum of Canada is one of the oldest and best scientific institutions in this country. Over the years it has brought distinction to Canada, through the work of such distinguished men as Sir Francis Knowles, our first physical anthropologist; Harlan I. Smith, our first

archaeologist; Edward Sapir, an outstanding figure in Canadian anthropology; F. W. Waugh, a distinguished ethnologist; R. M. Anderson, for many years chief biologist of the national museum.

These are names that are honoured in their own particular fields. Better known perhaps to the public at large is the work of P. A. Taverner, who published the classic Birds of Canada, which has gone through so many editions; Diamond Jenness, best known for his monumental work The Indians of Canada, and Marius Barbeau, who has done so much to preserve the native folk-lore of Canada.

The growing importance attached to the work of the national museum can be illustrated by a simple comparison. In 1951-52 when the Massey Commission reported on the museum, its total budget was $229,000. For 1959-60 we are budgeting for no less than $675,000, a threefold increase. Over the years the museum has done great work regarding the zoology and botany of Canada and the early peoples of this country, their traditions, customs and habits.

Throughout its history, the emphasis has shifted back and forth from the natural history to the human history side, depending for the most part on the availability of outstanding men and women in the various scientific disciplines concerned.

For example, during the 1920's and 1930's the anthropological side of the museum was generally stronger. This condition persisted until about the time of world war II. Then, because of a number of retirements and deaths among senior staff, the natural history side seemed to surge ahead. But at all times an effort has been made to maintain a balance between the two important areas of the museum's work by seeking out the best available professional staff.

On balance, the museum's reputation among world scientists rests more on its anthropological work over the years than on its biological work.

Another area in which the museum has won world-wide recognition is in vertebrate palaeontology. And here I should acknowledge the museum's debt to the Geological Survey of Canada, whose scientific staff over the years have collected valuable museum specimens during the course of their geological field work.

As hon. members know, for many years the Geological Survey has occupied space in the Victoria Museum building. With the moving of the geological survey and the national gallery to new quarters, this year, the museum will fully occupy the building for the first time since it was built in 1910. At present the museum occupies only about a third of the building. With additional space the museum will be faced with a large problem of redeployment.

And here I can say that plans are fairly well advanced on both the human history and natural history side of the building. Apart altogether from the research and purely scientific work done by its staff, the museum carries out a very important educational function. One has only to glance at the impressive lists in the department's annual report to see the diversity of its many publications of scientific and popular interest.

Increasing emphasis is also being placed on such educational activities as special temporary exhibits, lecture series and folk-loric concerts. Then, too, guided tours and the provision of special information to teachers, school children and others are continuing an imprtant educational service.

The museum's primary function is, of course, the collection and exhibition of scientific specimens of all kinds. It's natural history study collections are very large, containing for example about 333,000 botanical specimens in the national herbarium; about 25,000 specimens of mammals; about 44,000 specimens of birds; about 14,000 specimens of amphibians, fishes and reptiles; about 190,000 specimens of invertabrates; about 5,000 specimens of vertabrate fossils.

On the human history side the collections are also large: About 600,000 archaeological specimens; about 350,000 physical anthropology specimens; about 25,000 ethnological specimens; about 14,000 recordings of folk music.

The task before the museum now is to make available to Canadians throughout Canada, as well as to visitors, this vast amount of knowledge of Canada in the fields of natural and human history.

Museums can have a dynamic influence on the people; they can learn a lot about their country, and can thus learn more real reasons to understand it and to be proud of it and of the achievements of their forbearers. It has still much to do in carrying out one of its main functions and that is the education of the people of this country in connection with its natural and human history. At the present time there has been a very significant and satisfactory start on this program but, as in the case of the national art gallery, I think it is necessary for us to carry the learning of this country into all the main areas of Canada. This is not an easy job, and the only reason I suggest more has to be done and that we have to face up to these difficulties is that if we are going to make this truly a national museum, then we have to carry it to the people rather than carry the people to the museum.

The CHAIRMAN: Thank you, Mr. Minister. Gentlemen, we have also with us this afternoon Mr. L. S. Russell, the director of the Natural History Branch and Mr. W. E. Taylor, archeologist of the Human History Branch. I should mention also that Mr. Robertson, the deputy minister and Mr. Côté, the assistant deputy minister are present.

Mr. ARGUE: Mr. Chairman, the Massey Commission made a number of recommendations about Canada's museum and about the need for a historical museum, as well as other recommendations. I wonder if the person who is answering would care to outline in general what has happened to the recommendations, how they have been dealt with, those that have been started and those that have been fulfilled.

Mr. HAMILTON (*Qu'Appelle*): The assistant deputy minister, Mr. Côté, is in charge of the museum and as he is more familiar with it, perhaps he would answer your question.

Mr. E. A. CÔTÉ (*Assistant Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, a few years ago the then government examined this matter in the light of the recommendations of the Massey Commission report. It considered the first recommendation that was made, namely the making available of more space for the National Museum of Canada. As members of this committee know, the Victoria Museum building, one of the largest edifices in Ottawa at the time, was built in 1910 for the National Museum of Canada. The National Museum has never, through force of circumstances, fully occupied that building. Parliament itself required the use of that building after the destruction of the centre block. The first world war intervened as well. As a result of a number of circumstances which came about, the National Museum never did fully occupy the building.

The Massey Commission report recommended that new premises be found for the National Gallery and the Geological Survey. This has been put in train over the past few years and this summer the Geological Survey of Canada moves from the Victoria Museum building to new premises.

Early next year the National Gallery moves from the Victoria Memorial building to new premises and, therefore, that part of the Massey Commission's recommendations are being fulfilled as to making more space available to the National Museum of Canada.

Another recommendation of the Massey Commission was that more funds should be made available to the National Museum. I think the minister has indicated this afternoon that since the time that the royal commission

report was written, when the museums allocation of funds was of the ordrer of $222,000, it has reached the point where today the funds are of the order of $675,000. A couple of years ago the government, looking at the matter, wondered whether the time had not come to implement further the recommendations of the Massey Commission for the enhancing of the status of the museum and whether the time had not come for the creation of a Canadian museum of history or a Canadian historical museum. The decision was that the status of the director should be enhanced from that of a division chief to a director of a branch, and thereby putting him more akin to the level of the Dominion Archivist, although not quite to that level, but a step in that direction.

The then government also decided that there should be created within the National Museum two branches, one of human history and one of natural history, and that the recommendations of the Massey Commission report should be put in train in this matter.

Mr. Chairman, briefly those are the actions that have been taken since the report was made.

Mr. ARGUE: What was done by the previous government to set in train the division of this responsibility? Was not a bill introduced into the house at one stage?

Mr. CÔTÉ: That is correct.

Mr. ARGUE: Would you tell the committee what happened to the bill?

Mr. CÔTÉ: The bill was not passed by the house, Mr. Chairman. I believe there was a technicality because the appropriate resolution had not been introduced and the bill was not carried out at the session.

The CHAIRMAN: What year was that?

Mr. CÔTÉ: I believe it was 1957, sir.

Mr. ARGUE: Could the committee be told on what legal basis the museum is now administered and operating?

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): According to the advice at the time from the Department of Justice it was not necessary to introduce legislation to effect the division. The Department of Justice advised this could be done as an administrative matter within the power of the government, with regard to administration arrangement.

Mr. ARGUE: What was the date of that opinion?

Mr. ROBERTSON: I have not it here.

Mr. ARGUE: Or the approximate time? It was prior to the introduction of the legislation?

Mr. ROBERTSON: It was prior to the introduction of the bill, but the government decided as a matter of policy that it would be preferable to have legislation, and the point I was trying to make was that according to the advice of the Department of Justice it was not legally necessary to have legislation and, therefore, the present position rests on the advice that legislation is not necessary to effect this; it can be done under the general powers of administrative action.

Mr. ARGUE: This was an opinion of the Department of Justice. I do not think anyone will argue that a museum is operated on the basis of the opinion of the Department of Justice, and the opinion of the Department of Justice must have been based on some legal entity.

Mr. ROBERTSON: Yes.

Mr. ARGUE: What is the legal basis of the operation of the museum? That was my question.

Mr. ROBERTSON: I would have to get the detail from the Department of Justice.

Mr. ARGUE: Perhaps the minister could tell the committee the legal or statutory basis for the operation of the museum.

Mr. CÔTÉ: The legal or statutory basis for the operation of the museum is in the Department of Northern Affairs and National Resources Act. I have not the section immediately at hand; I think it is section 7 or 8, and it directs the minister to accumulate and obtain all necessary information in order that the minister can afford to the people of Canada a full and complete knowledge of the palæontology, botany, archæology, ethnology, fauna and flora of Canada.

Mr. ARGUE: Mr. Côté's recollection is relatively accurate. As I understand it the legal basis is section 9 of chapter 4 of the Statutes of Canada, 1953-54 which reads as follows:

> The minister has the control, management and administration of the National Museum of Canada, and shall collect, classify and arrange for exhibition in the museum of such specimens as are necessary to afford complete and exact knowledge of the geology, mineralogy, palæontology, archæology, ethnolgy and fauna and flora of Canada.

I may be mistaken, but is not this in the Statutes of Canada the total legal existence of the museum?

Mr. CÔTÉ: I think that is substantially correct, Mr. Chairman.

Mr ARGUE: In view of the minister's comprehensive statement as to the purpose of the museum, the desire of the minister and of the government to see that more knowledge in this field is accumulated, and that the people of this country are educated in regard to our history, so that they can become more conscious of the ancestry and of the history of our nation, does the minister not feel it would be more acceptable and a better, more business-like arrangement if he and his department could give consideration to bringing in a comprehensive act that would set out the objectives of the National Museum, the objectives of government policy, as stated by the minister—with which I am not quarrelling—so that the foundation, the legal foundation of the museum may be in more exact, specific and comprehensive terms?

I think one could argue the minister's statement this afternoon is a very, very generous interpretation of the legal powers created in this section; and I am not putting that forward as a critical suggestion at all.

The minister said, "We have a comprehensive policy", but my suggestion is, the legal basis for the operation of the museum, while it may have been adequate at one time is most inadequate and most unacceptable at this time.

Mr. HAMILTON (*Qu'Appelle*): I have no hesitation in saying the idea has often passed through my mind. I did read about a bill sent in 1957 to set up the two museums under a statutory basis, which seemed to me to be a good idea, but it was unfortunate they slipped up on a technicality. I would certainly say that I would be glad to consider that idea.

Mr. ARGUE: I wonder if while the minister is considering it—and I think this is the natural question—that he would consider then, as I think that he would have to, dividing the museum in a legal way into the two obvious divisions into which it now falls? In other words, such a comprehensive act would surely carry into effect in a legal way, or in a more comprehensive way, the recommendations of the Massey Commission as to the setting up of the Canadian museum of natural history?

Mr. HAMILTON (*Qu'Appelle*): Yes. I think, if an act was set up, it certainly would set up the divisions of human history and natural history. I would like to suggest—speaking now, without too much reflection—there are other things lacking: we have not a civil aviation museum in Canada at the present time. We do have the War Museum. I think there is a good deal of merit in taking a look at the War Museum and the Human History and

Natural History branches of the present National Museum, and the necessity for an aviation museum; and seeing if it could not be worked into a comprehensive act that would cover all of them.

Mr. ARGUE: Mr. Chairman, apparently the museum, for administrative purposes, has been divided into two branches. I wonder if we can be given, in some detail, the way the moneys are divided between the two branches, the way the personnel are divided between the two branches, and so on?

In the details of the estimates everything is lumped together, so it is impossible to say what sum of money is used by each branch, the number of personnel, the qualifications of the various personnel, and so on.

Mr. CÔTÉ: Mr. Chairman, I think I can answer that question.

The Natural History Branch has 21 employees, excluding three on the director's staff; or a total of 24.

The Human History Branch has 17 members, excluding three on the director's staff; or a total of 20.

There are six persons in the National War Museum, attached for administrative purposes to the Human History branch.

There are 26 other persons employed seasonally. So that the total of persons—

Mr. ARGUE: Are they employed now—excuse me—are the 26 employed now; is this the season, or will they be employed later on?

Mr. CÔTÉ: This is the season.

Mr. ARGUE: They are now employed?

Mr. CÔTÉ: Not all of them, but I should think the majority, nearly all of them now.

This makes a total for the National Museum of Canada, all told, in position, of 105 positions, including six for the War Museum. That is the total number of positions on the staff of both museums and the War Museum.

So far as the estimates are concerned, Mr. Chairman, I think I could give you the figures for 1957-58, 1958-59, 1959-60, and the amounts allocated to each branch.

In 1957 and 1958 the Natural History Branch was allocated $205,000. I do not think the committee wants it down to the last cent?

Mr. ARGUE: No.

Mr. CÔTÉ: The Human History Branch, $146,000; and the common services, $99,000; with the War Museum, which amount was then included in the Department of National Defence estimates, under which the War Museum was to be found, $27,000, in round numbers.

Mr. Chairman, at this point, however, I should like to go back and correct an error in personnel, because I am sure the committee members, by this time, will have added up those figures and found this does not add up to 105 persons.

I omitted 29 persons being employed in common services, which are the services of display, the educational service, photography, library, and mechanical section, as well as the administration section, which serves both branches of the museum.

Continuing then, the figures for 1958-59: the Natural History Branch's estimates amounted to $251,000.

The Human History Branch, $236,000. The common services, $102,000; and the War Museum, $28,000.

In 1959-1960 the breakdown between the services is as follows: Natural History, $265,000; Human History, $256,000; common services, $119,000 and the War Museum, $34,000.

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NATIONAL MUSEUMS OF CANADA

DEPUTY MINISTER

MUSEUM OF NATURAL HISTORY

MNH 1	Director	RUSSELL, L.S., Dr	
MNH 2	C 4	JETTE, Miss M (fb/S3)	
MNH 3	C 2	FOISY, Miss G.I.	

ZOOLOGY SECTION

MNH 4	B 5	BANFIELD, A.W.F.	
MNH 5	B 4	GODFREY, W.E.	
MNH 6	B 3	CAMERON, A.W.	
MNH 7	B 3	BOUSFIELD, E.L.	
MNH 8	B 4	LANGSTON, W.Jr.	(fb/B3)
MNH 9	B 3		
MNH 10	B 2	McALLISTER, D.E.	(fb/B1)
MNH 42	B 1		
MNH 11	T 3	LINDBLAD, G.E.	
MNH 12	AT 3	GORHAM, S.W.	
MNH 13	AT 3	BLANCHARD, G.	(fb/MA1)
MNH 14	AT 3	SHEARMAN, H.L.	
MNH 15	C 3	HUMPHREYS, Miss V.M.	
MNH 16	S 3	CROSBY, Miss J.I.	(fb/S)

SEASONAL POSITIONS

MNH 4500 TO 1
MNH 4502 SA
MNH 4503 SA
MNH 4504 SA
MNH 3004R Cook
MNH 3000R Museum Adviser
MNH 3001R Museum Adviser
MNH 3002R Museum Adviser

ZOOLOGICAL PROJECTS

1 Coastal Labrador Birds — 2 SA
2 Eastern Canada Mammals — 1 SA
3 West Coast Seashore Invertebrates
4 Maritime Provinces - Fishes
5 Lake Erie, Ont., Que., Painting of Birds
6 Ornithology - Bonaventure
7 Fresh Water Mollusks - N. Ontario
8 Herpetology - Saskatchewan
1 TO & 1 Museum Adviser
9 Mollusks - B.C. — 1 Museum Adviser
10 Vertebrate Palaeontology - Saskatchewan R.
1 Museum Adviser
11 Vertebrate Palaeontology - S.E. Alberta
1 Cook

NATIONAL HERBARIUM SECTION

MNH 17	B 5	PORSILD, A.E.	
MNH 18	B 4	SCOGGAN, H.J.	
MNH 19	B 3	CRUM, H.A.	
MNH 20	B 3	BALDWIN, W.K.W.	
MNH 21	T 1	HARKNESS, Miss H.T.	
MNH 22	MA 1	DUMAS, Mrs. M.	
MNH 23	Ty 2	McCARTHY, Miss H.	

SEASONAL POSITIONS

MNH 3003 Museum Adviser
MNH 3007 Museum Adviser
MNH 3005R Labourer
MNH 3006R Labourer

BOTANICAL PROJECTS

12. Botany - Rocky Mts. — 2 Museum Advisers
13. Botany - Churchill R., E. Quebec & Maritimes
1 Labourer
14 Bryological Survey - E. Ontario — 1 Labourer
15 Boreal Forest — N. Quebec & Ontario

MUSEOLOGY SECTION

MNH 24	TO 6		
MNH 25	T 4	CROSBY, J.A.	
MNH 26	T 3	HALDORSEN, P.	
MNH 27	T 3	INGRAM, A.E.	

MECHANICAL SECTION

MNH 28	T 4	VAN ALSTINE, J.W.	
MNH 29	T 1	KINSEY, A.M.	
MNH 30	D 2	RIVARD, D.	
MNH 31	MA 1	CHAMPAGNE, H.J.	
MNH 32	MA 1	NOEL, P.E.	
MNH 33	MC 2	MERANGER, L.J.	
MNH 1000X	Ca	TOD, W.J.	
MNH 1001X	Ca	KNIPE, K.	

EDUCATION SECTION

MNH 35	PC	THOMPSON, H.F.	
MNH 34	T 3	ALLISON, S.L.	(fb/T1)
MNH 36	TO1	CHAGNON, Miss G.	
MNH 37	T 1	STEWART, Miss L.	(fb/Secretary to Executive)
MNH 41	Ty 2	DUBOIS, Miss M.P.	(fb/T)

PHOTOGRAPHY

MNH 39	T 2	McCAIN, Miss A.	(fb/SP)
MNH 43	P 1		

LIBRARY

MNH 38	L 4	DAWE, Miss A.E.	(fb/L3)
MNH 40	L 2		
MNH 44	C 3	TRUNKS, Mrs P.J.	

MUSEUM OF HUMAN HISTORY

MH 1	Director		
MH 2	C 4	MARLEAU, Miss M.A.Y.	
MH 18	S 2		

ETHNOLOGY SECTION

MH 12	B 4		
MH 13	TO 3	PFEIFFER, H.S.	(fb/TO2)
MH 14	A 2	BALIKCI, A.	
MH 15	A 3	ROY, Miss C.	(fb/A2)
MH 28	TO 6		
MH 3	T 1		
MH 27	T 1	TWARECKI, T.	
MH 16	C 3	MONETTE, Miss M.M.T.J.	(fb/S3)
MH 17	S 3	ROBINEAULT, Mrs. M.T.M.	

SEASONAL POSITIONS

Special Project
Museology — TO
Ethnology Projects
Eastern Arctic Eskimo — 1 Museum Adviser
Western Minorities
Folklore
Gulf of St. Lawrence
Newfoundland
Ontario Minorities
Maritimes — 1 Museum Adviser

ARCHAEOLOGY SECTION

MH 4	B 5	MACNEISH, R.S.	
MH 5	B 4		
MH 6	A 3	TAYLOR, W.E.	
MH 7	A 3	OSCHINSKY, L.	(fb/A2)
MH 8	A 1	CAPES, Miss K.H.	
MH 9	Sn 3	ROBERTS, W.G.	
MH 10	MA 1	DELLAIRE, J.A.	
MH 11	S 3	FUNKE, M.L.	(fb/T)

SEASONAL POSITIONS

MH 4502 TO 1
MH 4500 TO 1
MH 4501 SA
MH 3000R Museum Adviser
MH 3001R Museum Adviser
MH 3002R Museum Adviser
MH 3003R Museum Adviser
MH 3004R Museum Adviser
MH 3005R Museum Adviser
MH 3007 Cook
MH 3008R Labourer
MH 3009R Labourer
MH 3010R Labourer
MH 3011R Labourer

ARCHAEOLOGY PROJECTS

Victoria Is — 1 Museum Adviser
Survey of Labrador Coast — Physical Anthropology — 1 Museum Adviser
Prairie Provinces — 1 Cook & 1 Labourer
British Columbia — 2 Labourers
Early Man - Ontario & Quebec — 1 SA & 1 Museum Adviser
Newfoundland — 1 Museum Adviser & 1 Labourer
Yukon — 1 Labourer
Kingston — 1 TO

WAR MUSEUM

MH 1X	TO 7	MURRAY, L.F.	(fb/Secretary & Curator)
MH 2X	TO 3	MILLETTE, P.	(fb/Asst. Curator)
MH 3X	T 1	ROBERTS, T.A.	
MH 4X	AT 3	BUTLER, P.E.	
MH 5X	CSM	LACEY, B.P.	
MH 6X	CSM		

ADMINISTRATIVE SECTION

MH 19	AO 3	CHARRON, E.	(fb/AO2)
MH 20	HC	McKEOWN, M.D.	
MH 22	C 3	CHOQUETTE, Miss B.M.	
MH 23	C 2	SPENCE, R.D.	
MH 24	C 2	AIRTH, Miss A.J.	
MH 21	AT 2	MACKENZIE, D.C.C.	
MH 25	S 2	BRUNET, Miss M.I.	(fb/S)

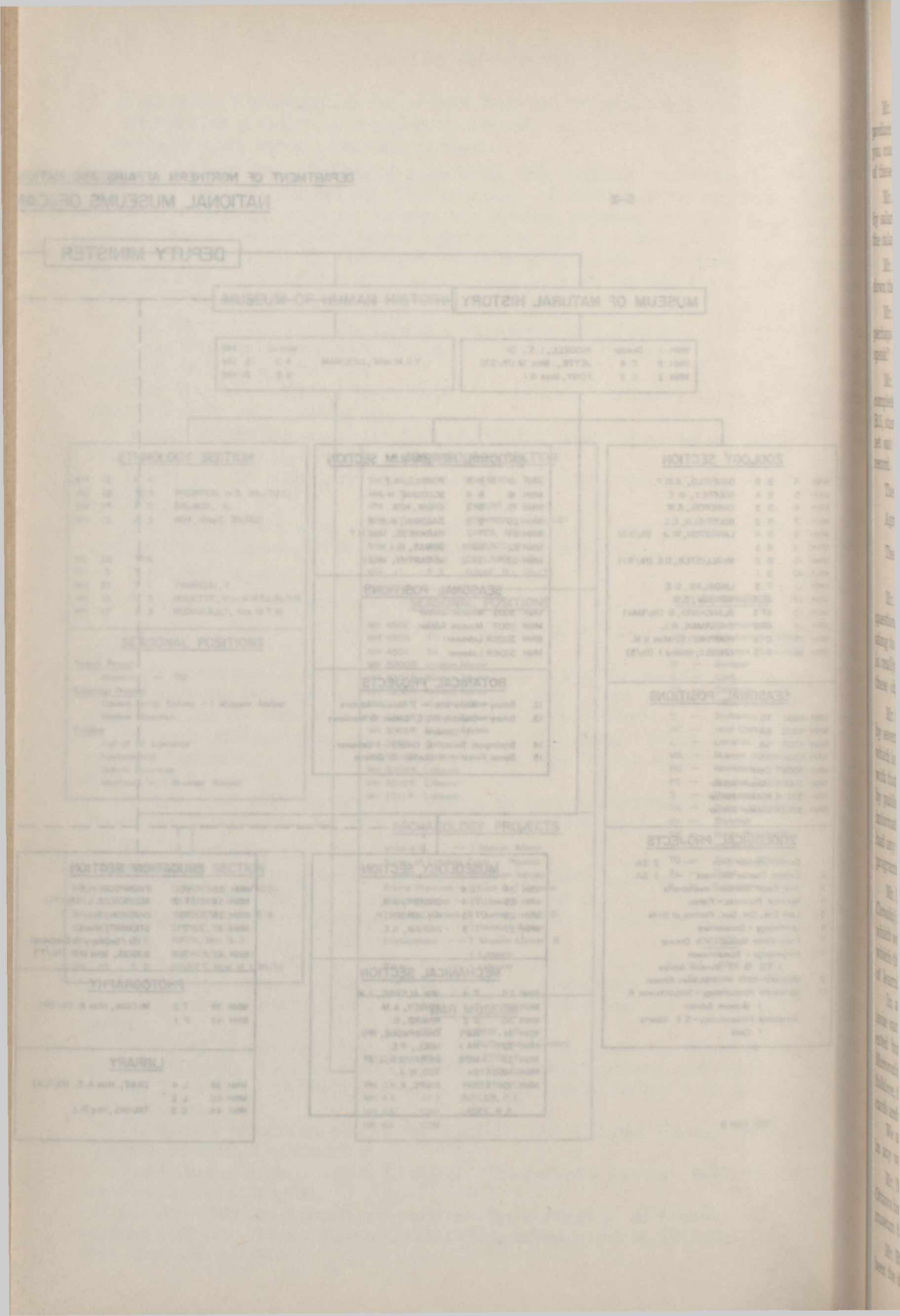
KEY TO SYMBOLS

A — Anthropologist
AO — Administrative Officer
AT — Assistant Technician
B — Biologist
C — Clerk
Ca — Carpenter
CSM — Cleaning Service Man
D — Draftsman
HC — Head Clerk
L — Librarian
MA — Museum Assistant
MC — Maintenance Craftsman
PC — Principal Clerk
S — Stenographer
SA — Student Assistant
Sn — Storeman
SP — Senior Photographer
T — Technician
TO — Technical Officer
Ty — Typist
P — Photographer

NOTES

1. fb/ filled by
2. All positions carry prefix R —

8 April 1959



Mr. ARGUE: I wonder—if you have it here, fine; if you have not, you could produce it at some later date for the records of the committee—I wonder if you could give us the names of the people who are now engaged in each of these services, and their salaries?

Mr. CÔTÉ: I think I can give you the full list, Mr. Chairman, not directly by salaries, but by positions, and these positions give the key to the salary or the salary range in the Natural History Branch.

Mr. HAMILTON (*Qu'Appelle*): Do you want all the clerks and typists, right down the list?

Mr. ARGUE: I am not wishing to taking up the time of the committee, but perhaps it could be produced now, for the record, and laid on the table, so to speak?

Mr. CÔTÉ: I could have this chart tabled, and the positions are shown here completely, with the names of the individuals, the rank of position—such as, B.5, standing for biologist 5, and so on. The whole thing is comprehensively set out here. I would be delighted to table that now for printing in the record.

The CHAIRMAN: Is that agreed, gentlemen?

Agreed.

The table is as follows:

Mr. NIELSEN: Mr. Chairman, while Mr. Argue is preparing for the next question, I am sitting here wondering how the museum goes about disseminating to the Canadian public all of this very admirable work it is doing, which is really what it is set up to do, is it not to inform the Canadian public of all these objectives? How do you go about doing that?

Mr. CÔTÉ: I should say that the dissemination of this information is done by several means: one is by exhibitions in the National Museum; the second—which is beginning now—is by itinerant exhibitions. We have not got very far with that. The third is by lectures within the museum; and the fourth, primarily by publications of various descriptions for the scientific world and for popular information. Then the fifth is by radio and television programs. We have not had any very recently, but a couple of years ago we had a series of televised programs on the National Museum. Possibly Dr. Russell could elaborate on that.

Mr. L. S. RUSSELL *(Director, Natural History Branch National Museum of Canada)*: Mr. Chairman, I would like to elaborate on the question of publications which was mentioned by Mr. Côté. These are primarily scientific publications, of which the bulletin of the National Museum is well known throughout the world of learning and has gone into a series of something over 200 numbers.

In addition to these purely scientific, or largely scientific publications we issue various pamphlets and special publications which are aimed at the interested but non-specialist reader. Among these are *Some Canadian Birds, Mammals of Canada,* and various works, some by Dr. Barbeau on Canadian folklore, folk music and folk culture. In addition to these we have leaflets, post cards and various more or less *ad hoc* publications to meet particular needs.

We are trying to build up this side of the museum's publication without in any way diminishing the volume and quality of our scientific series.

Mr. NIELSEN: Would I be correct in saying that those who are closest to Ottawa have a much greater opportunity of enjoying the fruits of the work of the museum than the bulk of the citizenry in Canada?

Mr. RUSSELL: If so, it is purely a matter of geography, and it has never been the desire or intention of the museum to have this persist, if it could in

any way be overcome. To that end we have prepared travelling exhibits and we have emphasized the publication series greatly, simply because it is the one thing that is equally available throughout Canada.

We hope that as we get our own house in order with new exhibits and better facilities, the extension services will be greatly increased. But I may say that we do lend a great many specimens to schools and other agencies outside Ottawa; we supply photographs, we supply information—and that takes up a great deal of the time of the scientific staff, in answering letters throughout Canada and abroad. Any way that we see possible to overcome the geopraphic barrier, we seize upon it. But, at the same time, if we can offer services to the people of Ottawa without in any way cutting down our services to Canada as a whole, we feel that we are doing our duty in so doing.

I mention specifically the lecture series which has been going on now for about 30 years and which, naturally, is primarily available to the people of Ottawa. This, I think, has brought us a great deal of credit and it is certainly something that we plan to continue.

Mr. ARGUE: Mr. Chairman, under the various groups listed in the estimates we have such listings as technical officer, technician, museum assistant, museum adviser, and so on. I wonder if the committee could be given—very briefly—the scope of these officers and a description of the type of work that is done by the persons in each section, or group?

Mr. RUSSELL: These classifications, of course, originated with the Civil Service Commission, and we try, as far as possible, to fit our organization into their broader classification of employees in the public service.

Starting at the top, we have a group of scientific officers who are, in almost all cases, university-trained men, the majority of them with the degree of doctor of philosophy. These make up the ranks of the biologists and anthropologists.

The category of technical officer is a somewhat intermediary one, and commonly it is held by persons with a modest academic training, such as general training in university without graduate work, or possibly years of experience in the particular field without academic training of any sort—but, because of their experience, recognized specialists. However, we do not like to use this category, because it is a kind of intermediate one—which is not entirely desirable.

Then we have the technical staff, whose duty it is—under the direction of the scientific staff—to prepare and maintain the collections and prepare exhibits. Here, again, we have a number of categories which—I must confess—sometimes mystify me. But they range all the way from high-ranking technicians down to museums assistants.

The term "museum adviser" is a strange one which—again, I must confess—I do not know the origin of. This, however, is a position which is available to the museum for appointment without going through the Civil Service Commission, and is used mainly for the appointment of junior assistants in field work.

We have student assistants, who are appointed through the Civil Service Commission and they, of course, are university students training in the particular field in which they are working. I am not sure I have covered all this miscellanea of ranks and titles, but those are the principal ones which we have, in addition to the usual array of clerks, stenographers, typists and so on.

Mr. ARGUE: In the establishment of these categories, you do not make recommendations as to the terminology; you just leave that for the Civil Service Commission?

Mr. RUSSELL: We specify the kind of person we want, and in consultation with our own personnel people and the Civil Service Commission, we decide upon the appropriate title and rank.

Mr. ARGUE: In what group are your archaeologists; where do they fit in?

Mr. RUSSELL: Originally they were all classified anthropologists, but due to certain difficulties in the classification it was agreed some years ago that the senior members of the anthropological sections, archaeology, ethnology, physical anthropology, should be classified as biologists, which would enable them to receive a salary comparable to their opposite numbers in the Natural History Branch. You will notice some of them in the Human History Branch are called anthropologists and some biologists, but this in no way affects the work they are doing.

Mr. ARGUE: I see there has been a reduction of one person in the classification biologist 5. Could you tell me what has happened to the one person?

Mr. RUSSELL: We currently have a vacancy for a biologist 4, but I am not aware of any reduction in the classification biologist 5.

Mr. ARGUE: The estimates show that in 958-1959 you had four biologists 5 and in the estimates for this year it shows three.

Mr. RUSSELL: The only biologists 5 currently are the chiefs of the zoology, botany and archaeology sections and the senior archaeologist. The head of the anthropology section is currently a biologist 4 and that position is being filled by competition.

Mr. ARGUE: The person who held that position has vacated it?

Mr. RUSSELL: Yes.

Mr. ARGUE: Who was that?

Mr. RUSSELL: Mr. Rioux, who is now with Carleton University.

Mr. ARGUE: There has been the elimination of two craftsman 4 from this year's estimates. Could you tell the committee why that has been done?

Mr. RUSSELL: In the case of the craftsmen it is simply a juggling of titles. At one time we were advised these two carpenters would receive better prospects in respect of superannuation and other privileges if they were reclassified from the classification of carpenter to the classifications of maintenance craftsman. This was done, and then it was discovered there were certain disadvantages to them in that classification and they were put back in their original classification under the prevailing rates. This actually was merely a paper transaction. It never affected their salary or actual status. I am afraid I missed the third position that was questioned.

Mr. ARGUE: In last year's estimates there were two museum assistants 2 and 3 museum asssitants 1. This year the two museum assistants 2 have been eliminated and there is an addition of one position for museum assistant 1, making four in all. What has happened in this case? Why has there been a change here?

Mr. RUSSELL: These are reclassifications. There has not been any decrease in staff in this respect. It is additional duties or simply promotions as deserved by long service.

Mr. ARGUE: Could you tell the committee what you have by way of secretarial or stenographic help in the museum?

Mr. RUSSELL: There is one secretary and one typist for each director. In addition, there is approximately one typist or stenographer per section, making four for the principal sections. Education has assistance of this sort and there have been one or two additional ones brought in in the Human History Branch to cover special requirements. Essentially, however, it is one per section.

Mr. ARGUE: If you are trying to get out a good deal of information and carry on a good deal of activity in the museum, how can a total of seven persons do all the typing, and so on, which is necessary for the 31 scientists involved and the other technical help which you have in the museum? It would seem to me you are very short in stenographic help if the museum is in fact being active in disseminating some of its information.

Mr. RUSSELL: I would say there are times when additional stenographic help would be of assistance, but in contrast to this during the summer when the scientific officers are in the field the stenographic staff have an opportunity to get caught up in such long-term work as preparation of manuscripts. Our need is not so much in the purely mechanical side of typing and the preparation of letters and manuscripts as in the clerical work which goes with the maintenance and recording of the vast collections we have. In this regard I would agree in order to do our tasks we probably do need additional assistance.

Mr. ARGUE: For collecting?

Mr. RUSSELL: No; for preparing the records of the collections. We have tried to do this on a temporary basis, but it is not satisfactory. Our records are not as up-to-date as we would like to have them. It has fallen on the scientific staff sometimes to prepare and take care of these records. I do not think this is a satisfactory arrangement, but we are doing the best we can with what is at our disposal.

Mr. ARGUE: How far back are you going in catching up with some of the records?

Mr. RUSSELL: Some of them are two or three years behind.

Mr. ARGUE: And some go back further than that?

Mr. RUSSELL: No.

Mr. ARGUE: There are no specimens down there which have been there for many years and are not specified?

Mr. RUSSELL: Only the ones such as the dinosaurs, the removal of which is a colossal job. It is not the paper work which is the problem as much as simply the mechanics of preparing the specimens for study. Other than that, we are within two or three years of being up to date. However, I do not think this is good enough for a museum.

Mr. ARGUE: How good would be good enough; about a year back?

Mr. RUSSELL: Yes.

Mr. NIELSEN: May I ask how long this situation has prevailed where you have been short-staffed and you have scientific personnel doing clerical work in your department?

Mr. RUSSELL: I think it has always been characteristic of the National Museum, and we are rapidly improving. A figure of three years is a good deal better than it has been in the past. At one time there was possibly none of this clerical work being done; I am speaking of the 'thirties' and during the last war when anything which was being done was being done by the scientific staff such as were there.

Mr. NIELSEN: Mr. Chairman, I assume that in the other countries similar work is carried out and I also assume you are aware to some degree of the extent to which those other countries carry on this similar work. Could the witness tell the committee how we in Canada compare with the progress which has been made in other countries?

Mr. RUSSELL: This would depend a little bit on the country with which the comparison is being made. For our size, and on the scientific side particularly, we compare favourably with the United States. In respect of older

countries which have had museums for 100 years or more, I think our records are perhaps not as well kept but our output of scientific work is comparable for our size.

Mr. NIELSEN: How about the salaries of scientific personnel in the department? Do they compare favourably with the salaries paid in other countries to scientists doing similar work?

Mr. RUSSELL: Well, I would have to compare that, Mr. Chairman, with our general level of salaries in other comparable occupations such as universities. I would say on comparing them with other institutions of learning in Canada, that our museum employees do receive salaries which are about as good as the comparisons one could make between, let us say, the national museums in the United States, and the leading United States universities. In other words, the scale is about correct, but I would not like to draw comparisons on an international basis.

Mr. NIELSEN: As far as you are aware do you feel there is any dissatisfaction within your division as to the salary level?

Mr. RUSSELL: No, not in general way. There may be individual cases particularly in the lower ranks of technicians and assistant technicians; but there again, I would agree that these men—I would like to see them, in other words, get more money, but their salaries are comparable, and in fact are better than those of similar employees of other Canadian museums.

Mr. NIELSEN: When was the last raise that these personnel obtained? Can you tell me, roughly?

Mr. RUSSELL: During the last revisions of civil service salaries. There has been no special provision within the museum.

Mr. NIELSEN: Thank you.

Mr. SLOGAN: In your anthropology department I notice you received 35 reels of folk songs from the National Film Board. It specifies the number of pieces which were collected from indians in various areas and it also mentions Ukrainians in Winnipeg. What would that consist of?

Mr. RUSSELL: These are tape recordings which have been made. You are speaking of the ones turned over by the National Film Board?

Mr. SLOGAN: Yes.

Mr. RUSSELL: I do not have direct information on this. Perhaps Mr. Taylor may have, but he is an archæologist rather than an ethnologist. Neither of us have information on this particular item, I am sorry to say.

Mr. SLOGAN: Could you dig some up for us?

Mr. RUSSELL: Yes, I could do that.

Mr. ARGUE: There are 11 museum advisers listed as seasonal. I wonder if we could be told whether these 11 are now appointed?

Mr. RUSSELL: They are not all employed, but about 9 of them are currently.

Mr. ARGUE: Some of them are not Canadians?

Mr. RUSSELL: There is one very distinguished name among them which I would like to put on record. I refer to Dr. Helen Creighton, who has worked with the museum for years in the capacity of museum advisor, seasonal. I think it is unfortunate, but Dr. Creighton has been happy to operate on this basis, and I think the museum has been honoured by having her associated with us over the years even in this humble capacity.

Mr. ARGUE: Could you give us the names of other advisers who have now been appointed?

Mr. RUSSELL: There is one young man from Saskatchewan, Mr. Routley, who is working currently with the biological expedition; and there is another

one whose name I do not have, but who has just been appointed to the museum and who is with the biological expedition in Saskatchewan. I am afraid I would have to refresh my memory from the documents for the others. There are some who would be in connection with the Botanical Congress which is about to take place, and when field assistants will be required for the Rocky Mountain expedition or excursion for that congress. I would have to consult the files for the others.

Mr. HAMILTON (*Qu'Appelle*): May I interrupt for a moment, Mr. Chairman? You heard the name of Saskatchewan mentioned. I think you are aware that we are doing a cooperative job with the government of Saskatchewan in the area which will be flooded out for the Saskatchewan dam. There are just six years to work on it. We have taken the most haste we could under the circumstances to get it done.

Mr. ARGUE: How many people are employed out there in the Saskatchewan field?

Mr. RUSSELL: There are two employed in that project, and one other in the survey of amphibians and reptiles in Saskatchewan. In addition there is one scientist on contract in the archaeological survey, from the University of Toronto.

Mr. CÔTÉ: I would like to say that in the list of positions which I tabled, there is to be found under the various sections the projects as they were visualized in April, 1959, and the distribution of advisers to them.

Mr. ARGUE: Are all the seasonal advisers who have now been employed Canadians?

Mr. RUSSELL: To the best of my knowledge, yes.

Mr. HAMILTON (*Qu'Appelle*): Would it make any difference?

Mr. ARGUE: I would prefer Canadians, myself, yes.

Mr. HAMILTON (*Qu'Appelle*): So would I, but if you want the scientific knowledge and you cannot get Canadians of that standard, you would not have any objections to using Swedes, Danes, Dutch or Americans?

Mr. ARGUE: I would have a very long look to try to find Canadians.

Mr. HAMILTON (*Qu'Appelle*): But you would have no objection if you could not get Canadians?

Mr. ARGUE: Rather than have the work left undone, no. But is seems to me, if we are going to have asides now, that perhaps the hunting was not done thoroughly enough in certain instances, because there seems to be quite a number of non-Canadians who have been appointed to very important positions.

Mr. HAMILTON (*Qu'Appelle*): There is quite a number?

Mr. ARGUE: I think there are 5 non-Canadians in very important positions. I am in favour of Canadians, and I am in favour of others as a second choice. I am not opposed to people who are non-Canadians being employed when they can do a great service for this country. But I feel that with important positions particularly, as the minister said in outlining the purposes of the museum to train Canadians in their own historical background, that I would be biased in favour of Canadians, and I think that, other things being equal, Canadians would do a better job for Canada.

Mr. HAMILTON (*Qu'Appelle*): I think you are saying what we all believe and hope. But one of the great disappointments to us who are in this work is that there is a very great difficulty in getting highly qualified Canadians. I have spoken to the presidents of two universities and asked what they could do about setting up sections in their universities for certain of these scientific subjects, when we, in our department, could provide summer work for those students. Most of our students in this line of work have to go to the United

States to get the necessary training. I have done what I could within my limited powers of suggestion in my contacts with old friends in the hope that we could do something about it.

I hope in one or two cases to see sections being developed in the universities which would provide those students with an opportunity for the training that we can give them in the summertime, because we are short of people to do this type of work.

Mr. ARGUE: I agree with the minister's objective and I hope it will be accomplished. I hope it is not just an objective which is set forth with little done to fulfill it. I think as Canadians we should be extremely careful not to Americanize to a greater extent than is necessary such an important function of government, particularly, and such an important function to the people of this country, as the minister has set forth, in the shape of the National Museum and its various branches.

Mr. HAMILTON (*Qu'Appelle*): I think we can agree with you, but there is just one question which I think is important. Ordinarily in the realm of science we do not distinguish between nationalities except in certain very vital and sensitive points.

Mr. ARGUE: Oh!

Mr. HAMILTON (*Qu'Appelle*): The trend of events after the war has shown that there was a type of nationalism developed. For example, the United States has agreed to share its scientific information with Great Britain, and Canada on certain matters.

I think most of us believe it would be very wrong to try and set forth a creed that all scientific things and knowledge should be done purely on a national basis. I grant you that as Canadians all of us would prefer if we could get capable Canadians, but I would hate to see a position advocated where you would say a scientist must be obtained within the country and could not be interchanged. I do not think you are going that far.

Mr. ARGUE: You started out by saying that since the end of the war there has been greater interest in international and scientific information, and you said the Americans are vying with Canadians and others in the interest they are showing in such information. That is good; it is excellent. But as a nation—and I think other nations are guilty of the same thing—we have been too ready to assume that extremely important scientific information should be kept under wraps and be kept secret on the excuse that it has something to do with security. Again, do not misunderstand me. I am all for protecting the security of the nation, as we are required to do; but sometimes I think it is used as an excuse to retain scientific information that should not be retained because it has nothing at all to do with security.

Mr. NIELSEN: Mr. Chairman, are we not getting removed from the subject of the museum?

Mr. ARGUE: The minister and I are having a discussion and seeing how close we can come to agreement.

Mr. NIELSEN: Are we not supposed to be discussing the museum?

Mr. HAMILTON (*Qu'Appelle*): The member is right. I would like to put in my observation because I hope the hon. member is not suggesting we can only hire Canadians, even if we had to use mediocre ones. You are in agreement with me that we all prefer Canadians but, in the interest of science, if there are good young Americans, Dutch and Swedes—and I mention these because they have worked for us in our northland—and we are short, if we cannot get Canadians, you would have no objection to these men coming in and helping us out.

Mr. ARGUE: I think my position already has been made clear on the record. I have already stated my position. However, I do emphasize again that in a

place like the National Museum, which has people in high placed positions, the government, the minister and the people who are responsible should exert every effort to see that qualified Canadians are placed in those positions. I view somewhat with alarm the growing number of Americans who are being placed in these positions.

Now, on principle, the minister and I are in agreement, but I am just stressing my desire that the government and the minister should make extraordinary efforts to try to fill important positions in the national service, in the Canadian public service, with Canadians, particularly in a field like this which has to do with the very origin of our nation and our national quality.

Mr. NIELSEN: Mr. Chairman, again I can say, as the minister has said, that I am sure we are all in agreement with the member that Canadians should be given priority in employment with the museum. However, I feel perhaps there has been an unintentional implication left by the member that something less than every possible effort was exerted to have Canadians in these positions. In order to clarify this, this question should be put to the minister or the assistant deputy minister, Mr. Côté: Was every possible effort made to hire Canadians for those positions which are now held by Americans?

Mr. HAMILTON (*Qu'Appelle*): I will start the answer off, and perhaps my officials can check me. I have not had an intimate knowledge over the years but at the present time out of 105 positions on the museum staff there are four American top-notch men who have taken the oath of office and have sworn allegiance to their job and the country for which they are working. This is not a growing number. At one time the great majority of the staff in the museum, as I understand it, were Americans because we did not have suitably qualified Canadians.

Mr. ARGUE: How many were there two years ago?

Mr. CÔTÉ: Two years ago there were Dr. MacNeish, Dr. Langston and Dr. Crum, which makes three.

Mr. ARGUE: And now?

Mr. CÔTÉ: Four. Mr. Chairman, I think one of the explanations is that we are able to fill very few positions in Canada for palaeontologists or experts in living mosses or physical anthropology. We in the department have tried to get Canadians for these positions and, as you know, the Civil Service Commission is a very jealous guardian of that requirement of the act, that is, that we must have Canadians employed where available and if United States citizens are employed in Canada, there must be a certificate from the Civil Service Commission saying no one else in Canada is available.

Mr. ARGUE: It also requires an order in council.

Mr. CÔTÉ: Yes, it has to be looked at by the governor in council.

Mr. HAMILTON (*Qu'Appelle*): The same thing applies to the provinces who have museums. In looking over their staffs I find they have the same difficulty as we have.

As you gentlemen probably know, one of the finest museums in Canada is located in Regina and the Saskatchewan government was able to obtain one of the most outstanding men in the world for that museum. He is an American. I imagine he has taken his oath of office and I think it would render a great hardship on them if they lost a man of that calibre. I do not know how many others there are on the staff in Regina but I had a feeling while talking with the man in charge that they have no alternative, and when you see a good man who is available, you go for him. The first thing you want done is the job and scientists have a great tradition; they give their loyalty to the thought and the subject and not the country for whom they work.

Mr. ARGUE: In that regard I do not think scientists can claim any more loyalty to their job than other people. I think there is the same percentage of people in other professions who are very loyal to the job they are doing; I do not think it is confined to scientists, but I agree they have it.

Mr. NIELSEN: Mr. Chairman, in order to follow this question to its logical conclusion, I would like to ask one more question of Mr. Côté.

The CHAIRMAN: Would you proceed.

Mr. NIELSEN: Mr. Côté, if the government had not obtained the services of these four United States citizens who are now employed by the branch, do you feel that the job which the museum has undertaken to do would be accomplished or in the process of being accomplished?

Mr. CÔTÉ: Mr. Chairman, I think that the job would not be in the process of being accomplished other than at a more junior level in some cases. In the case of the physical anthropologist, the job would not be done; there are not any in Canada. We obtained the services of Dr. Oschinsky. In the case of mosses, I do not think it would be done and in the case of palaeontology, I do not think it would be done. In the case of archaeology, it might be done at a more junior level. We have been able since to get the services of a Canadian archaeologist, but only one.

Mr. SLOGAN: Mr. Chairman, could I change the line of questioning? I would like to ask the minister if he is happy to have the National Museum under the administration of his department?

Mr. HAMILTON (*Qu'Appelle*): That is a very queer question!

Mr. MCFARLANE: He likes everything he is doing!

Mr. HAMILTON (*Qu'Appelle*): The Department of Northern Affairs and National Resources is one of the greatest choices that any minister could have, because it has almost everything in it; and with my background and interest I am very proud to have the museum or any museum that collects knowledge and disseminates it.

Mr. SLOGAN: In the minister's opinion, is not the museum mostly a cultural and historical institute?

Mr. HAMILTON: (*Qu'Appelle*): Yes.

Mr. SLOGAN: Do you feel that with the expansion of your department it seems to be a caretaker department, into which everything is dumped that does not come under other specific departments? Do you not feel that very great emphasis is being placed upon northern development and so on? Do you feel you can give the attention and the leadership to this branch which it deserves and requires?

Mr. HAMILTON (*Qu'Appelle*): I think I have a few ideas yet on the subject I could use.

Mr. ARGUE: Do you want to fire the minister or just the branch?

Mr. HAMILTON (*Qu'Appelle*): If I am getting useless I suppose it would be easier to get rid of the minister!

As a matter of fact, this is a very interesting point and it is not my job in this committee to discuss it. But as I understand the re-organization that took place some years ago, they organized around Citizenship and Immigration those things dealing with people, and around my department those things which did not deal with people so directly. After all, the museum is the study of the past, and it has a good deal of reference to people, as you know. However, it is still more closely associated, probably, to the planning characteristics my department is supposed to specialize in.

Mr. SLOGAN: My point is, I think a great deal more attention and emphasis has to be placed on preserving historical sites, our national culture, and so on.

Earlier this season, in the House of Commons we heard a bill to advocate the establishment of a sports council. In another committee we have heard of a situation where the Canada Council, at present, perhaps, is not under the supervision of government to the extent that it might be.

I have an historical site in my own riding, Lower Fort Garry. It says on the map here that it is a national historic site, but there is a sign in the entrance of the fort which says, "Members only", because now it is a private club with a golf course, and is not even open to visitors. Those kinds of thing disturb me. I feel these national historic sites should be preserved, and that visitors should be encouraged to visit these sites, and so on.

I feel, if we could establish a ministry—what is your opinion of establishing a ministry under which such things as cultural, sports and historical development could be administered?

Mr. HAMILTON (*Qu'Appelle*): If that sign has not been taken down already, I guarantee it will be taken down soon, because I understood it had already been taken down.

As to whether there should be another ministry, you are asking me to go into a field I would hesitate to embark upon.

The CHAIRMAN: I think in your question, Mr. Slogan, you forgot the scientific aspect should have been included. You probably unintentionally forgot that. Any other questions, gentlemen?

Mr. MCGREGOR: No, no other questions. I move we adjourn.

Mr. ARGUE: I have some more questions.

Mr. MCGREGOR: Go ahead.

Mr. ARGUE: There is an item of savings due to staff turnover in 1958-59, the amount is $10,000 and in 1959-60 the amount is $22,000. Could we be told how this larger saving has come about?

Mr. ROBERTSON: Mr. Chairman, this is purely—if you like—a mathematical guess. You will find the same sort of thing shown in a number of other branches.

It is simply an attempt to forecast, on the basis of experience, what turnover there may be, and, therefore, in a sense, what proportion of the salary may be un-drawn over the year; and, therefore, make an allowance for it. They are not the same for Parks or Northern Administration Branches, as, say, for the Museum.

This would simply be on the basis of, and as a result of previous experience. That is, it would appear we could make a slightly larger allowance to them than we had made the previous year, regarding the relationship that savings have to turnover.

Mr. ARGUE: Could we be told how many resignations there have been in the museum since the first of this year?

Mr. CÔTÉ: There have been three resignations since the beginning of the year.

Mr. ARGUE: Who are they?

Mr. CÔTÉ: Miss Bujold, Mr. T. E. Lee of the Human History Branch, and Dr. A. W. Cameron, of the Natural History Branch.

Mr. ARGUE: Surely, there are more than that.

Mr. CÔTÉ: You may be right, sir. In the secretaries—yes, I am sorry, sir. There has been a stenographer transferred to another position in government service in the museum. That is not a resignation. There is a Mrs. Atkinson who has resigned on marriage.

Mr. ARGUE: And Dr. Rousseau?

Mr. CÔTÉ: Mr. Chairman, a moment ago Mr. Argue asked a question as to why in the 1958-59 estimates there were four biologists 5, and why in 1959-60 estimates there are only three.

In the 1958-59 estimates, we had prepared them on the basis that the Civil Service Commission would agree to our recommendation for the reclassification of one biologist 3 to a biologist 5, and that would have made 4 biologists 5, in 1958-59.

After the estimates had been approved—this recommendation which we had made was still subject to review by the Civil Service Commission, the Civil Service Commission did not agree with our recommendation, and agreed only to a reclassification to biologist 4.

So, while the estimates of last year were printed to show we had put forward four biologists 5, we had to carry that forward through to these estimates this year. We never did get the fourth biologist 5.

Mr. ARGUE: Is the position of director of the Human History Branch now vacant?

Mr. CÔTÉ: That is right, sir.

Mr. ARGUE: I wonder what steps have been taken to fill that position?

Mr. ROBERTSON: None, Mr. Chairman.

Mr. ARGUE: Are any steps being taken?

Mr. ROBERTSON: Not at the moment.

Mr. ARGUE: Will steps be taken within the present fiscal year to fill this position?

Mr. HAMILTON (*Qu'Appelle*): I will be very candid about it. When I made the announcement in the house I said I was hoping things would quieten down, and when they quieted down and things were propitious, we would take steps to fill that position; because in the confusion that existed there for a while it would not be the right time to bring in a new director. But I think before next April we can take steps along that line.

Mr. ARGUE: Would the minister anticipate a Canadian will be appointed to this position?

Mr. HAMILTON (*Qu'Appelle*): I would certainly expect a Canadian will get it if he meets the qualifications. That is, if there are suitable Canadians.

As a matter of fact, on this question of the director, not only has he to be a man of some scientific achievement, but also a good administrator; and I think we can find those types of characteristics in Canada.

Mr. ARGUE: I would think so too, Mr. Chairman. When Dr. Rousseau resigned, Mr. Chairman, it was stated by the assistant deputy minister that he was being offered a position in the Department of Agriculture—or he would be offered a position—one was available. I wonder if the committee could be told precisely what this position was; not just that it was a scientific position and an important position, and so on—what, precisely, was the position?

Mr. HAMILTON (*Qu'Appelle*): The indications here are that it was a scientific job as a botanist, with a maximum salary range of $9,420. But we can find out what the actual category was. I do recall seeing it.

Mr. ARGUE: That position was vacant, or it was being created?

Mr. HAMILTON (*Qu'Appelle*): Mr. Robertson could answer that, because he did the negotiating.

Mr. ROBERTSON: The position was this: the Department of Agriculture indicated that they would be glad to have Dr. Rousseau join them because of his qualifications as an ethnobotanist, and they said they would be prepared to do that if his position—and the position is, in a sense, a "slot"—could be

transferred from our department to the Department of Agriculture; and if it were transferred, it would be reclassified to whatever the botanist category is that has a top level of $9,420.

This was discussed by them with the Civil Service Commission, and the Civil Service Commission agreed that if we were prepared to make that transfer, they were prepared to authorize the transfer of that position and the reclassification accordingly. We said we were prepared to arrange the transfer. So there was a position that would be created at the botanist level that has a maximum $9,420. But I have forgotten exactly what the grade of botanist is, at this point.

Mr. ARGUE: Under what authority would such a transfer be made? What are the mechanics of having such a transfer made—order in council, Civil Service Commission?

Mr. ROBERTSON: Civil Service Commission. It does not require an order in council, I know that.

Mr. HAMILTON (*Qu'Appelle*): May I correct the record? You used the word "resignation" for Dr. Rousseau, did you not? There was no resignation from Dr. Rousseau. I had the task of recommending his separation from the Civil Service.

Mr. ARGUE: You are not certain how that would be done?

Mr. ROBERTSON: It would certainly be done by the Civil Service Commission, but I am not familiar with their mechanics. But it can be done under the Civil Service Commission.

Mr. ARGUE: The position would not have been open for competition?

Mr. ROBERTSON: It would be a Civil Service transfer, which is something that is frequently done.

Mr. ARGUE: Without a competition?

Mr. ROBERTSON: Yes, without a competition.

Mr. ARGUE: By the Civil Service Commission?

Mr. ROBERTSON: That is correct.

Mr. ARGUE: I wonder if the committee could be told, in general, what scientific work is now being done in the Arctic by the museum: what general type of work is being done this summer, who is cooperating in the work, who is paying for it, and so on?

Mr. NIELSEN: Does the member mean above the sixtieth parallel, or the Arctic? There is a big difference.

Mr. ARGUE: Let us take the larger question, then.

Mr. NIELSEN: Northern Canada and the Arctic?

Mr. ARGUE: Yes.

Mr. CÔTÉ: I think you will find a good deal of that information on the chart that was filed with the committee. The expeditions—or field parties—which the national museum have in mind are listed therein. Among the zoological projects there is one project concerning coastal Labrador birds. That is not as high up as the member for Yukon had in mind, but it is one that is in a more remote area. That is all in that section.

In the botanical projects there is one scheduled for the Churchill River. For the ethnological projects there is one in the eastern Arctic concerning eastern Arctic Eskimos. In the archaeology projects there is a survey to be carried out by the physical anthropologists on the coast of Labrador. There is one project on Victoria Island, which I think since that time has been changed to Mansell Island. There is another project that was scheduled for

the Yukon, plus another field project of the Eskimos of Rankin Inlet, Baker Lake and adjacent areas. Those are the projects under the National Museum.

Mr. ARGUE: To what extent are they joint projects with United States institutions or with other countries, if at all?

Mr. CÔTÉ: None this year; there are no joint ones with the United States this year.

Mr. ARGUE: Is there any institution which itself is composed of members from different countries, or any institution of any other country that is financially involved, or in the jurisdictional field, with regard to these coming projects?

As I understood your answer, you said it was strictly Canadian. I am not wishing to contradict you, but I just want to make certain that that answer is fully accurate and that there are no institutions other than strictly Canadian institutions involved in any of these proposed surveys, and so forth.

Mr. CÔTÉ: I am informed that this is correct, with one exception. Mr. Taylor can give us that.

Mr. W. E. TAYLOR (*Archaeologist, Human History Branch, National Museum of Canada*): Mr. Chairman, we have one contract with a serologist—a blood type specialist—in Winnipeg, Dr. Chown. He is operating conjointly with an American mixed expedition working on Southampton Island.

Mr. HAMILTON (*Qu'Appelle*): Mr. Chairman, I think I should add something here with regard to what the member for Assiniboia may be asking. Within this department, this is all the information they can give you. But there is also an Arctic institute, composed of individuals in Canada, the United States and Denmark. I cannot give you, at the moment, just what projects they have on this year. The government does pay a grant to this institute.

Mr. ARGUE: The Canadian government pays a grant to the Arctic Institute of North America?

Mr. ROBERTSON: We pay a grant of $10,000 per year to the Arctic Institute. It is carried under the Northern Research Coordination Centre.

Mr. ARGUE: Within your knowledge, do you know approximately the amount of money that is contributed by other sources to the Arctic Institute?

Mr. ROBERTSON: I do not know in dollar terms. We could probably get that from the institute or from our own records. It receives substantial amounts by way of contracts from various agencies for various work. It does not work just in the Canadian arctic; it does work in Greenland, some in Alaska, and a certain amount in the off-shore areas, not within the limits of any particular country. I believe it has started in the Antarctic. The Defence Research Board on occasion has contracts with them; whether or not it has this year I am not sure.

Mr. CÔTÉ: I gave an indication of the contracts which have been concluded so far. If the committee is interested we have another contract which is being considered now which involves work by Mr. Malaurie who is French, with Mr. S. E. Frederiksen, who is a United States citizen. Both these gentlemen would go north on a project for the department if this is approved by Treasury Board.

Mr. ARGUE: I take it that you do not have any information as to the amount of non-Canadian money going to the Arctic Institute?

Mr. ROBERTSON: All I know is that the non-Canadian money is greatly in excess of the Canadian money. I know it is much in excess. I could get that for you.

Mr. HAMILTON (*Qu'Appelle*): If the Arctic Institute does any work in Canadian territories it has to ask for our permission.

Mr. ARGUE: No Canadian has to get permission from the Arctic Institute to go into any part of Canada? This is not such a facetious question, as it may seem in view of the minister's reply last year in respect of a very important person in his department who waited so long for permission.

Mr. HAMILTON (*Qu'Appelle*): He was not in our department. This is a terrible slur on the Department of Northern Affairs. The case referred to was not in our department.

Mr. ARGUE: The case to which the minister referred?

Mr. HAMILTON (*Qu'Appelle*): That does not happen any more.

Mr. ARGUE: I am very pleased to hear that, Mr. Chairman. I would like to get some further idea, if I can, to what extent the Arctic Institute will be in Canada this year?

Mr. ROBERTSON: I do not know offhand. We could find out from the institute what their plans are or we may have it on record in our department. We keep in close touch with them and probably have the information.

Mr. ARGUE: They would have to obtain permission to go into the Canadian area?

Mr. ROBERTSON: Yes. However, they may not have told us yet what their plans are.

Mr. ARGUE: They would have to get permission from your department?

Mr. ROBERTSON: Yes. They get a licence granted by me as commissioner of the Northwest Territories. It is called an exploration licence. I do not know whether or not there is a similar arrangement in the Yukon.

Mr. NIELSEN: It is by permission of the commissioner?

Mr. HAMILTON (*Qu'Appelle*): There is also an amendment to the Northwest Territories Act which was put through this year which sets up a framework for the archaeological investigations.

Mr. ARGUE: Would you have any idea what amount of United States money in the last twelve months—any general estimate—was spent in Canada in the type of exploratory work that is often done by the people in the museum? I mean in this general field, how much American money was spent in Canada in the last twelve months.

Mr. ROBERTSON: Do you mean United States government money?

Mr. ARGUE: No, the Arctic Institute has spent some money. There may be other organizations in the United States which subsidize explorations such as the universities, museums or the Smithsonian Institute. What I would like to know generally is to what extent this type of valuable exploratory work in Canada is dependent upon outside money?

Mr. ROBERTSON: There is a certain amount of it done every year. I do not want to give an estimate of the figures offhand. I could try to get something on that. We would have a record of the licences granted in each case. We might not get for you what each expedition cost, but we would have some idea.

Mr. ARGUE: I would like to have, although not in minute detail, an answer to the question as to the general apportionment of the work in these fields and the amount of outside money and the amount of Canadian money?

Mr. ROBERTSON: We have in our department only the figures on the territories. We cannot give any answer in respect of what may be done in the provinces.

Mr. ARGUE: You do not have that information? There is not a close enough liaison between your department and the department which is comparable in the province of Ontario, for example?

Mr. ROBERTSON: There is no arrangement for that.

Mr. ARGUE: Does your museum know, in general, what work is going on in the provinces?

Mr. RUSSELL: Outside of the work of the Arctic Institute the amount of money spent on this is negligible. I would say it is typified by the expedition of Mr. and Mrs. Raymond Wood of New York state who spend their summers in the Arctic photographing the Arctic in natural colour. They present a set of their pictures to the National Museum at the conclusion of their work. I think you would find that any other expeditions of this sort would be on the same scale of, shall we say, scientific tourists.

Mr. ARGUE: What you are saying is that this amount of money is only a few hundred dollars?

Mr. RUSSELL: No, perhaps a few hundred dollars in a few cases.

Mr. ARGUE: A moment ago we were told you had no general idea of how much was spent in the provinces.

Mr. RUSSELL: I am speaking now of the Arctic, and the north in the usually accepted sense. I know of no organized expedition on a large scale dealing with subjects related to the work of the National Museum representing United States institutions which will be operated in the north this year.

Mr. ARGUE: I am not thinking purely of American expeditions. I am thinking of the Arctic Institute, or any other bodies which may have part of their expenses paid by money other than Canadian money.

Mr. RUSSELL: I do not know of any other than the Arctic Institute.

Mr. ARGUE: You do not know of any other than the Arctic Institute or these minor instances of persons travelling in the provinces?

Mr. RUSSELL: I have never heard of any in the provinces.

Mr. ARGUE: Would you think your information is sufficiently comprehensive and that this is rather a factual statement as far as the provinces are concerned?

Mr. RUSSELL: If they are connected with the museum field I think it is reasonably safe to say there are not any. There certainly are none of which I know.

Mr. ARGUE: To what extent in recent years have Canadians attached to the museum done work outside of Canada?

Mr. RUSSELL: As representatives of the National Museum there have been none working outside Canada. There have been cases of staff members taking their personal leave and working in their particular field outside of Canada.

Mr. ARGUE: Do you know whether the persons taking their leave and working outside of Canada receive money which originates in places other than Canada for this outside work.

Mr. RUSSELL: I believe so; yes.

Mr. ARGUE: Would you tell the committee about this in more detail?

Mr. RUSSELL: This is specifically the work of Dr. MacNeish. He has received his grant from various organizations, particularly the Viking Foundation. I do not have the figures showing how much this has amounted to, but I understand it has been adequate for him to carry out the research he has conducted there with considerable distinction.

Mr. ARGUE: It has been adequate?

Mr. RUSSELL: Yes, it has been adequate to carry out the research which he has conducted with considerable distinction.

Mr. ARGUE: Can you describe to the committee the Viking Institute?

Mr. RUSSELL: It is an American foundation of Scandinavian origin. I do not know too much about it, but I understand it is mainly concerned with supporting work in the study of early man particularly on this continent, and it has supported work in Mexico by a number of individuals.

Mr. ARGUE: It is called the Viking Institute?

Mr. RUSSELL: The Viking Foundation.

Mr. ARGUE: It is an American foundation?

Mr. RUSSELL: It operates out of New York city.

Mr. ARGUE: And Dr. MacNeish is an American citizen and he is employed in a Canadian museum and he receives money from the Viking Foundation for work in Mexico. Have you any idea of the amount of money?

Mr. CÔTÉ: I think this is the subject of a question which Mr. Argue asked a little while ago. An answer has been prepared in the absence of Dr. Russell from Ottawa last week, which is going forward for consideration of the minister, and it will be available shortly in detail.

Mr. COATES: May we call it a day now, Mr. Chairman?

Mr. SLOGAN: May we have a vote on this section?

Mr. ARGUE: This is the last item, I take it, or do you have other items for another meeting?

Mr. NIELSEN: This is the last item, but we are leaving one open.

Mr. ARGUE: I would like to have an opportunity at a future meeting. As far as I am concerned it could be held tomorrow or next day, or a good deal later. It would be helpful to me if the committee would adjourn now and give me an opportunity to ask a few questions at the next meeting.

Mr. NIELSEN: Perhaps Mr. Argue is not aware of the plan which the committee has to send a group within the committee through the Yukon, the MacKenzie District, and the Northwest Territories.

Mr. ARGUE: I heard about it this afternoon.

Mr. NIELSEN: I would be willing to sit here until Mr. Argue has finished his questions, because I think it will be a matter of touch-and-go.

Mr. ARGUE: I am finished for this afternoon, but I would like to have an opportunity at a future meeting to ask some further questions.

The CHAIRMAN: That is quite all right.

Mr. NIELSEN: What about meeting tomorrow morning?

The CHAIRMAN: Would tomorrow morning at 9:30 suit you, Mr. Argue?

Mr. ARGUE: That would be fine.

Mr. HAMILTON (*Qu'Appelle*): May I ask a question? Is this questioning going to be on the museum?

Mr. ARGUE: Yes, on this item.

Mr. HAMILTON (*Qu'Appelle*): That means that I will not have to bring my staff here if they are not needed—just the museum people?

The CHAIRMAN: Before we leave, might I say that this idea of a trip to the Yukon and to part of the Northwest Territories has been under consideration for some time. Members of all parties are quite keen about it, because they felt that they should know more about the problems and potentialities of that vast area. And the only way they can get a better grasp, is to make a personal survey. So a trip to those areas has been proposed.

We had hoped to have one last year but we deactivated our committee a little too soon. As a matter of fact, the Department of Transport, I believe, is prepared to furnish a plane. But it will be necessary to take into consideration the accommodation, and I hope that the members will not be too perturbed about what we are able to get on short notice. I understand we should, by agreement of the committee, make a suggestion to the Department of Transport as to when we might be able to go.

So if the committee would pass a motion that the trip be undertaken, we will try to work out a schedule so that we may take probably 14 members of the committee, and perhaps one or two more; perhaps some of the press and some of the administrative officers of the Department of Northern Affairs, and maybe of Mines and Technical Surveys, so that we will have them on the job to furnish information to the members as they make the inspection or survey.

Mr. NIELSEN: Are you suggesting that officials of various government departments go on this trip as well?

The CHAIRMAN: I think the members would probably want two or three persons from the department to go along on the trip.

Mr. NIELSEN: Here is what we are up against. If I may say so, you will have to go from here to Yellowknife or to Whitehorse, according to our tentative program, by Viscount. From there the rest of your trip will be made by DC 3's or similar aircraft.

The CHAIRMAN: Yes.

Mr. NIELSEN: According to the tentative program as laid out now it will be by DC 3's for the major portion, and by Otter for the rest. But every officer from the department you put on the plane will remove a committee member from the trip.

I for one would be willing to forego the trip myself. I know the area. But I would like to see some eastern member get up there to see what we are talking about in the committee. Therefore I think we should keep this down to the very minimum.

The CHAIRMAN: I had it in mind, since roads are an important factor in northern development, and since the estimates of the department are concerned with plans for more roads. Your department has attempted to bring to the attention of the members possible routes. I think that is very important; and also while there we should see Inuvik and Aklavik, so that you may understand what has been taking place in that area. But the question about outside personnel could be decided later on.

Mr. COATES: I move, seconded by Mr. Argue, that this matter be referred to the steering committee for consideration.

The CHAIRMAN: I think the committee as a whole should approve of the trip. Is that agreeable?

Agreed.

It has been moved by Mr. Coates and seconded by Mr. Argue that the committee are in favour of making this trip to the Yukon and part of the Northwest Territories.

Mr. COATES: With the details to be worked out by the chairman.

The CHAIRMAN: Yes, but with the details to be worked out by the committee.

Mr. HAMILTON (*Qu'Appelle*): Who is providing the money?

The CHAIRMAN: Santa Claus! Is that agreed? Agreed, unanimously.

We shall try to accommodate you, Mr. Argue, by meeting tomorrow morning. And I should make this observation: tomorrow some of the members will be absent probably exercising their franchise, which is their responsibility. But I hope the members will bear it in mind and that those of us who are here will endeavour to contact others to make sure that we have a quorum under a difficult situation.

The meeting is adjourned until 9.30 tomorrow morning in this room.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 36

RECEIVED
JUN 22 1959

THURSDAY, JUNE 11, 1959

Estimates 1959-60 of the Department of
Northern Affairs and National Resources

WITNESSES:

The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources; Mr. R. G. Robertson, Deputy Minister; Mr. E. A. Côté, Assistant Deputy Minister; Mr. L. S. Russell, Director, Natural History Branch, and Mr. W. E. Taylor, Archaeologist, Human History Branch, both of the National Museum of Canada.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21465-0—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,
Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Argue,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, June 11, 1959.
(47)

The Standing Committee on Mines, Forests and Waters met at 9.30 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Argue, Cadieu, Drouin, Fleming (*Okanagan-Revelstoke*), Gundlock, Korchinski, Martel, Martineau, McFarlane, Muir (*Cape Breton North and Victoria*), Murphy and Nielsen. (12)

In attendance, of the Department of Northern Affairs and National Resources: The Honourable Alvin Hamilton, Minister; Messrs. R. G. Robertson, Deputy Minister; E. A. Côté, Assistant Deputy Minister; M. A. Currie, Administrative Officer; L. S. Russell, Director, Natural History Branch, and W. E. Taylor, Archaeologist, Human History Branch, both of National Museum of Canada; and G. W. Rowley, Secretary, Advisory Committee on Northern Development.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources and continued on Item 292 relating to the National Museum of Canada.

Mr. Robertson produced answers to questions which had been previously asked; copies of an answer concerning a contract with John A. MacIsaac Construction regarding a bridge at Mayo were distributed to members. The said answer was ordered to be printed in the record of this day's proceedings.

The Minister and his officials were questioned on matters relating to the National Museum of Canada.

Item 292 was approved.

By unanimous agreement the Committee reverted to and reopened Items 275 to 280 relating to the Northern Administration Branch. The Minister was questioned on the subject of roads and the question of exchange of visits by parliamentary delegations between Canada and the U.S.S.R.

Items 275 to 280 were confirmed as approved.

Pursuant to the consideration at the meeting on June 10th of plans for a trip by the Committee to the Yukon and part of the Northwest Territories, on motion of Mr. Nielsen, seconded by Mr. Martel,

Resolved—That the Committee report to the House recommending that it be empowered to appoint a subcommittee comprised of such of its members as it deems advisable; and that any subcommittee so appointed have the power to adjourn from time to time and from place to place in northern Canada for the purpose of examining projects completed and under way by the federal government, and with power to examine witnesses, to send for persons, papers and records, and finally to report to the Committee its observations and opinions.

At 11.00 o'clock a.m. the Committee adjourned until 11.00 o'clock a.m. Monday, June 15, 1959.

Eric H. Jones,
Clerk of the Committee.

21465-0—1½

EVIDENCE

THURSDAY, June 11, 1959.
9:30 a.m.

The CHAIRMAN: We now have a quorum, gentlemen. Mr. Robertson, the deputy minister, has some information which was requested by Mr. McGregor and by Mr. Argue.

Mr. R. G. ROBERTSON (*Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, the material I am tabling herewith is additional information asked for by Mr. McGregor. The question was originally asked by Mr. Coates relating to the construction of the bridge at Mayo in the Yukon Territory.

The other material which was asked for by Mr. Argue yesterday was in relation to the work being done in the north by non-Canadians. It has not been fully compiled as yet. It will be tabled at a later date.

However, we have the names of the museum advisers which Mr. Argue asked about yesterday. Perhaps Dr. Russell could tell us about them.

Mr. L. S. RUSSELL (*Director, Natural History Branch, National Museum of Canada*): Mr. R. B. Routley of Saskatoon is assistant to Dr. Langston on the palaeontological survey in the south Saskatchewan valley. Mr. D. J. Kelly of Toronto is assistant to Dr. MacNeish, and he is assisting in archaeological work in the southern Yukon. Miss Lillian Bourbeau of Montreal is assistant to Miss Carmen Roy in folklore studies in eastern Canada. Dr. Helen Creighton of Dartmouth, Nova Scotia, is carrying out her own folklore project under a museum adviser position, and Mrs. R. Sheridan of Ottawa is assisting temporarily at the museum.

Other museum advisers are in process of being appointed; I do not have their names. But there is an assistant for Mr. Francis Cook who is doing a herpetological survey of Saskatchewan, and an assistant for Dr. R. J. Drake, who is doing a zoological survey of molluscs, in southwestern British Columbia. The position of musuem adviser for Miss Capes, with the archaeological survey on Vancouver Island, has been changed to labourer. It is not always possible to get persons with the qualifications required. And as for the adviser to assist Dr. Oschinsky, it has been decided for reasons of transportation that this appointment will not be made.

There are currently seven rather than nine employed or in the process of being employed.

The CHAIRMAN: Alright, gentlemen, are there any questions?

Mr. ARGUE: I wonder if we could be told something concerning the circum polar conference which was held not long ago, whether Canada was represented, and how this representation came about, and whether it was an official representation, and so on.

Mr. E. A. CÔTÉ (*Assistant Deputy Minister*): Possibly I might answer that question. Early in 1958 Dr. MacNeish received a personal invitation to attend a meeting at Copenhagen to discuss circum polar archaeology.

Mr. Birket Smith of the Danish National Museum was attempting to get several archaeologists from Denmark, Sweden, Norway, the United States of America, the U.S.S.R., and one from Canada to discuss these problems on a personal basis.

Then the director of the Human History Branch indicated that he did not see personally any objection to Dr. MacNeish's attending the conference, and that he was convinced that it would be of value to the museum.

So he suggested that Dr. MacNeish be allowed to attend this meeting, and that Dr. MacNeish be also authorized to travel on funds which would be provided by the Rockefeller Foundation.

The deputy minister considered that the museum was to benefit from a private exchange of views, and because it would be better for Dr. MacNeish not to be beholden to a United States fellowship organization in the circumstances, that the museum should pay for his personal expenses, subject to specific conditions to be given to Dr. MacNeish.

Dr. MacNeish's instructions were passed on to the director and they stipulated in part that Dr. MacNeish was authorized to attend the conference on the following conditions—

Mr. ARGUE: On instructions from whom?

Mr. CÔTÉ: On instructions from the deputy minister. There is a clear understanding that it is to be a meeting of eminent individual archaeologists drawn from circum polar countries to consider exclusively scientific problems, and that it is not in any sense an international conference.

The instructions went on to authorize Dr. MacNeish to present a paper and to make sure that he did not participate in any discussion outside of his field of competence as an individual. He was asked to report on his return, and Dr. MacNeish reported on his trip.

There were four scientists from the U.S.S.R., four from the United States of America, and several from each of the other countries mentioned except for Canada, where there was only one person sent from Canada.

Dr. MacNeish specifically underlined in his report that there was no attempt at any time to convert this meeting of individual scientists into an international conference.

Mr. ARGUE: It was a meeting of individual scientists, which had the approval of the Canadian government through the deputy minister who issued formal instructions to Dr. MacNeish?

Mr. CÔTÉ: That he might attend, that he might go as an individual but at museum expense, and that under no circumstances should he participate in any phase of it which would make it an international meeting.

Mr. ARGUE: And the museum paid his expenses?

Mr. CÔTÉ: Yes, that is correct.

Mr. ARGUE: And he was on salary while he was there?

Mr. CÔTÉ: That is correct.

Mr. ARGUE: So I put it to you that he went to the conference while he was on salary from the Canadian government, with an expense allowance provided by the Canadian government, and with the permission of the Canadian government, that he was in effect then representing Canada, as in fact he was.

Mr. CÔTÉ: The point is is that this was never intended to be an internation conference. It was a conference of individuals promoted by individuals. It was convened by Mr. Birket Smith of the Danish museum who wanted to foster an exchange of views between many scientists who were working in various countries with circum polar connections. Therefore Dr. MacNeish was sent from Canada.

Mr. ARGUE: There was no Canadian at the conference?

Mr. CÔTÉ: Not that I know of.

Mr. ARGUE: So Canada paid the expenses of Dr. MacNeish and he went on salary with the formal permission of the government; and we have an American citizen representing Canada, because he was being paid, attending this conference although not officially. I suggest that this was a wholly unsatisfactory type of representation from Canada.

Mr. FLEMING (*Okanagan-Revelstoke*): Was Dr. MacNeish under the circumstances considered to be the best qualified man to go from Canada?

Mr. CÔTÉ: Yes.

Mr. ARGUE: He is the top man in the department?

Hon. ALVIN HAMILTON (*Minister of Northern Affairs and National Resources*): Please hold it a minute. He was the only one who was invited.

Mr. CÔTÉ: Yes, he was the only one invited.

Mr. ARGUE: Would it not have been a more proper procedure, since the government was paying his expenses, and since he was on salary from the government, for the government to have selected him rather than to have had him get a private invitation to what was purportedly a non-official but what was in fact an international conference, a conference of citizens from many countries?

Mr. HAMILTON (*Qu'Appelle*): Are we not getting into a sidetracking operation? If a conference is called of a non-government nature, and if the people of Canada will benefit by having one of their individuals attend such a conference, I think there are many occasions when a government official might attend, and where we would pay his salary, but he would go as an individual. The only point at issue, as I see it, in this question of the circum polar conference, is that the invitation came to Dr. MacNeish who was one of the leading archaeologists in the country, and one of the best in North America.

Mr. ARGUE: That is a debatable point.

Mr. HAMILTON (*Qu'Appelle*): I do not think the hon. member for Assiniboia or the hon. member for Qu'Appelle are competent to deal with that point.

Mr. ARGUE: But I have read other authorities that would not agree.

Mr. HAMILTON (*Qu'Appelle*): That is not the point at issue. This was a question where we could gain some information. When the matter was brought to me as the minister, the only question was that here was a man who was invited to go to a private conference which could be very valuable—and could he go? It was not a question of asking who was to pay his way; it was that another foundation, the Rockefeller Foundation, was willing to pay his way. The department recommended and I concurred that it would be much more proper that as he was going from the National Museum of Canada, which would be to our advantage—and we did not want to be beholden to the Rockefeller Foundation—so the statement was made to Treasury Board that the National Museum would pay his expenses, and it was accepted. The question of whether he was an American citizen working for the Canadian government is irrelevant.

Mr. ARGUE: Has he ever taken the oath of allegiance?

Mr. HAMILTON (*Qu'Appelle*): No; he has taken the oath of office.

Mr. ARGUE: Well, we were told yesterday that there are really no people from outside institutions doing archaeological work in Canada, that there may be some private visitors with cameras who take a few pictures here and there and spend $100 or $200 in the country, but there are no outside institutions that are doing work in this field.

Mr. ROBERTSON: There is the Arctic Institute.

Mr. ARGUE: With the exception of that.

Mr. NIELSEN: And I.G.Y.; last year they did a terrific amount of work in the Canadian north and Canadian Arctic.

Mr. ARGUE: And the department does not know that?

Mr. NIELSEN: Yes.

Mr. ARGUE: That is O.K.; I was just wondering who was answering the questions. What about the University of Michigan; what work has it been doing in Canada?

Mr. RUSSELL: I am not aware of any work which they are doing in Canada.

Mr. ARGUE: Has the University of Michigan done any work in Canada within the last ten years?

Mr. HAMILTON (*Qu'Appelle*): Mr. Taylor may be able to answer your question, Mr. Argue.

Mr. W. E. TAYLOR (*Archaeologist, Human History Branch, National Museum of Canada*): Mr. Chairman, so far as I know, the only University of Michigan affiliated person who in recent years has worked on archaeology in the Canadian Arctic was a graduate student of the University of Michigan in anthropology, who was my assistant in the field during 1956.

Mr. ARGUE: That is the only one?

Mr. TAYLOR: From the University of Michigan.

Mr. ARGUE: And, other than this one person for this period of time, they have not had any connection with archaeological work in Canada?

Mr. TAYLOR: In the Arctic.

Mr. ARGUE: I am talking about Canada at the present time. Let us get this clear. The statement was given to the committee yesterday that so far as the department was aware the museum would naturally have a great deal of this information coming into the museum, no matter where the work was being done. I asked whether American institutions or Americans have been doing any extensive work in any part of Canada, and the reply, as I understood it, was that in the Arctic specifically the answer was, no, with one or two exceptions, which were stated today.

Mr. ROBERTSON: I mentioned there had been licences, that is exploratory licences, issued by myself as commissioner in the Northwest Territories, and we are checking to find out the names of the private individuals.

Mr. ARGUE: There is no argument about that. So far as the provinces are concerned, while the museum did not claim jurisdiction in this field, nevertheless they did not have this type of information and it was not known this work was going on. Now, Mr. Chairman, I am asking specifically whether there is anything to add in connection with any work done by United States institutions in any part of Canada.

Mr. TAYLOR: So far as I know, yesterday's question was asked in reference to the Northwest Territories.

I would say this: the University of Michigan maintained an archaeological field school, which is a summer training program, in Ontario, from approximately 1939 to 1950, some of the war years being excepted.

Mr. ARGUE: And they did a good deal of work during that time; they were out there in some proportions?

Mr. NIELSEN: Is this your idea of a question?

Mr. ARGUE: Yes; they were also on Manitoulin Island?

Mr. TAYLOR: Yes.

Mr. ARGUE: Have you any idea how many people were involved in that connection?

Mr. TAYLOR: The field crews consisted of something of the order of four to eight students.

Mr. ARGUE: Did they work in cooperation or in liaison with the National Museum?

Mr. TAYLOR: I do not want to say, no; I was not connected with either institution until some years later.

Mr. ARGUE: Would anyone else be able to answer this question?

Mr. RUSSELL: That was before my association with the archaeological work in the National Museum; I cannot answer your question.

Mr. ARGUE: With your study of the records and the knowledge you have acquired, since you became employed by the museum, of what the museum has done in the past, you do not know of this?

Mr. RUSSELL: So far as I am aware, any such liaison would have been of an informal nature.

Mr. ARGUE: So, from your records at the museum or from other knowledge, you are not aware of what went on during this period?

Mr. RUSSELL: No, I am not.

Mr. TAYLOR: Mr. Chairman, there is one point I might make in connection with the University of Michigan's work. It was primarily a field school—a training ground. I think if they had had a connection or a liaison basis it would not have been necessarily with the National Museum, but with the Royal Ontario Museum of Archaeology and the Department of Anthropology of the University of Toronto. Both institutions more properly would be concerned.

Mr. HAMILTON (*Qu'Appelle*): That brings up the point I wanted to make.

Mr. ARGUE: If you do not mind, Mr. Minister, I would like to get this one question in, and then I will have concluded this part. Was the year 1950 the last time the people from the University of Michigan were on Manitoulin Island doing this kind of work?

Mr. TAYLOR: I said approximately; I cannot give you the precise date. However, I know they had more or less lost their impetus by 1952. We operated on Manitoulin in 1952, and we did not see much of them during that time. University of Michigan archaeologists and Chicago National Museum archaeologists have visited the area over the north shore of Lake Superior and Lake Huron.

Mr. HAMILTON (*Qu'Appelle*): The point, Mr. Chairman, I was going to make is this: we have nothing at all to do with the archaeology of the provinces, and so, although my officials know a great deal about these things, they are not proper items to be dealt with here.

Mr. ARGUE: But, Mr. Minister, I was endeavouring to inquire as to what liaison and cooperation there was, and to what extent the material obtained by Americans was recorded with the National Museum, and so on. I was not trying to establish that you had control over this area.

Mr. HAMILTON (*Qu'Appelle*): Mr. Argue, would you like to have a description of what we actually demand of outside people who do come in?

Mr. ARGUE: That would be fine.

Mr. ROBERTSON: Mr. Chairman, my statement might be relevant to what Mr. Argue particularly is interested in. The only physical areas where we

have direct control are the two territories and, so far as the two territories are concerned, there are archaeological regulations in regard to both of them.

As I mentioned yesterday, licences have to be granted by myself, as commissioner of the Northwest Territories, to persons doing archaeological work in the Northwest Territories. Under the regulations the person requiring a licence is required to report to the commissioner at the end of the work season on the work done, before removing any archaeological specimens. He is required to submit a list of the specimens that he has unearthed, if that is the type of thing he has been doing, and he has to receive permission for the exporting of them. If permission is granted he is subjected to a requirement that their return may be required after they have been available for study. For instance, a short while ago a Danish scientist did a good deal of work in the Keewatin area and sought permission to take his specimens over to Denmark for study. Often it takes months to study these specimens and draw conclusions from these studies. He was permitted to take the specimens to Copenhagen for study on the condition they would be returned when the study had been completed.

In some cases what may be done is to agree with the scientists who find the specimens that they retain a certain proportion and the museum here would retain a certain proportion, because often it is not necessary to take the full amount in order to get the scientific value of it. The director of the museum acts as the agent for the commissioner in handling these regulations and assessing the specimens.

Mr. ARGUE: Could we have a copy of the regulations that govern this?

Mr. ROBERTSON: We can get them for you.

Mr. HAMILTON (*Qu'Appelle*): I would like to add one more thing in connection with this subject.

For the last two years we have brought in amendments to the Yukon and Northwest Territories acts. We have set up a statutory provision to protect the archaeology and other phases of scientific information which may be there. At the time we were doing this I asked the department if they would prepare a statement in connection with the legislation that exists in all the provinces. The study is not complete, but I understand most of the provinces do not have this type of protective legislation. I have only one concern in it. As a Canadian with some interest in history I would hesitate to see any valuable artifacts or other scientific specimens taken out of the country without some form of control. I think, without any malice in my mind toward any province, it would be a good thing if the provinces examined this matter and put in statutory legislation under which the control of outside scientists could be maintained.

Mr. ARGUE: Under which?

Mr. HAMILTON (*Qu'Appelle*): The scientists from other countries coming into this country for notable reasons should work under clearly defined regulations. If they come in and dig up interesting historical facts about our country it should be under the regulations of the governing body. In the last two sessions in this respect we have amended the Yukon and the Northwest Territories Act. I think the provinces would be well advised to bring in similar legislation.

We are duty bound to protect the Canadian interest by seeing that what is taken out of the country does not harm our historical knowledge. In other words, if we discover ten jugs we would have samples of that type of art; but if they dug them up and took them out it would be harmful to our knowledge.

Mr. ARGUE: Are there any federal regulations governing the export of artifacts, specimens and so on outside the provinces or from the province outside of Canada?

Mr. ROBERTSON: Not which apply in relation to the province, but there are in relation to the territories.

Mr. HAMILTON (*Qu'Appelle*): Mr. Côté has been doing this study.

Mr. CÔTÉ: So far as I know, there are no federal regulations governing the export of artifacts and archaeological specimens as such. It is a matter into which we are looking. So far as the Northwest Territories and the Yukon Territory is concerned, there are these definite ordinances which provide for the procedure described by Mr. Robertson in so far as the export of artifacts or archaeological specimens from the Arctic areas are concerned.

Mr. ARGUE: Mr. Chairman, the minister can comment on this if he cares to. Surely there is no suggestion that the Canadian government does not have the constitutional authority to promulgate regulations controlling the export of goods of all kinds—artifacts, specimens, and so on—from this country. Anything going outside of Canada across our border is not a matter for the determination of a province, except in so far as the federal government may say it does not wish to use its jurisdiction.

Mr. NIELSEN: Is that a question?

Mr. ARGUE: Yes.

Mr. HAMILTON (*Qu'Appelle*): I think it is a very interesting point. If an outside visitor comes into Canada and picks up a peculiarly coloured stone, the Department of Trade and Commerce does not worry about that peculiarly coloured stone when he goes across the border. I do not imagine a customs officer bothers too much about that.

In the case of artifacts which are only valuable in that they tell us something about our people, I do not think the Department of Trade and Commerce has been too concerned about them. It is only of concern to those of us who have an historical interest. I am not enough of an authority on the constitutional aspect of this to speak of it with finality. As a historian I simply know we should have some knowledge of what is going on. I know the provinces look after the archaeology of their provinces, and if they had a regulation and would agree that a number of these things could be taken out, at first glimpse, I do not think the federal government would want to set up a national policy to over-ride a provincial policy and look on these as trade goods.

Mr. ARGUE: I would put it to the minister that Canada has control over any property of Canada going outside of the country, whether it is considered commercial trade, historic specimens or anything else. I would suggest to the minister that the ten jugs about which he spoke, in the absence of regulations, could go out and would be lost to the country. I know the reluctance of the federal government to get into arguments with the provinces, but I would suggest that general regulations in this field are as necessary and important as are general regulations in the field of taking any other commodities outside of the country. The minister has said that if these important artifacts are obtained in our country and are taken out, then as a source of historical knowledge of the country, they are gone.

Mr. HAMILTON (*Qu'Appelle*): That has concerned me very much. I have started a study of provincial legislation and what is operating there. But as to artifacts being trade goods, most of us consider them just as being knowledge. We cannot set up regulations which say that knowledge cannot be passed from one country to another.

Mr. ARGUE: These are material things.

Mr. HAMILTON (*Qu'Appelle*): Just hold it a minute. We base our knowledge on these material things but fundamentally they are just a part of our knowledge. I do not know what will come out of this study, but I am concerned as I hope you are about this.

Mr. ARGUE: That is correct.

Mr. HAMILTON (*Qu'Appelle*): And I hope we can come up with some proposals which we can work out with the provinces to help us achieve the end we want. However, at the present time I am not putting myself on record as saying we have control of all articles leaving the country, nor am I advocating that the federal government should put down the big stick and say that a little stone shall not leave our country without being checked, because until the study is completed, I have no precise proposals to put forward.

Mr. CÔTÉ: The situation is somewhat complicated because of the fact that in discoveries of this nature in the various provinces the artifacts and archaeological specimens probably belong to the crown in the right of the province. At the present moment, Manitoba, Ontario and New Brunswick have legislation which controls the handling of archaeological specimens which is identical, or similar, to that of the Northwest Territories in their handling of it. Therefore they already have a fairly full mechanism in the provinces. The other two provinces which have only partial regulations are British Columbia and Alberta.

The remaining provinces, so far as I know, have no regulations whatsoever. That is the situation as it now stands. We are studying it to see what could be done in the proper sphere of the federal government in conjunction with the sphere and authority exercised by the provinces to ensure that valuable artifacts and archaeological specimens are not lost to Canada.

Mr. ARGUE: You say these things are in the right of the crown through the province. Surely you are not suggesting that the provinces have the right themselves as to what is done with the specimens in relation to their being exported outside the province. Surely it is a well known constitutional fact that when it comes to goods crossing international boundaries, to say nothing about interprovincial boundaries, at that point the federal jurisdiction may become applicable if the federal government wishes to use it.

Mr. HAMILTON (*Qu'Appelle*): I think that is a question which Mr. Côté should not answer.

Mr. ARGUE: He has endeavoured to state the opposite.

Mr. HAMILTON (*Qu'Appelle*): He has stated the view that has evolved. We are getting into a field where many persons would consider these artifacts as part of knowledge which is associated with education. It is true it is just getting the tools of education. It is a pretty deep and complex problem and gets into the field of ceramics a bit. I would be hesitant to ask Mr. Côté to say more than he has on this.

Mr. ARGUE: I did not want the inference left unchallenged that because this is property which belongs to the provinces they can do what they wish. They can, of course, in the absence of federal regulation.

Mr. HAMILTON (*Qu'Appelle*): When a decision is made that artifacts are physical goods, we would have the power over export. Mostly, the weight of evidence would be that the artifact is simply part of human knowledge, and human knowledge and education are pretty well tied up with the provinces.

Mr. ARGUE: We have regulations over the import of materials, books, and so on. There is no question in my mind that the federal government not only has jurisdiction in this field but also that the minister himself, after a thorough exploration with his officials, probably will be the minister who brings in

some kind of regulation setting out that certain things should be done in this very field. I would express that as a hope. I think it is a shame there should be complete absence of jurisdiction by the federal government through failure to use it.

Mr. HAMILTON (*Qu'Appelle*): My own hope would be that the provinces could set up legislation which would achieve the end we all want.

Mr. ARGUE: Mr. Chairman, I would like to know whether or not Doctor Oschinsky has taken the oath of allegiance and, if so, when?

Mr. CÔTÉ: So far as I know, Doctor Oschinsky has not taken the oath of allegiance. He has, however, taken the oath of office as is required by the Civil Service Act.

Mr. ARGUE: That is the answer which was given to me when I placed question No. 344 on the record, but it does not happen to be the answer that was given when I placed question No. 430 on the record. Question 430 asks this:

1. Are there any American citizens presently holding positions in the Department of Northern Affairs and National Resources?
2. If so, how many are there in each branch?
3. Have any of these persons taken the (a) oath of allegiance; (b) oath of office?
4. If so, how many, what are their names, positions, nature of employment, in what branch; and how long have they been employed with the department?

Then the answers are as follows:

1. Yes.
2. One in National Parks Branch. Four in the National Museum of Canada.
3. (a) Yes. (b) Yes.
4. (a) The following have signed the oath of allegiance:—L. Oschinsky.

The statement that the oath of allegiance has not been taken agrees with the answer to question 344, but it is in variance with the answer to question 430.

Mr. CÔTÉ: Mr. Chairman, the answer to question 430 is at variance. I understand from the director that this came to his notice after both replies had been put in and that he inquired from Dr. Oschinsky whether he had taken the oath of allegiance. Dr. Oschinsky informed him he had not taken the oath. I can only assume from Dr. Oschinsky's reply that the answer given to question 430 is in error.

The CHAIRMAN: Would you put on the record the oath of office and oath of allegiance, for the benefit of the committee?

Mr. CÔTÉ: Yes, sir. The oath of allegiance which is administered is the following—

Mr. NIELSEN: This is the oath of allegiance?

Mr. CÔTÉ: Yes. It is the oath of allegiance which is normally sworn by civil servants unless they are specifically exempted. It is as follows:

> I do swear that I will be faithful and bear true allegiance to Her Majesty Queen Elizabeth the Second, Her Heirs and Successors according to law. So help me God.

Mr. NIELSEN: What is the oath of office?

Mr. CÔTÉ: The oath of office and secrecy reads as follows:

> I solemnly and sincerely swear that I will faithfully and honestly fulfil the duties that devolve upon me by reason of my employment in the Civil Service and that I will not, without due authority in that behalf, disclose or make known any matter that comes to my knowledge

by reason of such employment. So help me God. Sworn and subscribed before me—

Mr. ARGUE: Why do you not ask these persons to take the oath of allegiance?

An hon. MEMBER: They cannot.

Mr. ARGUE: One has.

Mr. CÔTÉ: It is a complex question of nationality. I understand that a United States citizen, and citizens from many countries, when abroad swear an oath of allegiance to a foreign crown or foreign power, they thereby automatically lose their citizenship. Many United States citizens feel they should not be asked to do that. That has been recognized by the government as far back as 1947 when specific and special procedure was provided for exempting non-British nationals from the oath of allegiance when no Canadian was available for employment.

Mr. ARGUE: I think there has been a feeling among Canadians that if a non-Canadian or a person who is not a British subject comes to Canada, and he is a qualified person, and he accepts an important position with the government or with somebody else, where he can be of good service—or presumably they would not have appointed him—then that person is going to be in Canada for a substantial number of years, and that person, or those persons, are going to make their living in this country.

Would it not be a much better state of affairs if they applied for Canadian citizenship papers in the ordinary way? I wonder if the minister or the government shares my feelings, and I wonder if any conversations on an informal basis or on any other basis have been held to see whether or not they considered it to be a desirable objective which might be obtained?

I have information here; I do not need to ask it again; but I think the majority of these people have now been in the country long enough to be in a position to apply for Canadian citizenship.

Mr. MARTINEAU: Mr. Chairman, I think we are going far beyond the scope of this committee. We are not here to examine whether civil service employees should be Canadian citizens or not. This is not a matter which is properly before the committee. I think, in addition, that the line of questioning adopted by Mr. Argue has been most unfair to a servant of Canada, whether he is a Canadian, an American citizen, or anything else.

Mr. ARGUE: I have said nothing about Canadian citizens. Let me not be misinterpreted. Do not misinterpret me.

Mr. MARTINEAU: Mr. Chairman, the whole line of questioning has been with respect to the character of this employee, and I think if we are going to adopt that line, the employee should be called here to defend himself. And obviously it has nothing to do with the work of this committee.

Mr. ARGUE: These questions are quite in order, Mr. Chairman. They were placed on the order paper.

The CHAIRMAN: I recognize that.

Mr. ARGUE: I am trying to clear up discrepancies in the answers to the questions. You can raise a point of order, or ask for the employee to appear before the committee. That is your prerogative.

Mr. MARTINEAU: It is not your prerogative to run down people in their absence. I think this committee has put up enough with this line.

Mr. ARGUE: I want to congratulate you, Mr. Chairman, on the way I have seen you handle this committee. I said to people privately last night that I thought the chairman of this committee was one of the best that I had seen in the chair.

Mr. MARTINEAU: That is not a point at issue. You are just trying to confuse the issue.

The CHAIRMAN: I think the point raised by Mr. Argue and Mr. Martineau is quite in order.

Mr. MARTINEAU: What we are indulging in here is a witch hunt.

Mr. ARGUE: Here we have more steamroller tactics.

The CHAIRMAN: No, no.

Mr. ARGUE: That is what he is trying to do, to use the weight of the majority.

The CHAIRMAN: May we have order for a moment, please.

Mr. ARGUE: It was a very unfair statement to make, and an unkind insinuation.

Mr. MARTINEAU: I listened to you all day yesterday, and I think somebody should put a stop to it.

Mr. ARGUE: You say "put a stop to it". That is exactly what I was saying.

Mr. MARTINEAU: You are out of order, yet nobody stops you.

Mr. ARGUE: That's right, use your steamroller tactics.

Mr. FLEMING (*Okanagan-Revelstoke*): We have sat quietly for a day and a half, and we are willing to do so if you will only stick to your line of questioning. I agree with Mr. Martineau that if there is any suggestion that an individual was improperly employed by the government, then that individual ought to be here. And while Mr. Argue has not said these things directly, there is, as Mr. Martineau suggested, an inference here that we should be limiting the people we employ, or insisting upon their Canadian citizenship, when they have been secured by the Canadian government for specific services because we could not find Canadians to do the job.

The CHAIRMAN: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): Now we seem to be going beyond that. What I am afraid of here is that if we place too many restrictions on the National Museum, the museum may suddenly find itself unable to secure properly qualified employees.

The CHAIRMAN: Might I have order for a moment. I think we have tried to be fair here. I must say to the committee, with due respect to Mr. Martineau's argument, who is always fair, that Mr. Argue actually is justified in his questioning, because some of the questions now asked have been answered by the department in response to his questions, which were placed on the order paper.

Mr. Argue's concern, I think, was merited with respect to these people who are employed. He made the suggestion that if a person was going to remain in Canada as an employee of the government, why should that person not take out Canadian citizenship. I think it is a justified remark, or a justified comment, and I think we can now pass along since we have threshed it out thoroughly. Will you please proceed?

Mr. MUIR (*Cape Breton North and Victoria*): I do not see a thing wrong with what Mr. Argue said, but I do believe he is suffering from—

The CHAIRMAN: Do not get into personalities.

Mr. ARGUE: That is the kind of personal insinuations which have been made by members of the committee. I have been maligned in this committee, and I think the record will show that I have not singled out any person, although I have the material here.

Mr. MUIR (*Cape Breton North and Victoria*): Who is chairman of this committee? I was speaking, and I thought I had the floor. I have been silent for the last two or three days, and I have listened very patiently. I think Mr. Argue has done a very good job.

The CHAIRMAN: Mr. Muir, the chair has control of the committee, I hope.

Mr. MUIR (*Cape Breton North and Victoria*): Mr. Argue had every opportunity, and no one objected. But just because someone differs from him, he blows up and cries "steamrollering", and "you are using your huge majority". I do not like this kind of nonsense.

Mr. ARGUE: I did not start it this morning.

The CHAIRMAN: Let us proceed. I think we have done very well.

Mr. ARGUE: I was trying to establish government policy, or the attitude of the minister towards the desirability of this thing, and I asked if the minister or the government had decided that if in their judgment to fill a particular post they must go to a person who is not a Canadian citizen. I am trying to be fair. Most of these people were appointed by past administrations, and certainly, if so, they were in a position to take out citizenship papers, because they have been in the department for some years.

I am merely asking whether the minister considers it would not be a preferable set of circumstances if American citizens who are working in the public service and who have been here for a number of years making their livelihood in our nation—if it would not be a preferable state of affairs if they applied for citizenship papers in the ordinary course of events, after they have been here for the prescribed length of time; and I asked, Mr. Chairman, whether any discussions have taken place with this in mind, by the minister or by his deputy.

Mr. NIELSEN: There is another side to the coin as well: that by insisting upon the rigid requirements suggested by Mr. Argue, it may well result in restricting the number of scientific people who would otherwise be available for employment in Canada when no Canadians were available for that purpose. In other words, if you insist on these people being Canadian citizens, you may not get the required people you need to do the work.

The CHAIRMAN: That point was well covered yesterday. Mr. Argue is asking the minister to comment on what he suggested.

Mr. HAMILTON (*Qu'Appelle*): First of all, I cannot speak for all departments, but I think all Mr. Argue is asking me for is an opinion. Whatever I may say will therefore be construed to be the opinion of a member of the cabinet, and under the cabinet solidarity rule, it would stick as a cabinet decision. If I say one thing, the cabinet is stuck with it.

However I think almost every Canadian, just as the citizen of any country, would like to think that the people who came to his country would eventually become citizens of that country. But a good many people have come in from the United States or from other countries, and after they have been here for a while without taking the oath of allegiance, they do become Canadian citizens.

There are several people on record from other countries who have come to this country and who have done so. But the thing is a two-way street. Thousands of Canadians have left Canada and gone to the United States, as we all know. Many of them—almost all of them—have become American citizens. But there are still many thousands of Canadians working in the United States who nevertheless maintain their Canadian citizenship.

Yesterday I asked the member for Assiniboia if he was against people from outside working here as scientists, and he said, no, but that he preferred

Canadians if possible. I think every member of this committee would agree with that.

But in the field of learning, and science I would be repelled by the idea of insisting on the practice so that citizens of other countries, who have scientific attainments which we have not achieved, should feel that they could not come here and be happily received. In this field of knowledge I belong to the school of educators who welcome them, and I hope that we always will welcome this interchange of people.

If we cannot get Canadians who are qualified to take these jobs, and who are highly skilled technicians, then we would have to employ people who come to this country, and I feel they are most welcome here.

I can think of certain Canadians who have gone abroad and who have never lost their Canadian citizenship, and who have lived most of their lives in other countries.

I am thinking of Edward Johnson who lived in Italy for a good part of his life, and who then came to the United States where he lived for 10 years; but he never dropped his Canadian citizenship. And after his work was finished there, he came back to Canada as a Canadian citizen.

I assume other people as well have the same deep devotion to their country that Edward Johnson had for his. I cannot speak of government policy in this matter, but I hope that good-minded people all over the world would welcome this free exchange of people in the field of knowledge.

The member for Assiniboia and I have personal knowledge that in our constituencies we have a large number of Americans who come up here to farm. Some of them, even after many years, have not taken out Canadian citizenship because they know that if they did so, they would lose their American citizenship. But gradually over the years many of them have taken out Canadian citizenship, and we welcome them. But I do not think he or I have ever tried to force any of them either by economic or social pressure to make the change.

In the field of knowledge I think we should move with enlightenment and tolerance in these matters. I do know that in every country there is a body of opinion that is very outspoken, and that resents people from other countries coming into their country. I can understand that feeling. But I hope our country always sets its feet on the path of tolerance. We will, by this attitude, not lessen our Canadianism one bit. We will strengthen it. And unless these people are acting hostile to our interests, I think we should welcome them to this country in all occupations, but particularly in the field of learning and science.

Mr. ARGUE: May I make a comment on the minister's statement. He referred to certain people in his constituency and mine who have been farming there for many years, or for a number of years, and who were American citizens. I do not think he meant people who travel up here and return to the United States in the same year. I do not think he had in mind people who live in Texas. I do not know anybody who does this. I do not believe he was speaking about people who keep a home in the United States and come up to Canada for the summer months.

I understand he was talking about people who live in Canada the year round, and who farm here in the ordinary course of events.

It is perfectly true that there are many who were citizens for a substantial number of years. I am very pleased, myself, at the number of these people who have taken out Canadian citizenship papers. I think it is a preferable state of affairs. But might I suggest—and the minister may not agree—that there is a difference between somebody coming up here and engaging in industry in our country in the ordinary course of events, and someone coming

up here and taking a job on what appears to be rather a permanent basis, in the public service, working for the government of Canada. And I think the attitude of governments in the past has been that Canadian citizens should be preferred.

I think that has been very well shown by the fact that the law requires that there must be a special order in council, a special exemption passed in order that this be done.

Therefore, we do not have what might be taken from the minister's attitude, a suggestion of free and open access for non-Canadians into the public service, and that everybody who applies is free to enter no matter from what country he may come.

I take it from the minister's answer—and I do not want to put words into his mouth—that no consultations, no discussions whatever, have ever been held with American citizens in the Canadian public service over a period of years as to whether or not they would care to take out Canadian citizenship?

Mr. HAMILTON (*Qu'Appelle*): No. I cannot speak for previous administrations, but I am sure no Canadian government would ever put on pressure.

Mr. ARGUE: Were no discussions held or engaged in as to whether it would be a desirable thing?

Mr. HAMILTON (*Qu'Appelle*): I would call it putting on pressure if you said to the men working for you: how about joining up and taking out Canadian citizenship?

I think I have made my statement as complete as I can make it. It is a subject about which we all have our feelings. I have tried to put the thing into perspective, and I cannot say much more.

The CHAIRMAN: Thank you. Are you through, Mr. Argue?

Mr. ARGUE: I am through with my questions on the museum, but there are other matters which may come up. I want to ask the minister one or two general questions.

Mr. HAMILTON (*Qu'Appelle*): About the museum?

Mr. ARGUE: No.

Mr. HAMILTON (*Qu'Appelle*): Perhaps we might clear up the museum vote.

The CHAIRMAN: Does item 292 carry?

Agreed.

Do you want to refer to something else? You mentioned the minister a little while ago.

Mr. ARGUE: Yes.

The CHAIRMAN: It was Mr. Argue's suggestion a few moments ago before the meeting, that we revert to the Northern Administration Branch items for one purpose only, and that was to discuss the teams going to Russia and the teams coming from Russia.

Mr. ARGUE: And I have one question on northern roads.

The CHAIRMAN: Is it agreed?

Agreed.

Mr. NIELSEN: I want to know what he is after roads for.

Mr. ARGUE: I cannot tell you what I am after until I have an opportunity to ask my question.

Mr. NIELSEN: Why do you want to open up northern administration and go into roads?

Mr. ARGUE: I do not want to go into roads in particular, but just very, very generally. I realize I am asking the indulgence of the committee.

Mr. HAMILTON (*Qu'Appelle*): I would like to support the member for Assiniboia. I know the difficulty he has in attempting to cover all these committees. I would suggest he be permitted to ask these questions.

Agreed.

Mr. ARGUE: At a previous meeting, Mr. Robertson gave us some idea of the network of roads in the Soviet Union. We know in Canada we have the Alaska highway and there are certain other proposals for building highways in our northland. I am wondering whether or not anybody has made any inquiries or study—and Mr. Robertson is obviously quite an authority on things going on in the Soviet Union; I think he established that the other day.

The CHAIRMAN: I would say very efficiently.

Mr. ARGUE: The Chairman agrees. Have any inquiries or studies been made as to whether or not there are any plans in the Soviet Union to provide what I would call a trans-Siberian road for automobile traffic? I am wondering if there is any thought at all of some day—perhaps not too many years from now—with the great advances in science, building our own road system through Canada and the United States in the northwest, to link up with the Soviet road system. I wondered if some day they may have a network, which Mr. Robertson says they do not have now, so that it might be possible for motor traffic to travel to Asia and to the Soviet Union. I have discussed this with a number of persons and they are intrigued with the idea. I suppose before the war we thought the Alaska Highway was a screwball idea, but it was built. Some day, and perhaps not too many years away, there might be that kind of interchange of tourists which would be much more general than anything we have had. I would think that would be a very excellent thing for international relations. This idea may not have struck anybody in the department.

Mr. ROBERTSON: Mr. Chairman, as far as roads themselves, not railroads, are concerned, as I mentioned the other day we have no information of any Soviet intention to establish a trans-Siberian highway. There is no trans-Siberian highway at the present time. In the northeastern area, which would be the area immediately adjacent to the Bering Strait, where the point of contact suggested by Mr. Argue would come, so far as our information goes there are no roads in that immediate corner—I mean right up against the Bering Strait. There are no roads of any length. There are roads which run from Magadan Strait north and in a northeasterly direction, but that is well away from the Bering Strait area.

A few months ago or longer there was an idea brought forward—and I have forgotten at the moment the name of the person who brought it forward; as I recall it he was a Soviet engineer—suggesting linking the rail systems of the two continents by extending the railways up on both sides with rail ferries which would operate between. I would doubt that this is something which is likely, at least in the foreseeable future. This is the only thing about which I have heard speculatively which is close to the sort of point which Mr. Argue raised.

Mr. NIELSEN: It has also been suggested from time to time that there could be a tunnel underneath the Bering Strait.

Mr. ROBERTSON: I have not heard that, but perhaps it has been suggested. It has also been suggested, or raised, by Soviet engineers that a dam be built across there which would affect the climate.

Mr. ARGUE: Since this is a department which is looking to the north, and from what the minister has said, is a forward-looking department, I think these are the types of speculative ideas, or speculative possibilities, which should be explored both in this department, the Department of External Affairs

and others. I think the faster we can move towards this kind of objective the quicker we will obtain a greater degree of peace in the world.

I have just one more question. Has there been any further consideration given to the oft suggested proposal that there should be an interchange of visits by members of parliament, and parliamentary delegations, with the Soviet Union. I understand some of their people are in Ottawa just about now. Also, from reading the newspapers I understand they are not here in an official capacity as far as the Canadian government is concerned; they are guests of the ambassador, and that is the position in which they are in Canada. Has any further consideration been given to the oft repeated proposal there should be an official interchange of a parliamentary delegation which, in my opinion, would be an excellent idea at this time? I think it would be a wonderful thing if members of the Senate and a group of members of the House of Commons—

The CHAIRMAN: Of this committee?

Mr. ARGUE: Perhaps—could visit the Soviet Union and other points in Europe and Asia.

Mr. HAMILTON (*Qu'Appelle*): My department is not aware of any proposal along that line. The last information I have is that there was a consultation on this some months ago which dealt briefly with this. This is a general statement and purely from memory, because I have not taken the time to look up the files on it. There may have been more recent discussions on this in other departments, particularly the Department of External Affairs. As far as this department knows we have no such information.

The CHAIRMAN: Gentlemen, will you confirm the approval of the items of the Northern Administration Branch?

Agreed.

Mr. NIELSEN: Mr. Chairman, I have a motion to make. I move, seconded by Mr. Martel, that this committee report to the House recommending that it be empowered to appoint a subcommittee comprised of such of its members as it deems advisable; and that any subcommittee so appointed have the power to adjourn from time to time and from place to place in northern Canada for the purpose of examining projects completed and under way by the federal government, and with power to examine witnesses, send for persons, papers and records, and finally to report its observations and opinions to the committee.

The CHAIRMAN: Are there any comments, gentlemen?

Agreed.

The CHAIRMAN: The meeting is adjourned. We will have a steering committee meeting this afternoon.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 37

RECEIVED
JUN 24 1959
Library of Parliament

MONDAY, JUNE 15, 1959

Estimates 1959-60 of the Department of
Northern Affairs and National Resources

WITNESSES:

The Honourable Alvin Hamilton, Minister of Northern Affairs and National Resources; Mr. E. A. Côté, Assistant Deputy Minister; and Mr. Alan Field, Director, Canadian Government Travel Bureau.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21477-5—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*St. Maurice-Lafleche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

ORDER OF REFERENCE

HOUSE OF COMMONS,
THURSDAY, June 11, 1959.

Ordered— That the name of Mr. Fisher be substituted for that of Mr. Argue on the Standing Committee on Mines, Forests and Waters.

Attest

LEON J. RAYMOND,
Clerk of the House.

21477-5—1½

MINUTES OF PROCEEDINGS

MONDAY, June 15, 1959.
(48)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Aiken, Dumas, Fisher, Fleming (*Okanagan-Revelstoke*), Granger, Korchinski, McFarlane, McQuillan, Mitchell, Muir (*Cape Breton North and Victoria*), Murphy, Nielsen, Payne, Slogan and Stearns. (15)

In attendance; of the Department of Northern Affairs and National Resources: The Honourable Alvin Hamilton, Minister; Messrs. E. A. Côté, Assistant Deputy Minister; G. M. Carty, Chief Administration Officer; M. A. Currie, Administration Officer; Alan Field, Director, Canadian Government Travel Bureau; R. D. Palmer, Chief, Travel Information and Publications; H. L. Crombie, Chief, Research and Statistics; and P. Rielly, Publicity.

On motion of Mr. Dumas, seconded by Mr. Aiken,

Resolved,—That Mr. Fisher be substituted for Mr. Argue on the Subcommittee on Agenda and Procedure.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

The Chairman advised the Committee of the necessity of deferring its plans for the proposed trip to the Yukon and part of the Northwest Territories, which had been considered at the meeting of the Committee on June 11th. Referring to the said consideration of the matter on June 11th, it was moved by Mr. Korchinski and seconded by Mr. Mitchell,

Resolved,—That the presentation of a report to the House regarding a subcommittee making an inspection trip to northern Canada, as resolved on June 11, 1959, be deferred until such time as the Committee may later decide.

The Committee reverted to Item 293 relating to the Canadian Government Travel Bureau. The Minister and departmental officials were questioned on matters arising therefrom.

In the course of the said discussion, on motion of Mr. Fisher, seconded by Mr. Fleming (*Okanagan-Revelstoke*),

Resolved,—That there be called as witnesses, in regard to the problem of assistance to small businesses in the tourist industry, Mr. James A. Roberts, Associate Deputy Minister, Department of Trade and Commerce, and a representative of the Industrial Development Bank for the purpose of inquiring into the problems regarding credit which face the said small businesses.

During the proceedings officials of the department produced detailed answers to questions which had been asked at previous meetings in regard to the following matters, namely,

Dollars spent in U.S.A. for travel promotion—dollar earnings—and earnings per dollar of promotion cost, 1957;

Comparable rental rates per hour of equipment working in the Northwest Teritories as compared with rental rates on the basis of the contract for the Flatt Creek-Eagle Plain Road;

Employees of federal departments in the Yukon and Northwest Territories.

The said detail was ordered to be printed in the record of this day's proceedings.

At 12.55 o'clock p.m. the Committee adjourned until 11.00 o'clock a.m. on Tuesday, June 16, 1959.

Eric H. Jones,
Clerk of the Committee.

EVIDENCE

MONDAY, June 15, 1959.
11.00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Mr. MCFARLANE: Mr. Chairman, with the permission of this committee I would like to refer to the report to the House that was made on the estimates of the Department of Mines and Technical Surveys.

The CHAIRMAN: Just a moment. Could we deal with that point a little later, Mr. McFarlane?

We require a motion to substitute the name of Mr. Fisher for Mr. Argue on the steering committee. Would someone move that Moved by Mr. Dumas, seconded by Mr. Aiken: that the name of Mr. Fisher be substituted for Mr. Argue. Agreed?

Motion agreed to.

The CHAIRMAN: Gentlemen, the proposed trip which is scheduled for an early date has been postponed. I have discussed this matter with the house leader, to determine whether or not this committee should continue to function after the house prorogues at the end of this session, or whether or not a smaller committee could be appointed—which would probably be known as a commission—composed of such members as our committee should nominate to make the trip to the north country, probably in September.

In view of that, we require a motion—as I was prepared to make a report to the house at the end of last week—the motion being: that the presentation of a report to the house regarding a subcommittee making an inspection trip to northern Canada, as resolved on June 11, 1959, be deferred until such time as the committee may later decide. Will someone move that? Moved by Mr. Korchinski, seconded by Mr. Mitchell. Agreed?

Agreed.

Mr. SLOGAN: Mr. Chairman, why was the decision made to defer the trip?

The CHAIRMAN: As a matter of fact, it has to be a decision of cabinet. Cabinet is not meeting until tomorrow, so there was not enough time in between to take care of resolutions and make the necessary arrangements. But, as suggested by the house leader, a trip could be made at a later date, and probably at a more convenient time—probably in September.

Mr. MCFARLANE: Mr. Chairman, since the report was approved on the estimates of the Department of Mines and Technical Surveys—and, as you know, we were not allowed to take the report out of the room when we were considering the draft in camera—we have now had a chance to study it, and I see there is one sentence in the report:

> The provision of two additional ships for this work is considered an immediate necessity.

I cannot find in the printed proceedings that we ever agreed to that: we more or less agreed this was going to be handled by plane rather than go to the terrific expense of building two additional ships for this work in the north.

The CHAIRMAN: What are you referring to?

Mr. McFARLANE: I am referring now to page 716 of our proceedings, paragraph 47 of the report.

The CHAIRMAN: Paragraph 47? How would it be if we took that up at another meeting? You have brought it to the attention of the committee.

Mr. McFARLANE: That is fine, then.

The CHAIRMAN: Gentlemen, we have the minister with us this morning. We are still on the estimates of the Canadian Government Travel Bureau, item 293, on page 57 in the estimates.

Mr. AIKEN: Mr. Chairman, I would like to ask the minister if there is anyone representing Canada who travels in the United States in an effort to sell Canada to the Americans?

Hon. ALVIN HAMILTON (*Minister of Northern Affairs and National Resources*): There is no person who is on it full time, or anything like that; but individuals, such as the head of the travel bureau—once or twice the minister—and always, of course, the consuls general have this as part of their responsibility, to do what they can to encourage travel in Canada.

Mr. AIKEN: Last week we heard Dr. Mackle—who is connected with the association of tourist resort operators—who spends almost full-time travelling throughout the United States in an effort to sell Ontario tourism to the Americans, and also in an effort to get the industrial concerns to extend their season so that the Ontario resorts will have a longer season. I was wondering if the Canadian Government Travel Bureau could inaugurate something like that on behalf of Canada.

Mr. HAMILTON (*Qu'Appelle*): It is a matter I will be glad to take under consideration.

Mr. AIKEN: There is another question along the same lines, Mr. Chairman. I think I might preface it with a few remarks. Since these meetings have been reported in the press, I had a gentleman approach me over the weekend—Mr. Roberts, from Gravenhurst—who said that a couple of years ago he had volunteered, along with two or three other prominent Canadians wintering in Florida, to show films to different American groups, and he had approached the National Film Board and the Canadian Government Travel Bureau in an effort to secure these films.

He and another man were very anxious to go around and to try to sell Canada in the States, and particularly in Florida. He was told he would have to put up $200 to rent the film; so he abandoned the idea. I know there are a good many Canadians who winter in Florida, who are anxious to sell Canada and would be willing to take up this particular work. I wonder if the department could consider any such volunteer projects?

Mr. HAMILTON (*Qu'Appelle*): I wonder if Mr. Field could speak to this: he would know more about the details of the program.

Mr. ALAN FIELD (*Director, Canadian Government Travel Bureau*): Mr. Chairman, I do not recall this particular request from memory. I do know that we have supplied through the National Film Board a good many copies of films to operators like Mr. Roberts, who have taken them down to the States and have shown them. This has been done without charge to such people. The policy of the film board is to loan these travel and wildlife films without charge. I cannot imagine circumstances under which he would be asked to put up $200, unless he wanted to cut the films up, which I think is a little bit unlikely.

I do remember another case of an operator who was going down to Mexico City and he wanted to take a film down there. It was "Trans-Canada

Summer", a 50-minute film. It was produced by the film board last year. He wanted to make some cuts in the print, and he was advised that if he did that, the cost of the print would have to be assessed to him.

Mr. AIKEN: Then do I understand that these films would be made available to people such as I have mentioned?

Mr. FIELD: Yes, sir, that is true.

Mr. AIKEN: He told me this was a few years ago.

The CHAIRMAN: Mr. Field, on that same subject, the other day you were telling the committee about some 50 million, 60 million or 70 million television viewers of Canadian films in the United States. How was that undertaken?

Mr. FIELD: The television film library is administered through the National Film Board's New York office. A number of prints are assigned to the television library. These prints are made available to any television station in the United States that wishes to use them. They are loaned without charge.

The films are in both black and white and colour, but I think colour predominates. Last year I believe there were 70 film titles in circulation through this library, and we are told that the estimated audience for several thousand screenings was in the neighbourhood of 60 million viewers. I think, Mr. Chairman, a report on television distribution is available, and we could table it if the committee wishes.

The CHAIRMAN: What I am anxious to find out, Mr. Field, is this: my understanding from people that are in the business is this: that an advertiser, we will say, can obtain one of those films, cut it up as he chooses, take the title and anything else out that he wants to take out, and use it probably at 9 o'clock or 8 o'clock in the morning, and no reference to Canada whatsoever is in the film.

I think that is a practice that is accepted, not only in the United States but in Canada. It means that they can show these Canadian films without any reference to Canada whatsoever—maybe they throw in an ad. when any reference could have been made to Canada. Furthurmore, you say it has an audience of 60 million people, and I understand that you base that audience on the television viewers in the area, we will say of Chicago, for instance.

Tell me if I am wrong about this. There might be an audience of 10 million people in Chicago at 8 o'clock at night, but this film you are talking about—which may not even refer to Canada, but be Canadian scenes—could be shown at, say, 8 o'clock in the morning, when there would probably be an audience of one million instead of 10 million. There being, say, four stations there, you would break that down, allowing each station the same average number—250,000 people. Your 10 million audience is down to 250,000 people at most—and then, no reference to Canada. Is that the practice?

Mr. FIELD: I do not think so, Mr. Chairman, although you are quite right in saying that this does happen, and has happened. I do not know of any specific cases where it happened to Canadian films.

The CHAIRMAN: I must say that I do know!

Mr. FIELD: I meant Canadian Government Travel Bureau television library films, sir. I think it has happened, because I heard of it when I was in New York. But the films that I have been describing in the library are loaned to the television station and must be returned. They must be returned in good condition. As the chairman says, this does not preclude the possibility of someone cutting the film and then putting it together again; but if this happens, and it is noted, the television station is asked what they did with the film. We did have the film board make an assessment on the times that most of these

films were shown on the air. As the chairman indicated, some of them were shown during the daytime hours, but it is surprising how many are shown in evening hours.

There is one other development I should mention, and that is the production of a series called "televisits". These are short, five-minute film clips, which are made available in packages to the various television stations in the United States on a free basis. They can be used as fillers, in the same way as short paragraphs are used by newspapers in making up a page. If a television show runs a little short at the end, they can use a filler on Canada, in which they quickly get across a message—

The CHAIRMAN: The name "Canada" might not even be used. They will use part of the film and cut that part if necessary; and the name "Canada", or any reference to Canada, might not be in that program.

Mr. FIELD: This could happen, but I am not aware that it has happened to any great extent in our films.

The CHAIRMAN: Since you made your statement to this committee the other day, I have checked up on the Buffalo station, and in that case it has happened frequently. And here is a Canadian production shown by that station without any reference to Canada. The people who made inquiries regarding them knew they were Canadian productions, and, in fact, Ontario films, because the road signs were quite obviously those of Ontario. But there was no reference to Canada or Ontario in the program. When you mentioned a minute ago that a surprising number of evening hours are taken up with this sort of thing, did you mean to tell this committee this type of advertising would get an eight o'clock showing, or a nine o'clock showing in the evening?

Mr. FIELD: Yes, sir. There are a number of stations in the United States that have shown these productions from seven o'clock right through until eleven o'clock at night. I could get the report from the film board, if you would like to have it.

The CHAIRMAN: I think the committee would be very glad to have it.

Mr. AIKEN: Mr. Field, following up the chairman's suggestion, do you require television stations to make a return as to when these films are shown on television?

Mr. FIELD: Yes, the National Film Board, which administers this program in the United States on our behalf, does ask them to give that information.

Mr. AIKEN: Would you be able to get information from the National Film Board as to the dates and hours on which different films are shown?

The CHAIRMAN: And the stations?

Mr. AIKEN: Yes, and stations?

Mr. FIELD: Yes, I could get that information.

The CHAIRMAN: I think the committee should have that on the record.

Mr. FLEMING (*Okanagan-Revelstoke*): Mr. Chairman, on hearing the evidence on the travel bureau, throughout this period we have continuously come up against the problem, and we have endeavoured to get comment on a suggestion, to broaden the scope of the travel bureau operation. We were given the answer that the terms of reference for the board are restricted, and do not enable the broadening of scope. I would like to know exactly what these terms of reference are and in what way they limit the broadening of the scope of the bureau.

The CHAIRMAN: That is a very good question, Mr. Fleming. The minister probably would answer that.

Mr. HAMILTON (*Qu'Appelle*): The terms of reference under which the Travel Bureau operates is that Treasury Board watches very closely that all moneys expended are directed generally to attracting tourists from the United States. We do cooperate with all the provinces and some of the private agencies. They give us certain information which comes from their offices into our office, and we put a certain amount of this literature into our offices so if any inquiry comes in from the United States, asking for information, say, for travel in the maritimes we put maritime literature into that envelope and send it to them. When they get inquiries for information about Canada, we give them that. But, generally speaking, the terms of reference limit advertising to attracting tourists from the United States.

About a year ago there was a proposal that we make a move into the United Kingdom market. We did certain things to help that along. I do not know whether these have been mentioned or not.

Mr. CÔTÉ: Yes.

Mr. HAMILTON (*Qu'Appelle*): One of the things was, to get a relaxation of the currency regulations in the United Kingdom, which would allow more people from the United Kingdom to come to Canada. We also considered establishing an office there. When it came up, with the amount of money we had available, the preference went to setting up an office in San Francisco. Those are the terms of reference under which we operate.

I have a feeling that the time has come when we should move on from these terms of reference, and that we have moved a little already. The co-operative program with the provinces on the building of camp grounds and picnic sites along the main highways, and also along the Trans-Canada Highway has yielded very attractive response from people who have used them. One of the reasons for that was that, in my opinion,—and, I think, in the opinion of a good many others—with the new type of tourist travel we were not attracting sufficiently was the type of persons who took their boats on top of their cars, or tents with them, and travelled into the more remote areas. We are seeing these new trends in the United States towards boating, and similar types of recreation.

The camp grounds and picnic sites establishment was quite an important move out into providing what we call tourist service, and information service. This was done under a cooperative program with the provinces.

I mentioned the other day there are things which are going to be necessary to improve the situation. One aspect of this deals with credit, and credit is a very difficult proposition these last few years, in Canada, particularly for the tourist industry. We have experienced difficulties in the national parks and in the ordinary private tourist industry in getting capital to go into what many lending agencies think is a second-class or third-class type of enterprise development. From the point of view of government, credit for the tourist industry is but one thing. We have demands for credit from other enterprises and businesses, so these demands from the tourist industry are just one part. The government policy on credit is being worked out, but I am certain that the interests of the tourist industry will be thoroughly considered in that general policy.

I mentioned the other day a question of plant. One of the reasons why there was a special program of advertising in the United States, to ask people to visit the maritimes, was that apparently the maritimes had excess plant over use at that time. This special program in the maritimes has increased from 18 to 20 per cent a year, and it has shown that a concentrated program can produce results.

I understand that in the provinces of Quebec and Ontario the operators now feel they have sufficient plant to handle more tourists than they have been getting. This brings that matter into consideration, in forming a policy, of giving some sort of special concession.

Personally, I have been hoping that with the completion of the Trans-Canada Highway this would serve as a basis or a foundation for an extensive type of special advertising to use the Trans-Canada Highway. It is not yet complete in British Columbia and Ontario, and some of the other provinces, but it is very close to it.

I did ask the provinces at one of the tourists meetings we had if they would think about how they could develop plant along with the Trans-Canada Highway. This is within their jurisdiction, and I cannot do much about that, but they promised to take a look at it. I did try to carry out our part a little bit, by suggesting to the national broadcasting networks in the United States that they might carry a film we have, "Trans-Canada Holiday", which is a film based on the Trans-Canada Highway. One network did carry it on two half-hour shows, I believe, in the evening; that was A.B.C. I cannot estimate how many viewers saw it, but it was done as a contribution by A.B.C. to the good relations between our country and theirs, and I am very grateful for their having done it. There were 31 stations on their network, so it would be a sizeable audience. I could go on and list a number of other factors which we could broaden.

Some of the members have been discussing making a special drive for winter sports. There have been a number of matters we have been looking at in an endeavour to work out some sort of a pattern of thinking in respect of going after this winter sport activity. This is very important in the areas where there are sufficient hills for skiing. This is already a well-established sport in the urban areas which might lend itself to development by Canada. At the present time, however, I cannot point to anything on this which is tangible except that in the National Parks we have accelerated our program of allowing more skiing facilities in the parks; but, as you know, something beyond that was indicated.

Mr. FLEMING (*Okanagan-Revelstoke*): I know the minister in his over-all administration of his department has the various branches of the Department of Northern Affairs and National Resources working on different aspects of tourist development. The travel bureau, however, in its terms of reference, has been restricted largely to an information and advertising agency of the government. I would think there ought to be a much broader concept of the travel bureau to enlarge its scope so that it can undertake the institution of recommendations similar to those made by the Canadian Tourist Association here last week.

Whenever we come down to what the bureau can do in instituting measures of that type, we come back to the point of the bureau being restricted to placing advertising and providing information. Can we assume there actually is, in fact, no limitation on the scope of the bureau, providing the funds are made available to it, and that it can broaden its activities to cover items such as recommended by the Canadian Tourist Association, and that it can be expanded without any impediment under the present terms of reference?

Mr. HAMILTON (*Qu'Appelle*): We have to go back to the act. The act says we are authorized to provide tourist information and services.

Mr. FLEMING (*Okanagan-Revelstoke*): And services; yes.

Mr. HAMILTON (*Qu'Appelle*): It is on that last clause that you might be able to broaden the terms of reference. I simply have emphasized that for 25 years since the travel bureau was set up they have operated on the terms of reference about which I have told you. Naturally, Treasury Board and the

Auditor General make certain we stay within the terms of reference. I would be interested in what you would say in your report that we should do on this. I know, I think, a good deal about it—we would like to hear what the committee thinks. I said at the beginning that I hoped your work on this committee this year would serve to provide comparative ideas for the department to look at to see if we might do something about it.

In addition to the Canadian Tourist Associations' representations which we always study carefully, there is also the Restaurant Association of Canada which has made some very useful representations to the government. These two sets of recommendations, and what you recommend here, give us something on which to attempt to base policy.

I was tremendously impressed with the report you gave on the Department of Mines and Technical Surveys, and I hope there will be something comparative in respect of my department.

The CHAIRMAN: Could you tell the committee how you expect to increase the tourist business in Canada from the United States unless you increase the amount for advertising?

Mr. HAMILTON (*Qu'Appelle*): There is no doubt where the department stands on this matter of money for advertising. We would like more. However, as a member of the government, I accept the full responsibility of over-all government policy. With the deficit which we had last year and this year now, naturally our department has had to play its full part in cutting down every place they could. Wherever it is not absolutely imperative that we increase them down or decreasing them.

The CHAIRMAN: I think it is the opinion of this committee that you are never going to get a billion-dollar industry with the picayune amount which you are spending for advertising. You have a good product to sell. In order to sell it, as business people would sell a product, you have to have advertising. We have so much to offer to so many people that I think more money has to be spent on advertising. That is only the way you will get the tourists. There is no other way, except courtesy, accommodation and the services which necessarily go with the tourist industry.

Mr. AIKEN: Might I also suggest that expenditure in the travel industry is the one place where the government will actually get a return on its investment? I can think of a good many places where the government is laying out millions of dollars which are non-returnable and there is no benefit. It seems to me, however, in a case like this, that for every dollar expended, and publicized in the country, we will get a good many dollars back. I think the attitude of Treasury Board should be altered in this respect. This is a paying proposition. It is an investment which brings back a return and is not the laying out of money which will never return, as is the case in a good many instances which I do not wish to detail here.

Mr. FLEMING (*Okanagan-Revelstoke*): Coming back to the subject of investing money to make money, is the representative of the travel bureau in Los Angeles an employee of the department, or of some other department of government, or a representative who acts on behalf of the government?

Mr. FIELD: The representative in Los Angeles is an employee of the Department of External Affairs.

Mr. FLEMING (*Okanagan-Revelstoke*): One employee?

Mr. FIELD: Yes.

Mr. FLEMING (*Okanagan-Revelstoke*): How many employees are there in the Chicago office?

Mr. FIELD: Three year-around employees. In the summer-time the province of Ontario supplies an additional summer clerk.

Mr. FLEMING (*Okanagan-Revelstoke*): That is three plus one in Chicago to handle the 14,369 requests for information, and one person in Los Angeles to handle the 12,146? Obviously, the person in Los Angeles is the hardest working member in the government service. What service does this one person give to 12,146 inquiries?

Mr. FIELD: The majority of the inquiries coming into the Los Angeles office would be coupons returned to that office by readers in the greater Los Angeles area, which is now, I believe, the second largest metropolitan area in the United States. We supply packaged literature to the consulates. They can send out the literature each night in response to the coupons, or, if they get overloaded, they can put all the inquiries into an envelope each night, air-mail it to Ottawa, and we put the material in the mail within 24 hours.

Mr. FLEMING (*Okanagan-Revelstoke*): Therefore the operation at Los Angeles obviously is inadequate in comparison to the number of inquiries received?

Mr. FIELD: I am sorry; I did not hear that.

Mr. FLEMING (*Okanagan-Revelstoke*): Therefore the operation at Los Angeles is inadequate to meet the situation, that is, the number of inquiries?

Mr. FIELD: Yes, sir; I think that is true. If I may leap ahead of you a bit, I think it would be better to have the office located in San Francisco. All of the agencies which we have consulted on this matter, the Department of Trade and Commerce, our own former director of the Canadian Government Travel Bureau, Mr. Leo Dolan, who is now in Los Angeles as Canadian Consul General, and the western Canadian provinces, are all agreed that if an office were opened by the Canadian Government Travel Bureau on the United States west coast it would be better located in San Francisco.

Mr. FLEMING (*Okanagan-Revelstoke*): What additional services does the Chicago office provide that the representatives in Los Angeles cannot now provide?

Mr. FIELD: A great deal more individual attention; they have a great many more personal calls in the Chicago office. They have what we term in the business an opportunity to do travel-counselling. As individuals come into the office, because it is in a ground floor location right in the heart of the Loop, the counsellors will spend anywhere from twenty minutes to half an hour with a good prospective tourist to Canada, and will give him the information that he requires.

In addition to that, the manager of the office does a good deal of local promotion and publicity work in so far as his duties in the office permit it with Chicago newspapers.

Mr. FLEMING (*Okanagan-Revelstoke*): But the Canadian Government Travel Bureau is in no position at the present time to provide any such service on the Pacific coast of the United States?

Mr. FIELD: I must say that I agree.

Mr. FLEMING (*Okanagan-Revelstoke*): And the need for such a service has been proven?

Mr. FIELD: Yes, I think so.

The CHAIRMAN: What about the office in Detroit?

Mr. FIELD: No, we do not have a Detroit office. The Canadian consulate in Detroit does a certain amount to service inquiries, but we have not given any consideration as yet to an office in Detroit.

The CHAIRMAN: What about Cleveland?

Mr. FIELD: Cleveland, yes, there is a good potential there.

The CHAIRMAN: When you said you had not given any consideration to it, how do you expect to promote the tourist industry unless you do give consideration to such ideas?

Mr. FIELD: We try to take them in the order we presume they are worth to the whole tourist industry in Canada. But the concensus is that the next office to be opened should be on the west coast.

The CHAIRMAN: Are you only considering opening one office next year?

Mr. FIELD: I cannot answer that question. I can only say what offices we have considered opening.

The CHAIRMAN: That is all I asked you.

Mr. FIELD: Following San Francisco, our recommendation has been that a Boston office be established. The Chairman has mentioned Detroit and Cleveland. Both these areas have very high potential business for Canada. We certainly would be in favour of opening up offices there, but I think the other two must be considered first.

Mr. MCFARLANE: The provinces also have established offices in the points mentioned, San Francisco and Los Angeles. I know that British Columbia sends down a terrific amount of literature. I think they sent down about three or four tons of it last year. Alberta also has an office in the United States. I think that this may account for something of the fact that a lot of people coming up especially to western Canada would apply to the provincial offices. And I think there is a certain amount of duplication between our Canadian government advertising agencies and the provincial government advertising agencies. Alberta is spending a terrific amount of money, and is maintaining offices in the western states.

Mr. FISHER: Was that a statement or a question?

Mr. MCFARLANE: It was a question. I wondered if there was not duplication in the advertising agencies that are in the United States, and I wondered if our Canadian Government Travel Bureau and our provincial travel bureaus are not duplicating each others efforts.

The CHAIRMAN: I think that matter was explained by Mr. Field in his remarks when he said that at their annual meeting they tabled their programs.

Mr. FIELD: That is right.

The CHAIRMAN: That they laid out their programs for the following year, and that the provincial representatives were there.

Mr. E. A. CÔTÉ (*Assistant Deputy Minister of Northern Affairs and National Resources*): So far as the various offices in the United States are concerned, the province of Quebec has opened an office in the city of New York. Nova Scotia also has an office there, and an office is being opened in San Francisco jointly by Alberta and British Columbia.

The ones which the provinces have approached us to take over are where they reckon that general promotion might be done by the government of Canada, probably with more effectiveness than would be the case with a program which is regionalized in its aspects.

At the same time if the government of Canada were to open an office in San Francisco or anywhere else in the United States, the provinces most affected would be asked if they would from time to time lend additional assistance in the promotion work particularly during the peak period. Ontario has been able to do that in both Chicago and New York very effectively. New Brunswick has also done it.

But as far as Alberta is concerned, the amount that has been promoted on the west coast is as much obviously as a province can do with a small

operation; and then the provinces do not have the larger resources of the Canadian Government. The Travel Bureau itself on certain peak days has achieved the mailing of up to eleven tons of mail in one day.

Mr. FISHER: I would like to ask the minister a series of questions. Does the minister think it wise that this committee should call before it the gentlemen in the Department of Trade and Commerce who are working on this whole project of extending aid for small businesses? I understand that on the tourist aspects of it the figures are fairly large in their planning. Could we not thereby get some idea as to what is in mind in so far as policy is concerned on the present stage of the information that they have?

Mr. HAMILTON (*Qu'Appelle*): Well, I have no particular feelings on that subject if you thought it would be of any advantage.

Mr. FISHER: Do you think it would be of any advantage? This is your department, and you said you were bringing this point to the attention of the government as a whole. This is your department. Do you think it would be useful for us to speak to or to question these people to try to find what they are developing in respect to this tourist business?

Mr. HAMILTON (*Qu'Appelle*): As I say, I have no particular feelings about it, but I would be glad to hear from them.

Mr. FISHER: Do you agree that they are working on this aspect?

Mr. HAMILTON (*Qu'Appelle*): Oh, yes!

Mr. FISHER: Well, it might be useful.

The CHAIRMAN: Along that same line, would you like to go further?

Mr. FISHER: I would like to wait until I have finished, Mr. Chairman. Has any consideration ever been given by this government to pointing out to the provinces that they may be spending an inordinate amount on European and United Kingdom advertising, having regard to the market there is in the United States? I am think of Ontario and Saskatchewan which maintain headquarters in London for promoting trade, industry, and tourist business; and as compared to what they spend especially in the United States, which is very small; and that, plus the fact, that I have been quite shocked at the amount of money and personnel that Canada, in its Department of External Affairs, and in its trade commissions, scatters around the world to promote industry and trade and commerce in relation to the pittance in terms of people and money that we have in the United States where we have our largest potential market, and which is perhaps our most expansible industry. I have injected this question almost rhetorically, and I wonder if the minister has any views on it.

Mr. HAMILTON (*Qu'Appelle*): I have been thinking about the question since you asked it. Are you in effect saying—and I am sure you are saying—that we should be spending more money in the tourist industry in the United States?

Mr. FISHER: Yes.

Mr. HAMILTON (*Qu'Appelle*): Rather than spending so much money in trade and commerce ventures in other parts of the world?

Mr. FISHER: It seems to me as that plan is developing in Chicago, and in relation to what is being done, you might do it in other areas as well.

Mr. HAMILTON (*Qu'Appelle*): I cannot give you the figures on spending in comparison with the United Kingdom, but I have an analysis in the form of the dollars spent in the United States by various countries in competing for

that market. I shall use the figures for 1957, and I would like at a later stage that the whole table be placed on the record so that you can see the analysis right straight through.

In 1957 the United Kingdom spent $801,000 in direct advertising in the United States. France spent $661,000; Italy spent $411,000; Switzerland spent $305,000; Germany spent $290,000; and Canada spent $2,600,000.

That also includes some of the provinces advertising in the United States.

Nassau spent $1,300,000; Bermuda spent $1,200,000; Europe, in the Mediterranean area, spent $5,172,000.

Mr. FISHER: I think we can draw our own conclusions.

Mr. HAMILTON (*Qu'Appelle*): For every dollar spent in advertising it is nice to know what return we get from it. These returns are based on United States Department of Commerce figures, and the Department of Justice of the United States, which gives the figures for the money spent.

For every dollar spent the United Kingdom received $102 of tourist business; for every dollar spent, France received $125; Italy received $226; Switzerland received $137; Germany received $200; Canada received $130; Nassau received $27; Bermuda received $22; and using the average for Europe and the Mediterranean area, they received $93.

Figures do not prove everything because many of the tourists who come to Canada come for a short stay, and do not spend large amounts of money, whereas if a tourist from the United States goes to, say, Switzerland, he usually spends a much larger amount. This would indicate certain things. We are spending a relatively fair amount and receiving a fairly high return for each dollar spent. It does not destroy my conclusion and your conclusion that a few more dollars spent would bring a larger return; in other words, I do not think we have reached the end of the scale in connection with spending money in the United States in order to receive higher returns.

Could these figures be tabled?

The CHAIRMAN: Is it agreeable, gentlemen, that these tables be incorporated in the printings of our proceedings?

Agreed.

Country or Area	Dollars Spent in U.S.A. for Travel Promotion (Source: U.S. Department of Justice) 1950	1955	1957	Number of Tourists 1957	Cost of Promotion per Tourist 1957	Dollar Earnings (Source: U.S. Dept. Comm.) 1950	1955	1957	Earnings per Dollar of Promotion Cost 1957
	$	$	$	$	$	(in millions of dollars)			$
United Kingdom	524,022	894,481	801,223	294,000	2.72	37	72	82	102.
France	673,240	668,247	661,082	321,000	2.06	56	81	83	125.
Italy	209,128	463,494	411,110	268,000	1.53	50	83	93	226.
Switzerland	362,504	181,927	305,837	305,837	1.39	18	38	42	137.
Germany	26,707	423,691	290,046	237,000	1.20	?	46	58	200.
Canada	see below	2,324,583	2,620,707	4,407,000†	.60	261	306	340	130.
Nassau	436,800	952,000	1,300,000	not known	—	14	22	35	27.
Bermuda	—	820,000	1,247,000	99,000	12.50	14	24	27	22.
*Europe and Mediterranean Area	2,694,862	3,656,951	5,172,072	556,000	9.21	225	430	483	93.

Notes:

* These totals for all major European and the Mediterranean countries include direct expenditures by each country as well as the following sums spent by the European Travel Commission: 1950, $279,887; 1955, $251,004; 1957, $855,714.

† The expenditure figure used for Canada is the total shown by the Curtis Publishing Company analysis 1956–1957 and includes all provinces and the Canadian Government Travel Bureau. The total is approximate as some provinces, notably Ontario, did not disclose how much of their expenditures were directed to the United States. The total figure for all provinces and the Bureau, for 1950, is not readily available.

The number of tourists shown for Canada are the long-term ones (over 48 hours stay) only. If advertising costs is spread over the 28,500,000 TOTAL VISITORS for the year 1957 (long and short term) the cost of promotion falls to 10 cents per person.

Compiled June 12, 1959
H.L.C.

The CHAIRMAN: Along the same line as your first question, I had this in mind. If you are going to bring some witnesses from another department, would you consider bringing someone from the industrial bank? I think requests have been made of that bank by people in the tourist industry, and they have been turned down. We would like to have an explanation as to why they have been turned down. Would the committee agree to that?

Mr. FISHER: My idea was to have Mr. James A. Roberts called before the committee. I believe he is the associate minister over this part of the Department of Trade and Commerce. If the rest of the committee is agreeable, I would like to move that he be brought before the committee to give us his views in connection with the relation of small business plants, or policies of the government, in relation to the tourist industry.

Mr. FLEMING (*Okanagan-Revelstoke*): I will second the motion.

The CHAIRMAN: It has been moved by Mr. Fisher and seconded by Mr. Fleming that we have Mr. Roberts from Trade and Commerce as a witness. Gentlemen, would you also incorporate in this your wish to have a representative from the Industrial Bank.

Agreed.

Mr. FISHER: Now, the one other field of questioning I wanted to pursue with the minister—and I must apologize as there are a couple of committee reports which I have not read, and it may have been covered before—is this: In connection with the coordination that is carried on between the federal and provincial governments I am wondering if you have worked out images of Canada that are most fruitful to project in the United States in order to draw tourists here. In this connection I would be very much interested to learn whether you have any motivational research experts in this field doing such analysis.

Mr. HAMILTON (*Qu'Appelle*): I will answer the first part of your question and ask Mr. Field to answer the second part.

When I spoke to the dominion-provincial conference, the picture that I tried to put across of what we should work on, in addition to what had already been worked on, was what I described earlier, this new tendency toward boating and camping. Secondly, in regard to analysis: I have requested the travel bureau, within the limits of its facilities, to embark on a series of measurement devices to try and test the reaction of one type of advertising over another type. It surprised me that we have a great deal to learn about the market for the various types of things that we can provide in Canada.

Having stated these two general positions, I think Mr. Field can fill it in.

The CHAIRMAN: I believe Mr. Field referred the other day to the research angle, but perhaps he can enlarge on what he said before.

Mr. FIELD: Mr. Chairman, the whole industry has been caught up in the last five or six years in surveys and studies. We are all doing it. Probably the most outstanding one on motivational research was conducted on behalf of the Canadian National Railways several years ago. A summary of findings was given to the travel bureau. To a certain extent we have been influenced by it. It came down to this: that for a commercial concern in a highly competitive field like transportation, it appeared as if point of sale advertising was of more immediate benefit than representational advertising. I am capsulating one of the most important features of that report, but we in the bureau have not had any motivational research done. We have had a good deal of other studies made. We have had readership studies made by the Startch concern in the United States. We conduct surveys of our own. We have our three advertising agencies conducting studies. As the minister has indicated, we have been asking a number of very pertinent questions about

the matter of markets. The advertising agencies have very considerable research resources and undertake continuing media studies to assess the value of comparative markets in the higher population centres of the United States. The advertising agencies have made these studies available to us. It is something that goes on every month of the year. The bureau has reorganized its research section and we will be doing much more of this kind of work in the coming months and in the coming years.

The CHAIRMAN: In connection with research, Mr. Field, what are the qualifications of the men you have doing research?

Mr. FIELD: Well, sir, we do not have statisticians. I think what we have looked for is someone who has a background in travel and an aptitude for discovering into source material and making use of it.

The CHAIRMAN: Then you have not as yet any research people working for the bureau?

Mr. FIELD: No sir, not as such.

The CHAIRMAN: I understood you to say the other day that you had people doing research.

Mr. FIELD: We have them now. In the past we were doing mainly a tabulation service to discover what the returns were from our advertising. We have done a certain amount of market analysis, which we in the past depended upon outside agencies to do. We are proposing to give more time to research and for this reason we have taken Mr. Crombie on staff recently.

The CHAIRMAN: You say you came to the travel bureau in 1957?

Mr. FIELD: No sir, In 1950; I came to the bureau,

The CHAIRMAN: I mean as director?

Mr. FIELD: Yes, in March, 1957.

The CHAIRMAN: And you came with the bureau in 1950?

Mr. FIELD: Yes.

The CHAIRMAN: You were in New York?

Mr. FIELD: Yes, for seven years.

The CHAIRMAN: For the travel bureau?

Mr. FIELD: Yes.

The CHAIRMAN: What was your experience before that?

Mr. FIELD: I had been with the National Film Board for a period of approximately five years. After I came to Ottawa. I was with the Department of the Secretary of State as Director of Information services, and then I was Executive Assistant to the Minister of National Health and Welfare for a year in 1947. I returned in December, 1947, to the National Film Board to become Secretary of the Board. In the years I was with the National Film Board. I was in charge of newsreel and film production and, later liaison and photo services. In 1945 I headed the first post-war travel film production unit in the board.

The CHAIRMAN: You never had any experience in advertising?

Mr. FIELD: No, I was never with an advertising agency.

Mr. FISHER: Mr. Chairman, I would like to ask Mr. Field whether, in his question of point of sale versus representational approach, does the conclusion follow from that, that on your point of sale you have to concentrate upon regional attractions and specific information, rather than a general trying to sell historical quaintness of various parts of Canada, or the Mountie as a symbol—that sort of thing?

Mr. FIELD: Yes, you have put it very well, Mr. Fisher. I might say, the Canadian National Railways has adopted this technique in the United States,

but the Canadian Pacific Railway has continued to do both a representational job and—in the larger sense, I suppose—a public relations job of selling the Canadian Pacific as well as point of sale advertising.

Mr. FISHER: If you were being guided by this study, would one of your conclusions be that the kind of representational advertising that tries to sell Canada as a whole is not the most effective means?

Mr. FIELD: No, sir; no advertising agency that we have employed has ever said this to us as a result of studies. What we try to do—and I am again capsulating—in the high population centres, in the larger magazines—which we must use to get greater circulation—is to present Canada in the most dramatic and effective way, visually, to arrest the attention of the reader. When we go into Life magazine—if I may mention one—or any other large-circulation magazine, we are in competition with advertisers who are spending, in groups, over $120 million.—For example, it is estimated that the U.S. Airlines are spending $120 million a year on advertising.

When we put an advertisement into these magazines we are competing with major advertisers for the attention of the reader. We attempt to give what we call a high impact visual presentation of Canada, to arrest the attention of the reader, and invite him to write to us for further information. We provide that information in the form of the literature mentioned by the minister.

Mr. FISHER: This seems to be the more natural function of your kind of advertising. But if the C.N.R. analysis has merit, it might suggest that there is another level completely at which you could operate?

Mr. FIELD: If I may answer that question: we are already operating, to some extent, on that level by our advertising in the newspapers in the United States. But we are not able—and this is understandable—as the Canadian National Railways is, to say to the reader, "For $25.60 you can come to Montreal this weekend. We do not do that. That is, in effect, the real punch of point of sale advertising—to put a price at the end of it.

The CHAIRMAN: Regarding this advertising, do you expect to increase the tourist revenue to Canada without increasing the advertising?

Mr. FIELD: No, sir; I do not think it can be done. As any business would tell you, you get back in returns what you are willing to spend on your promotion.

The CHAIRMAN: All right. Have you recommended to the minister or to the department what percentage increase in advertising they should have?

Mr. FIELD: I do not know if I should answer that question, sir.

Mr. HAMILTON *(Qu'Appelle)*: The director has put forward to me a lot of figures to show that we are not spending at the percentage that we should be to take advantage of the opportunities in the United States. He has worked it out on what are considered to be normal expenditures by other countries and what we are spending. I have my own opinions on these things, and I have said here in the committee that I do not think we are spending enough on advertising.

The CHAIRMAN: Mr. Hamilton, I think you have made it very plain to the committee that the tourist industry will not be increased unless you do spend more on advertising?

Mr. HAMILTON (*Qu'Appelle*): I cannot answer that directly, because I think there is an economic pressure there that comes into the picture, regardless of advertising. But I am certainly very much in agreement—with the tremendous potential that I see, with the great multitudes that are now on the road in the United States—that we could, by advertising, expand our tourist business tremendously.

Mr. McQUILLAN: Mr. Chairman, I think we all realize that word of mouth advertising is the best you can get. How successfully has it worked, as far as advertising Canada to the American tourist is concerned? I would like to ask Mr. Field if they make any attempt to find out what proportion of the American tourists feel that they have not received value for their money after spending a vacation in Canada?

In other words, are we sending back a lot of dissatisfied customers? No matter how much money we spend in advertising, that destroys the effect.

Mr. FIELD: We do make an effort to find out how the American tourist feels about Canada after his visit here. We send out some 200,000 questionnaires each fall and winter to obtain answers to certain questions such as the one that you have mentioned. We find that about 41 per cent of the people coming to Canada are influenced by word of mouth advertising.

We find that a large number, of course, are directly influenced by advertising and publicity—because it is a curious thing, that many people in the United States do not separate a travel article from a paid advertisement. To supplement this kind of work in the bureau we have a travel counselling service, which is one of our most important sections. This section comprises a group of about 10 to 12 people, and during the course of the year they write upwards of 20,000 individual letters to people who are interested in coming to Canada.

This is direct travel counselling, and it is one service that we would like to expand, because we know that if a person writes a letter to us, in 82 per cent of the cases that person will come to Canada. If he sends a post card, he is not as likely to come to Canada, because—obviously—his interest is not as deep as the person who takes the time to write a letter. The same thing is true of coupons. The coupon user will come to Canada in only about 55 per cent of the cases.

Mr. McQUILLAN: My question was—

Mr. HAMILTON (*Qu'Appelle*): May I interrupt Mr. McQuillan, because he is on a point that I think is very important. I would like to put on the record a survey we carried out in 1958 on this point. Would that be acceptable?

The CHAIRMAN: Yes.

Mr. HAMILTON (*Qu'Appelle*): One of the questions asked of the tourists was: What mostly influences you to come to Canada? This is what Mr. McQuillan is after—and here are the percentages. First, advertising—and this is not in order of priorities—24.3 per cent; films, 7.3 per cent; advice of friends, 38.4 per cent; TV, 3.9 per cent. There is a certain overlapping, of course. The fifth one was travel articles, 26.6 per cent; other—No. 6—27.4 per cent; and, not given, 7.2 per cent.

I think I should go further and put down some more percentages, that overlap—because of the method of tabulation—but which will give you an idea of what they are interested in. The question asked was: What were your main vacation interests? The first one on the list is sightseeing, 79.3 per cent; fishing, 33.3 per cent; historic sights, 36.8 per cent; camping, 12.9 per cent. hunting, 1.7 per cent; other, 10.9 per cent; and, not given, 1.7 per cent. Of course, they total up to much more than 100 per cent. But that is how they were taken out.

One other question raised by Mr. McQuillan is also vital, and that is the question of word of mouth advertising. One of the great hazards of putting on a big advertising campaign to go into a certain area is this: you bring the tourists in there, and if there are not satisfactory services available you will do more harm by that advertising than all the good you can do with advertising in 10 years. So it is very necessary to watch in a cautious fashion to see there is sufficient room for expansion of the tourist industry in that area for the services that they want.

Mr. McQUILLAN: I was asking if, in these questionnaires, the question is asked: Do you feel that your money was well spent? Did you enjoy your vacation in Canada? Do you get replies to that, and how many replies do you get to your 200,000 questionnaires—how many are favourable and how many unfavourable?

Mr. FIELD: I will deal with the last question first, if I may. We get about 25,000 returns. It may have gone higher in other years, but the last year or so we have obtained an average of about 25,000 returns. The questions vary from year to year. We always ask: Did you get the information you required for your visit?—and we generally get a lot of compliments about the kind of literature that they received. The answer to the question about complaints is—I am afraid I have to reiterate this—that Canada gets very, very few complaints about either our services, our roads or the courtesies that are extended to visitors. I do not mind saying that from my talks with directors of travel organizations and the men who are operating travel offices in the United States, and in New York, I think the complaints about Canada are fewer than for any other country that I know of. But, of course, we do get some.

Mr. McQUILLAN: How do you test that information? What steps do you take to find out?

Mr. FIELD: What steps do we take to find out what the basis of the complaint is?

Mr. McQUILLAN: How many people are satified?

Mr. FIELD: We make a tabulation from the returns that come to us. The number of people who complain is so much smaller than one per cent, it is not worth the tabulating.

Mr. McQUILLAN: Something must be destroying the word of mouth advertising, otherwise over the years it would build up to tremendous proportions. What is destroying it?

Mr. FIELD: I would not say something is "destroying" it, Mr. Chairman. I think you and other members of this committee have pointed out this is a growth industry. If we are going to encourage a greater percentage of Americans to travel in this country than we have enjoyed in the past, we must grow with the industry. This means spending more money on it. In 1958 we in Canada spent some $22 million on plant other than the building and the completion of the Royal York extension and the Queen Elizabeth hotel. While this was going on other countries—and I must emphasize this—other areas in the United States were out-building us 20 or 30 to one. If you go to the Adirondacks, New England, the Atlantic states, Florida, Texas, Nevada, and the desert states and California, you will see there that they are building hundreds of motels and hotels where we are building one. They are spending money on luxury resorts. In Canada there is not the luxury resort building on a comparable scale to what is being done in, say, California or Florida.

The CHAIRMAN: How much does the state of Florida spend in advertising?

Mr. FIELD: I have a figure for that, sir.

The CHAIRMAN: Let us have it.

Mr. FIELD: It is a little difficult to answer the question, exactly, Mr. Chairman, because you do not get in a picture like this all the promotion money being spent by all the agencies interested in traffic to that area. The Florida development commission is spending $1,850,000. Other municipal offices in Florida—like the chambers of commerce, and so on—are spending $2,330,000; or a total—just dealing with government, and local organizations—in the state of Florida of $4,180,000.

The CHAIRMAN: What about the hotels and motels? Have you got that?

Mr. FIELD: No.

The CHAIRMAN: That will be a good deal more than you have there?

Mr. FIELD: Yes, a great deal more, because there are some 700 hotels in Miami alone, all of whom are spending money on advertising. There are enormous amounts of money being spent by the airlines, bus companies and railways operating into the Florida area.

Mr. PAYNE: Mr. Chairman, I want to preface my question with a remark, so that it is indicated just where I am heading. I have spent a great many years in the automobile business, and I think it is very important for us, when considering the tourist business, to understand a cardinal feature. That is, a tourist does not like to be regarded as a statistic. Certainly, when any of us go on holidays we want to protect ourselves from such routines, and we are not too prone to publicize or make specific returns on our reactions. However, I do not think there will be too much debate on my statement, in view of what was brought to our attention by the Canadian Tourist Association, and that is this, that tourists do have complaints, and the reason for the complaints is the type you have and I have. In other words, when somebody comes to visit British Columbia with their family they like to go through a saw mill, and thousands of them are not given that opportunity. They would return home and say, "Well, there is a land of large timber production and we never saw any milling processes." They visit Alberta, and what they want to see is an oil well. Information is not given to them and it is not made easy for them to see an oil well, or to visit a petro-chemical plant in, say, Edmonton. They would return home and wonder what all the talk about oil in Alberta is about. No doubt the same situation surrounds certain specifics elsewhere, and in Ontario, for instance.

In Ontario, how many of us know where to go to fish, where we can catch a fish. That information is not given us. These are the complaints that people take home; and that is the sort of word of mouth advertising that concerns us.

My question is: in view of the statement made by the travel bureau, and in view of the facts as, I am sure, all of us know and recognize, what is done on behalf of the federal government to enlighten industry and commerce generally in Canada as to advantages that can accrue through their opening their facilities to the public so they can enjoy and benefit from their stay in Canada? Do we spend any money on brochures, to help provincial government or industry in matters of this kind?

Mr. HAMILTON (*Qu'Appelle*): I would like to answer that first part because I have had something to do with this type of thing.

Usually any complaints—I should not say "usually", but sometimes complaints come in to me direct, and if any complaint is serious it usually gets to me as minister. I would like to say, on the positive side of this, that I have been tremendously impressed by the work which the pulp and paper mill associations have done in their industry to invite tourists into their operations. They do this for two reasons: one, I suppose, is to advertise their product; but, primarily, they are trying to interest people in the conservation program they are following in their area.

I have had some conversations with pulp and paper operators, who realize the tremendous advantage it has been to them to get a large percentage of the tourists in their area through their mill, so they can get a chance to underline the necessity of conservation and fire prevention that has to go along with their industry. So that is a very good point.

I think Mr. Payne has brought up something that we might do more about —that is in relation to other industries in many parts of Canada that have not yet recognized how tourist promotion of their industry may help to serve as a

form of advertising for them and may serve as a great dollar earner for the whole country in general. I know how successful the pulp and paper mills have been, the ones that I have visited, in doing this type of work. They keep a regular staff to take people through their plant. I have seen this in Quebec, Ontario, and in Alberta; so this is to my personal knowledge. I think we could carry that through to these other industries.

Mr. PAYNE: I would like to enlarge on one point, to make it very specific and personal. Last spring I drove from the west coast to Ottawa; and in the very late summer returned. During the trip east we proceeded on the American highways and stopped at various points of call, including the old frontier village in Montana. The children were able to pick up brochures which they have used throughout this year at school. I think it is not a very flashy situation, but it shows how it registers.

On our return trip we proceeded through part of Manitoba, Saskatchewan, Alberta and, largely, through British Columbia. We visited a few specific places, among others the legislative chamber in Winnipeg. My children and myself were unable to collect a brochure giving any data on the legislative chamber, or any data on the Winnipeg area.

Similarly, in Regina the same situation existed. In Edmonton, again, we called in at the legislative building, where there was not even a guide to show us through the building, let alone proper literature. Also we visited a petrochemical plant, and there was no guide and no brochure, and no information. These children disseminate this information through school in a manner far beyond our comprehension. On our visits in Canada, in which we made a great effort to care for things of educational interest, they have nothing to keep the facts—these very favourable facts and features—of Canada which they saw before them at any subsequent time.

The same condition exists practically throughout the length and breadth of Canada, and, certainly, if you go from here to the west coast.

The CHAIRMAN: Mr. Mitchell?

Mr. MITCHELL: Mr. Chairman,—

Mr. SLOGAN: I wonder if I could make a comment on Mr. Payne's remarks? He spoke about the legislative building in Winnipeg. I am sure you realize the Manitoba travel bureau is located right in the legislative building, right to the left of the front entrance.

Mr. PAYNE: They have no literature there.

Mr. SLOGAN: I dropped into there last summer, and I was able to pick up all sorts of literature.

Mr. PAYNE: We were not, and they had no guides.

Mr. SLOGAN: Unless it was during hours when the office was closed, I am sure there would be some literature available on things specifically related to the legislature. There is one pamphlet in particular called the *Golden Boy* which is a fascinating pamphlet.

Mr. MITCHELL: When the minister was giving the figures in the neighbourhood of $2 million to attract tourists to Canada, did I understand him to say they included the money spent by the various provinces?

Mr. HAMILTON (*Qu'Appelle*): The figure I gave you was $2.6 million which was the amount of money spent in the United States by the federal government mainly, plus most of the provinces.

Mr. MITCHELL: Was the amount spent by the provinces included in that figure?

Mr. HAMILTON (*Qu'Appelle*): In that figure was included the money spent by the provinces as far as we were able to get it. The figures for the province of Ontario were not included and it was a fairly large expenditure.

Mr. MITCHELL: I was impressed by the figure given by Mr. Field as far as Florida is concerned. I think that if we could have a total figure, Canada-wise, including the provinces, perhaps we would be able to draw up a comparison in respect of the total moneys being spent in Canada as against that being spent in the same line of business showing what they were trying to attract and what we are trying to attract.

Mr. CÔTÉ: It appears this figure of 2.8 million does include all the provinces and Ontario.

Mr. MITCHELL: And Ontario?

Mr. CÔTÉ: Yes, sir. The asterisk on the sheet refers not to the amounts of money spent, but the number of tourists who came to Canada.

The CHAIRMAN: The reason I mentioned Florida is that I saw in some press story not long ago that the total expenditure by Florida, I think for 1957, was upwards of $20 million, considerably above that.

Mr. Field, when we are on this business of advertising, you now advertise in the newspapers, the magazines, on the radio and television. Can you tell this committee whether or not you have made any assessment regarding the medium from which you get the most value from your dollar?

Mr. FIELD: It would be hard to give you a categorical answer. The newspaper advertising does bring a good return. Magazine advertising I would say brings a better return because the life of the magazine is longer; the advertising message stays longer with the readers. In some cases there are certain magazines, which I need not mention, which actually have a return which goes several years past the actual date of the particular issue with our advertisement in it. Our surveys show that people are influenced by television and radio. Almost 8 per cent show these media have some influence upon them. Mr. Chairman, I think it is necessary to use all techniques.

The CHAIRMAN: I was not asking about that. I was asking which medium gives the best results for the money spent?

Mr. HAMILTON (*Qu'Appelle*): I would like to say a word on that. Formerly we were not spending anything on advertising on radio or television in the United States. We tried a limited experiment on this last year. As far as I can remember the results were pretty inconclusive.

Mr. FIELD: As the minister says, the results were inconclusive. We surveyed the people who wrote to us as a result of radio advertising. Some of them said it is true we came to Canada, but we did not come as a result of the radio campaign. Yet the only way we get in touch with those persons is because they answered a radio commercial.

The CHAIRMAN: Following that up, you would have information, Mr. Field, would you not, to show where the large advertisers in the United States, or in Canada, spend their money?

Mr. FIELD: Do you mean travel advertisers?

The CHAIRMAN: No; advertising any product.

Mr. FIELD: We could obtain that information. Amongst the largest would be the automobile companies.

The CHAIRMAN: What proportion of their advertising budget do they spend on newspaper advertising? Is it not about 80 per cent of the appropriations of the large advertisers in the United States?

Mr. FIELD: I could not answer that offhand. My impression, however, is that the automobile companies are spending more on magazine than on newspaper advertising. I can obtain those figures from the bureau of advertising in New York city if you would like to have it, sir.

Mr. FISHER: Have you ever had any information in negative responses that tourists do not like international bridges which are toll bridges?

Mr. FIELD: I have not seen a single letter or complaint about international toll bridges. However, the head of our travel counselling section tells me in the past five years he remembers just two such complaints.

The CHAIRMAN: Have you had complaints about the discount on United States money?

Mr. FIELD: Yes; we have. There is no doubt this is a considerable irritation. It is one of the matters to which Mr. Payne was referring, although he did not specifically mention it. Many Americans are offended by the manner in which they are asked to pay the exchange. They do not write to us about it, but they do become irritated. The bureau has done a good deal to try to combat this feeling. We have distributed about five million leaflets and posters to tell the United States tourist in the most direct way we can that when he comes into Canada he should change his money into Canadian currency at a chartered bank, and that when he returns he change it back into United States funds.

The CHAIRMAN: Do you indicate that in your advertising?

Mr. FIELD: No; sir. We never mention it in our advertising.

The CHAIRMAN: Are there any complaints and, if so, do you check up on them, of anyone benefitting, such as tourist operators and so on, by charging more than the bank premium?

Mr. FIELD: Yes; we have had complaints that they charge more than the going rate for a particular day.

Mr. HAMILTON (*Qu'Appelle*): May I put on the record a personal experience I had last summer. I was visiting at a motel in northern Ontario. The person ahead of me in line to pay his bill was a United States tourist. The smallest bill he had was $20. The sign on the wall said the premium was 5 per cent. In all the figuring around in connection with making out the change, it worked out that he paid about 10 per cent on his money. I paid my bill, walked out, and afterwards suggested to him he had been short-changed and should go back and point out that 5 per cent of $20 was only $1 and not $2. He was obviously short-changed; but in this case I know it was purely a mistake in arithmetic by the operator because the sign was there in view, and in the changing of money back and forth mistakes are made, as we all know. I went out and spoke to him, but he would not go back. The argument he put up was it was his own fault, that he knew 5 per cent of $20 was less than what he had paid, but he did not want to go back and embarrass the operator by pointing out that there was a mistake. It illustrated several things: one, the American's friendliness—he did not want to embarrass the operator although he was overcharged roughly $1 on the transaction. However, I felt very apologetic because I thought if this happened here it might be happening in many places across the country.

Therefore I spoke to the owner of the motel on leaving and suggested that he train his staff better on how to work out the premiums.

Mr. FLEMING (*Okanagan-Revelstoke*): Is this confirmation of some of the charges made about Canadian public school education?

In view of the very large increase in the money spent by Canadians outside of Canada, and the increase in the travel account deficit, what increased attention is going to be given to this Know Canada Better campaign which has already shown good results, but which probably is not developed to its full?

Mr. HAMILTON (*Qu'Appelle*): Perhaps Mr. Field could speak to that.

Mr. FIELD: Any new avenues that we use in the promotion of interprovincial travel will, of course, require a larger budget by the bureau. But we have done quite a bit, I think, to help spread the idea that Canadians can have a good holiday in Canada. We have provided literature to the provinces for this purpose, and in exchange for the large amount of literature which the provinces give us for distribution in the United States; and there is in our advertising a very considerable Canadian readership.

I know that members of the committee may not feel that it is a good thing that there should be so many United States magazines read in Canada. But the fact is that, of the magazines in which we advertise there is a total circulation of 3 million in Canada. The message in our advertising does not only get directed at the United States market but it also gets back into Canada.

I think the Atlantic provinces form another good example of this kind of cooperative effort and they have shown improved results in increasing their traffic.

As the Minister said the directors of the Atlantic provinces have told us unofficially that since this campaign has been in effect there has been an increase of between 18 to 20 per cent in their traffic.

Mr. FLEMING (*Okanagan-Revelstoke*): Do you make plans for such a scheme despite the fact that you do not have the money at the moment or do not visualize it for the moment or for the immediate future—I mean the idea of getting across to the government the "Know Canada better" programe?

Mr. HAMILTON (*Qu'Appelle*): It is a matter of policy which has not yet been described. We are all in favour of this "Know Canada Better" program, and we have co-operated as far as we can within our terms of reference. But at the present time we are working under a policy which limits our participation to advertising of Canada in the United States. Therefore we cannot directly participate in any advertising in a "Know Canada Better" program.

Mr. FLEMING (*Okanagan-Revelstoke*): I was not thinking so much of advertising. You keep coming back to advertising. But my personal belief is that advertising is only one facet of this problem, and that it requires the co-ordination of effort in Canada of all agencies. I know the department has already undertaken it; but I think in view of increasing the expenditure of money there obviously is a great gap to be bridged in this particular area, and that advertising is just one part of it.

What plans, if any, has the department or the bureau contemplated, or do they contemplate any means, by which the bureau might give a lead to the provinces and to develop, if possible, avenues for encouraging the "Know Canada Better" program?

Mr. HAMILTON (*Qu'Appelle*): I have already mentioned the fact that we have done quite a bit with the money we have in relation to camp ground and picnic sites, which are not within the travel bureau's terms of reference. It is a very changeable type of benefit. And as I said before, these camp grounds and picnic sites are along the main highways of a province which the province selects. We do not have anything to do with the selection of the sites.

Then there is the special $2 million program offered to the provinces with special emphasis on the Trans-Canada Highway. And in the national parks program we have redirected our emphasis during the past year in drawing the attention of the park superintendents to the nature of the program more and more, in respect to camp ground facilities, so that people at all levels of income may enjoy or have the opportunity to enjoy these facilities, and so that the people in charge may provide more service. So within the various branches of my department we are trying to do what we can.

Secondly, with the co-operative programmes with the provinces we are trying to do what we can; and thirdly, in our discussion and liaison with the provinces, we are trying to encourage them more and more to take an interest in the tourist industry.

Going back now to Mr. Payne's earlier statement, I think we shall see a big lift in the tourist industry in the provinces of Manitoba and Saskatchewan. I have been in conversation with their ministers, and I know how keenly they feel along these lines. I think there is real possibility of extending the tourist centres of attraction of these provinces in those areas.

Alberta has been very fortunate, along with British Columbia, in having the Rocky Mountains as an attraction, and they are going full out to take advantage of it.

The provinces of Manitoba and Saskatchewan are building their highways towards the northern areas, and I think they are pushing very hard to develop recreational facilities in those two provinces.

Mr. FLEMING (*Okanagan-Revelstoke*): I grant you that I appreciate the fact that the Minister is doing what he can. I know the value of the work being done in the national parks and concerning picnic and camp site programmes.

There are many important areas in Canada where work is being done. But what co-ordinating body, what continuing committee, what permanent study, what progressive planning, what co-ordination of all these functions to create greater travel in Canada is in prospect? Is there any positive approach being taken on a continuing nature that might be built up year by year, as weaknesses are discovered, to see that more is done?

For instance, do we have a program where the province of Ontario might, for example, send us travel films and travel speakers from British Columbia, and vice versa; or with Alberta vis-a-vis the maritimes? Or is it only done on a hit or miss basis, where once a year people may come together and talk things over, and then go back home full of wishful thinking? Is there any continuing program in which there is a follow-through in respect to seeing to the development of programmes and the things which have been discussed?

Mr. HAMILTON (*Qu'Appelle*): We think we are doing all the things you mentioned. As I said earlier, I am trying to get a lead from the Dominion-provincial Conference which meets annually, and whose aims are dedicated to the same purpose as we are discussing here. And I detect an increasing interest on the part of their governments to follow the advice of their ministers who are responsible for the tourist services and publicity of their provinces.

As far as the federal government is concerned, we shall continue that pressure on our part. There is one thing I should mention: next year, in respect to the conservation conference which will deal with renewable resources, I have spoken to a number of ministers and deputy ministers across Canada privately, emphasizing that we considered the tourist industry to be a renewable resource, which should be nourished and developed.

They are also looking over their programs which they have submitted to us for study and other programs to see what is being done in the tourist industry and what gaps exist in their services. I hope that this will make one of the major items of policy discussion at the 1960 conference.

But as federal members, you must remember that this still falls primarily in the provincial field—I mean the providing of these services. We certainly do not want to interfere with their constitutional prerogatives. What we are doing is—by means of liaison and by giving leadership in trying to accelerate this program—not only to get a larger number of dollars spent within Canada, but also to attract money from outside, in our efforts to get after the deficit.

I can assure the committee that as far as I am personally concerned, this leadership will continue, and also leadership in ideas, and that we want to work together in co-operative ventures.

There are a great many things coming along. I have been waiting anxiously for the completion of the Trans-Canada Highway. I would like to suggest to the provinces that we are focusing attention on this particular national undertaking, and that it should be used not only to encourage travel within the dominion, but it should be used also as part of the tours that may be taken from the United States, to see our country.

One of the things specifically in my mind that we are striving towards is the completion of the Banff-Windermere highway and the Banff-Jasper highway, so as to make them part of the tours of the Rocky Mountain area.

I am very much interested in the provinces of Ontario, Manitoba and Saskatchewan in respect to their northern roads programs, to see where we can tie in our advertising and also help the flow of traffic into those very beautiful and very pleasant areas for recreation. So I think, along with the maritimes' special program, there are some good ideas coming along in the rest of the provinces.

The CHAIRMAN: I suggest that this committee is very much concerned about this whole industry which has been lagging for so long, and I think it will agree that the budget for advertising should be increased at least by 25 per cent per year for the next five years. If you do not do that, we will keep going back as we have been doing over the years.

In proportion to your advertising, you get returns. There is no question about it. And I mentioned the other day that in the Sarnia area, on the other side of the line, within a day's travel, there are 20 million people.

I quite often get the Chicago papers, and every Sunday, the Detroit papers, and it is very rarely that I see in them an ad of the Canadian Government Travel Bureau, yet there are pages and pages of resorts advertised from all over the United States as well as from Europe.

Very, very rarely do I see an ad of the Canadian Government Travel Bureau, but I see pages and pages of advertising in connection with resorts all over the United States and Europe.

I think you have to take a new look at the advertising program and you are not going to get to first base in this tourist business unless you take a businesslike approach to it.

Mr. MCFARLANE: Mr. Chairman, I would like to ask a question of Mr. Field.

The CHAIRMAN: Proceed, Mr. McFarlane.

Mr. MCFARLANE: Mr. Field, have you received any complaints at all from prospective tourists, or tourists coming from the United States and other countries, in connection with the provincial taxes that are levied in certain provinces? I think British Columbia has a five per cent tax. Has any concern at all been expressed by tourists over this tax?

Mr. FIELD: Yes, there has been an occasional complaint about paying this tax. I think it is called the hospital tax in certain provinces.

Mr. MCFARLANE: Yes, a social service tax.

Mr. FIELD: Yes. This question has come up from time to time during my talks with the restaurant and hotel associations. Of course, we do not receive all complaints. Many people object to these things, and do not take the trouble to complain, as was the case that the minister cited a few minutes ago.

The CHAIRMAN: Gentlemen, are there any other questions which you would like to ask the minister while he is here?

Mr. SLOGAN: I would like to ask the minister whether the province of Manitoba has signed their road agreement, that is, the northern access road agreement?

Mr. HAMILTON *(Qu'Appelle)*: They signed one copy some weeks ago, but the revised copy still has to be signed.

Mr. SLOGAN: And the federal government has not signed it yet?

Mr. HAMILTON *(Qu'Appelle)*: No.

Mr. SLOGAN: Could you let me know when they do?

Mr. HAMILTON *(Qu'Appelle)*: I would be very glad to do that; I will let everybody know.

Mr. FISHER: Has the variety of Canadian liquor and beer policies, and their attitude toward that, been discussed in this committee yet?

The CHAIRMAN: No, that has not been discussed.

Mr. FISHER: This always seems to be, perhaps, one of the largest issues in Ontario, and I was just wondering whether there is any role the government could play to sort of standardize this. I was going to say, liberalize, but I realize that perhaps that is not the right word, because the committee is dominated at this point by Progressive Conservative semi-socialists!

The CHAIRMAN: I do not think it is within the role of the minister to suggest any changes in provincial administration or laws respecting liquor. That is something that could be discussed at the annual meeting in the fall.

Mr. FISHER: Well, of course, one of the complaints has to do with taxation, and that is a federal matter.

The CHAIRMAN: Well, perhaps they could take that up at the conference which they are holding in July.

Mr. MITCHELL: Or, put it down!

Mr. FISHER: I can see that the minister is not anxious to comment on this.

The CHAIRMAN: It is like passing a comment in connection with baseball on Sunday!

Mr. MCFARLANE: I have one more question, Mr. Chairman. Is there any cooperation between the provinces in connection with their advertising in the United States? I am from British Columbia, and I know very well that Alberta has an information booth in the States and are diverting traffic away from British Columbia. Does that follow all the way through? Has Saskatchewan certain information booths in the United States and diverting the traffic there; or are we working together to bring this further into Canada?

The CHAIRMAN: You have introduced a subject which would lead everyone to the opinion that when they have these tourist conferences between the provinces and the federal authorities, representatives of this committee should be present. I think such would be the case as well in connection with other conferences that are held by the department—perhaps regional conferences. I think there should be someone from the committee in attendance when anything that concerns the department comes up. If we are going to make this committee as objective as we should, we should know the facts, and someone should be participating in these conferences.

Mr. HAMILTON *(Qu'Appelle)*: Mr. Chairman, I can say one word in connection with Mr. McFarlane's observation. I have taken the very strong stand at the dominion-provincial conference that provinces should not look at the

tourist industry as bringing people into one particular province, and trapping them there; they should realize that the greatest benefit to everyone would come about by encouraging people to keep moving. If all provinces take this stand, we will all benefit equally. There has been a parochial tendency on the part of the provinces—and it seems to them to be a very good reason—that as they are spending their own money to attract people to their province, they should reap the benefits. However, I have tried to put forward the point of view that they will all benefit more if they do not try to make their attractions such as to trap the tourist so he cannot get beyond a certain point. I am referring particularly to highway construction where they could join them together for the advantage of the province and the through traveller rather than trying to use the dead-end road type of thing. Also, many tourists want to go on a trip one way, and come back another. Both would benefit by advertising the routes, even if they have to come through other provinces.

Mr. McFARLANE: I was wondering whether they had received any information or complaints along that line?

Mr. PAYNE: Before we adjourn today, Mr. Chairman, could we have some idea as to when future meetings of the committee will be held?

The CHAIRMAN: Were you here, Mr. Payne, when it was suggested that we have someone from Trade and Commerce, and someone from the Industrial Bank?

Mr. PAYNE: Yes.

The CHAIRMAN: Perhaps we could try to get them here tomorrow for an 11 a.m. meeting; would that be satisfactory?

Mr. McFARLANE: What about the future program?

The CHAIRMAN: I imagine we will get busy this week on the final report, but first we must discuss with the house leader the question of the trip, so that we will not be placed in the same position as we were a year ago.

It is not necessary to have a meeting this afternoon, unless it is the wish of the committee. How would it be if we try to get the witnesses available for tomorrow and adjourn until tomorrow at 11 a.m., or at the call of the chair?

Mr. CÔTÉ: Before we do adjourn, Mr. Chairman, there were a couple of questions asked by members of the committee at a previous meeting. One question was asked by Mr. Hardie in connection with the comparable rental rates per hour of equipment working in the Northwest Territories. I have this document to table and it is available for distribution to the members, if they so desire.

The CHAIRMAN: Gentlemen, is it agreeable that we incorporate this table in the printed proceedings of the committee?

Agreed.

MINES, FORESTS AND WATERS COMMITTEE

QUESTION BY MR. HARDIE, M.P.

QUESTION

Have you any idea of the comparable rental rates per hour of equipment working for you in the Northwest Territories, as compared with rental rates on the basis of the contract for the Flatt Creek-Eagle Plain Road?

ANSWER

Serial	Type of Equipment	Yukon Rate	N.W.T. Rate
		$	$
1	D-8 Cat. with Blade	22.00	26.00
2	D-8 Cat. Scraper	26.50	25.00
3	D-4 with Blade	10.50	11.00 (1958)
4	13-15 c.y. Scraper (self-propelled)	24.00	19.00
5	16-21 c.y. Scraper (self-propelled)	25.00	26.00
6	¾ c.y. Dragline with Shovel	21.50	20.00
7	Power Grader (160 H.P.)	14.50	14.25
8	315 c.f.m. Compressor	8.00	7.75
9	Jack Hammer (45 and 60 lb.)	75.00 (per month)	3.60 (per day)
10	¾–1 Ton Pickup Truck (incuding 4-wheel drive)	400.00–450.00 (per month)	250.00–300.00 (per month)
11	3-Ton Flat Deck Truck	6.50 (per hour)	4.00 (per hour)

Mr. CÔTÉ: A question was also asked in connection with the number of employees on the federal payroll in the Yukon and Northwest Territories. I have also that information for tabling and distribution.

The CHAIRMAN: Gentlemen, is it agreeable that we incorporate this table in the printed proceedings?

Agreed.

EMPLOYEES OF FEDERAL DEPARTMENTS IN THE YUKON AND NORTHWEST TERRITORIES

Department	Yukon	N.W.T.	Total
Agriculture	17	9	26
Citizenship and Immigration	13	12	25
Fisheries	1	10	11
Justice	8	6	14
National Health and Welfare	66	53	119
National Defence	353	380	733
National Revenue	18	1	19
Northern Affairs and National Resources	42	619	661
Post Office	17	3	20
Public Works	53	52	105
Royal Canadian Mounted Police	55	151	206
Trade and Commerce	—	3	3
Transport	179	753	932
Unemployment Insurance Commission	5	—	5
TOTAL	827	2,057	2,879*

* This figure includes 156 teachers, 56 doctors and nurses, and 202 R.C.M. Police in uniform. It does not include uniformed members of the Armed Services as the Department of National Defence has indicated that this information is classified material.

The CHAIRMAN: Gentlemen, the meeting is adjourned until 11 o'clock tomorrow morning or at the call of the chair.

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

RECEIVED
JUN 29 1959
Library of Parliament

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 38

Including Index of Items of the Estimates considered, relating to the Department of Northern Affairs and National Resources.

TUESDAY, JUNE 16, 1959

Estimates 1959-60 of the Department of Northern Affairs and National Resources

---

WITNESSES:

Mr. E. A. Côté, Assistant Deputy Minister of Northern Affairs and National Resources; and Mr. Alan Field, Director, Canadian Government Travel Bureau.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21487-4—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielson, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, June 16, 1959.
(49)

The Standing Committee on Mines, Forests and Waters met at 11.00 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding

Members present: Messrs. Aiken, Coates, Drouin, Fisher, Kindt, Korchinski, MacRae, Martel, McFarlane, McQuillan, Murphy, Payne, Slogan and Stearns.—(14)

In attendance, of the Department of Northern Affairs and National Resources: Messrs. E. A. Côté, Assistant Deputy Minister. G. M. Carty, Chief Administrative Officer; M. A. Currie, Administrative Officer; Alan Field, Director, Canadian Government Travel Bureau; R. D. Palmer, Chief, Travel Information and Publications; H. Crombie, Chief, Research and Statistics; and P. Rielly, Publicity.

The Committee resumed its consideration of the 1959-60 estimates of the Department of Northern Affairs and National Resources.

The Committee reverted to and reopened Item 281 relating to the Forestry Branch for the purpose of putting on the record of the Committee's proceedings a letter dated June 8, 1959, from the University of British Columbia to Major L. R. Andrews, Executive Vice-President, B. C. Lumber Manufacturers Assn., listing contributions of British Columbia forest industries towards higher education in British Columbia, which letter was produced by Mr. McQuillan. Item 281 was confirmed as approved.

The Committee continued on Item 293 relating to the Canadian Government Travel Bureau.

Referring to the resolution to the Committee on June 15th regarding the calling as witnesses of Mr. James A. Roberts, Associate Deputy Minister, Department of Trade and Commerce, and a representative of the Industrial Development Bank, the Chairman informed the Committee that Mr. Roberts was out of town on official business and, in any case, the said department had not yet reached a stage in its consideration of problems regarding credit assistance to small businesses in the tourist industry to make possible any contribution in this regard to the deliberations of the Committee.

Messrs. Côté and Field were questioned on matters concerning the tourist industry in Canada.

Item 293 was approved.

The Committee recorded its hearty appreciation of the assistance given to it by the Minister of Northern Affairs and National Resources and his officials during its consideration of the estimates of that department.

21487-4—1½

At 11.50 o'clock a.m. the Committee continued *in camera* to consider the drafting of a report to the House on the estimates of the Department of Northern Affairs and National Resources.

At 12.35 o'clock p.m. the Committee adjourned to the call of the Chair.

Eric H. Jones,
Clerk of the Committee.

(Note: The answer to a question on June 10, 1959, on Item 292, by Mr. Slogan concerning 35 reels of folk songs from the National Film Board, (see page 1083 of the Committee's proceedings), which was produced by the department after the Committee had adjourned this day, is printed as Appendix "A" to the evidence which follows hereafter.)

EVIDENCE

TUESDAY, June 16, 1959.
11:00 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Mr. MCQUILLAN: Mr. Chairman, in going over the Forestry Branch estimates we asked some of the British Columbia delegation who were here about contributions to the universities—scholarships, bursaries, and other contributions—and I have here a copy of a letter from Dean George S. Allen, of the faculty of forestry, University of British Columbia. I wonder if we could have this printed in the proceedings?

The CHAIRMAN: Is that agreed, gentlemen, that we revert to item 281 in order to incorporate in the procediengs the memorandum that has been furnished Mr. McQuillan by the University of British Columbia?

Agreed.

FORESTRY BRANCH

Item 281 Branch Administration $163,785

The University of British Columbia,
Vancouver 8, Canada

JUNE 8, 1959.

Major L. R. Andrews,
Executive Vice-President,
B.C. Lumber Manufacturers' Assn.,
550 Burrard St.,
Vancouver 1, B.C.

Dear Len:

Attached is a hastily drawn up list of contributions made by the forest industries to the university, to students, and to students entering the university from high school.

To the best of my knowledge this is accurate. A few items are approximations because they vary from time to time. If necessary I could obtain the exact amount for 1958-59. Similarly, I could obtain the total in the loan funds mentioned.

If you need further data or an explanation of any items I shall do my best to provide any or all.

With kindest regards,

Yours sincerely,

(Sgd.) Geo. S. Allen,
Dean.

Contributions of British Columbia forest industries towards higher education in British Columbia

A. Current (1958-59)

I. In forestry

1. Teaching

Powell River Co.	$ 5,000.00		
MacMillan & Bloedel Ltd.	5,000.00		
H. R. MacMillan Esq.	7,000.00		
Alaska Pine & Cellulose Co.	1,500.00		
			$ 18,500.00

2. Research

MacMillan & Bloedel Ltd.	$ 1.500.00		
H. R. MacMillan Esq. (Vancouver Foundation)	7,417.90		
			$ 8,917.90

3. Lectureships

H. R. MacMillan Esq.	$ 600.00	approx.	
			$ 600.00

4. Scholarships, etc.

H. R. MacMillan	$ 800.00		
B.C. Loggers' Assn.	600.00		
B.C. Lumber Manufacturers' Assn.	300.00		
Leon Koerner	500.00		
VanDusen	3,000.00		
Timber Management Ltd.	250.00		
Canadian Forestry Assn.	200.00		
MacMillan & Bloedel Ltd.	1,200.00		
Truck Loggers' Assn.	250.00		
Canadian Forest Products	500.00		
Alaska Pine & Cellulose Ltd.	500.00		
B.C. Lumberman	150.00	approx.	
Canadian Pulp & Paper Assn. (West Div.)	1,000.00		
Hoo-Hoo Club (Kamloops)	200.00		
Western Plywood Co. Ltd	250.00		
Finning Tractor	500.00		
			$ 10,200.00

II. General

1. Scholarships

Crown Zellerbach	$ 13,700.00	approx.	
H. S. Foley	1,800.00		
Powell River	725.00		
Alaska Pine	1,500.00		
Kapoor Singh	500.00		
B.C. Lumber Manufacturers' Assn.	700.00		
Timber Sales & Dist. Ltd.	250.00		

Westminster Paper Co. ..	800.00	
Timber Preservers Ltd. ..	200.00	
National Box Co.	400.00	
B.C. Forest Products Ltd.	6,700.00	
MacMillan & Bloedel Ltd.	2,800.00	
C.P.P.A. (Pac. Coast Tech. Div.) (Loan)	250.00 p.a.	
Cooper-Widman	500.00	
Sydney Roofing & Paper Co.	250.00	
Finning Tractor	1,000.00	
		$ 32,075.00

B. Outstanding contributions since 1945 not shown under A

1. B.C. Loggers' Assn. (1949-53)	$140,000.00	
2. Forest Industries (1949)	20,000.00	
3. B.C. Forest Products Ltd., teaching & research in forest entomology—10 years at $5,000/yr.	50,000.00	
4. Alaska Pine, for teaching & research in forest products $14,500 over 3-year period ..	14,500.00	
5. H. R. MacMillan, Esq. Various grants estimated at	50,000.00	
6. H. R. MacMillan loan funds in forestry & other faculties ..		
		$274,500.00+

Summary

A. Current (annual)		
I. In forestry		
1. Teaching	$18,500.00	
2. Research	8,917.90	
3. Lectureships ..	600.00	
4. Scholarships ...	10,200.00	
	$38,217.90	
II. General		
Scholarships	$32,075.00	
B. Other contributions since 1945—		$274,500.00+

The CHAIRMAN: This is rather valuable information, something we were asking about in the committee, and the figures are quite surprising.

We will now revert to the travel bureau item.

Canadian Government Travel Bureau

Item 293 To assist in promoting the Tourist Business in Canada, including Grant of $5,000 to the Canadian Tourist Association $2,319,342

Yesterday we were hoping that we might be able to have someone here from the Industrial Development Bank and also someone from Trade and Commerce of the Small Business Branch, which was established within the last two years. We now find that according to the act incorporating the Industrial Development Bank it is set up for the purpose of encouraging new business and not to sustain or help to sustain existing businesses. It defines the businesses under which the act is administered and the tourist industry does not come under the act nor within the meaning of the act, so we thought it would not be necessary to have anyone appear from the Industrial Development Bank.

I think they were in touch with you, Mr. Fisher; you made the request, is that not right?

Mr. FISHER: Yes, if I might explain. I talked to Mr. Roberts some time ago about this, personally, and he told me they were trying to look into this and find out, as far as the small business aspect of it is concerned, just what the needs were in the tourist business. Mr. Roberts is not available, and I spoke to Mr. Churchill about it, as did our committee Clerk. The point is, they are not, as yet, ready to give any information or any leadership in this particular field. I have no comments critical or otherwise on that.

The CHAIRMAN: No, I know.

Mr. FISHER: It just means that it is pointless; but I myself am very grateful to have this information, because it will certainly save us from making any recommendation of a positive kind, when as yet the ground work has not been laid for government policy or action. I think we should appreciate knowing this, that we can hardly come out with a strong recommendation for assistance to the tourist industry in so far as credit and loan facilities are concerned, when the agencies of government are not prepared yet to give any lead in this rather complex field.

The CHAIRMAN: Would you not agree, though, Mr. Fisher, since the study of the functions of this Small Business Branch is being made by the department, that the committee, in their report, could refer to it and the necessity of the industry having assistance, as was suggested by several members of committee?

Mr. FISHER: Absolutely. It just seems to me it saves us from going out, if you like, on a long limb.

Mr. AIKEN: As you know, I produced a resolution along this line at the last session, on loans to tourist operators. On looking into it I find out it can be generally approached on three different possibilities. One was the amendment to the Industrial Development Bank Act which would specifically mention tourist businesses as an industry or businesses under the act. The second was the inclusion in the Small Loans Act or the small loans set-up; and the third was a special act dealing strictly with the tourist industry. There were these approaches, but I think it is a matter of policy more than anything else, as to which approach will be taken if the government decides to go ahead.

Mr. KINDT: Mr. Chairman, there have been two institutions mentioned, one the Industrial Development Bank and the other the Small Business Branch. We all know what the Industrial Development Bank has as its principal function, because it has been in operation for a number of years. The Small Business Branch has not. What was the thinking in mentioning the Small Business Branch in relation to the encouragement of the tourist industry?

Mr. FISHER: From the point of view of its considering what means were possible to help small business in the present predicament. If you consider one of the strongest pleas of one segment of small business is credit and other facilities for the tourist business, it was felt this might be a branch that could give us some worthwhile advice. I think in time it will too. I happen to

know Mr. Roberts quite well. Mr. Roberts happens to have been my former colonel in the army and he is a man for whom I have a great deal of respect; and I am sure that they will come up with something good, but the time is not yet—

The CHAIRMAN: That, gentlemen, I think should be given consideration, careful consideration, by the committee when they are preparing their report.

We have with us this morning the director of the travel bureau, Mr. Field; Mr. Côté, the assistant deputy minister, and others. Are there any other questions you would like to ask this morning? Probably this would wind up item 293.

Mr. PAYNE: We have had a very—

The CHAIRMAN: I interrupted Mr. Fisher, Mr. Payne. Would you mind his continuing?

Mr. FISHER: I wonder if, Mr. Field, you could elaborate on a point which you made twice, that we have just missed out, or are not working in the field of building large scale resorts of the Las Vegas type? It seems to me the large scale resort has pretty well died in Canada since that big burst the railways had a number of years ago, when they established Minaki, Bigwin Inn and Royal Muskoka.

Do you feel there is a real need in Canada for that kind of all inclusive resort, entertainment, and those sorts of high cost facilities and convention facilities?

Mr. ALAN FIELD (*Director, Canadian Government Travel Bureau*): Yes, Mr. Chairman, I think there is a need for that kind of accommodation. We must realize that in the large centres in the United States, like Miami, the big resort has more than one value to the tourist economy.

The first value, of course, is the fact that many wealthy people who are able to pay up to $100 a day—and that is what they will pay in Miami—will come to that resort. But in addition to that, it creates what I term a trend attraction. It gives to the area a tremendous amount of publicity, so that a person, even if he does not have $100 a day to spend, will read about this fabulous new resort and is, therefore, more conditioned to go into that state or to that area, or to that city. Creating a trend is one of the principal values of the luxury resort.

Mr. FISHER: Because of our short season where could you possibly expect —except, possibly in British Columbia or some parts of the maritimes—where could you conceive of our getting into that kind of field? Where could we hitch it on to something exotic, such as gambling and tuna fishing? You seem to need some kind of major attraction like that.

Mr. FIELD: You are quite right, Mr. Fisher. You do need a major attraction, but I do believe there are areas in this country where a major resort would draw, if not year round business, at least two-season or three-season business. A good example is up at the head of the lakes, where I think there is a considerable possibility for skiing and attracting winter business, if the facilities were there. I think you could find other such areas in the Rockies, other than Banff and Jasper. You could find possibilities, I think, in British Columbia. But it is a fact that risk capital for large resort development has been rather reluctant in coming forward in Canada in recent years.

Mr. FISHER: There is that risk capital available in Canada, because Canadians have taken it out of the country, in developing facilities in Jamaica and the Bahamas.

Mr. FIELD: Yes, that is quite true, there has been Canadian capital put into developments in places like Jamaica.

Mr. FISHER: Has there been any effort on your part, or on the part of any other agency you know, to speak to people like Butlin or E. P. Taylor, with the idea of their taking a flier on Canada?

Mr. FIELD: I have not done it sir.

Mr. FISHER: Do you think it is a field in which this department could probably consider—not so much giving support or subsidization, but some leadership, in any way?

Mr. FIELD: I do not know whether the government could do it. I think probably individuals highly placed in government and in businesses, such as banks, might bring a little influence to bear. But I think it would have to be on an unofficial basis.

The CHAIRMAN: Any other questions, gentlemen? Mr. Payne, you had one, but I interrupted you.

Mr. PAYNE: It is not a question, but I had an observation. However, I would wish to put it after all the questions have been asked.

The CHAIRMAN: Your observation would be welcome, Mr. Payne.

Mr. PAYNE: My observation is this: we have at this time, in my opinion, given a very thorough review to this matter, and I feel that it would be fair both to the witnesses and to the committee if our deliberations were concluded at this time.

The CHAIRMAN: Any further questions, gentlemen?

Mr. AIKEN: Mr. Chairman, I have a final question, and perhaps it might be of assistance in Mr. Payne's proposal.

I would like to address this to Mr. Field or Mr. Côté. On the assumption that more funds were made available by government for the Travel Bureau, could you outline to the committee what you believe the priority in spending would be? In other words, would the priority be for new travel offices, increased spending on advertising, or any of the other suggestions that have been made by your officials and by the committee? Could you give us some idea where you think the priority in spending would come; where the money could best be spent, if more money were made available under this item?

Mr. E. A. CÔTÉ (*Assistant Deputy Minister of Northern Affairs and National Resources*): Mr. Chairman, probably I might answer this question, and then I will ask Mr. Field to elaborate on it.

We have given some consideration to this matter. The committee will know that in this year's estimates, 1959-60, there has been only $68,000 added to the $1.4 million on direct advertising. That is hardly keeping up with the increased costs of advertising. I think our first priority would be for more advertising.

The second priority would probably be to increase the quantities of literature, so as to service the inquiries that come from more advertising.

The third priority would be for an office in the United States of America. It probably would not take a very large amount of money to meet all three priorities. I think possibly Mr. Field might comment on that.

Mr. FIELD: I think, Mr. Chairman, there is a decided need for additional funds for advertising. I think the committee has pretty well brought that out in its sittings. I do think that we must find some means of extending our advertising season, to keep our message longer before the travelling public in the United States. We have had, in the last two years, a very considerable increase, relatively, in our allotment for travel literature. I think in the last two years the budget for this purpose has gone up 54 per cent. That was largely in response to the increase demand for our literature that arose out of the increased number of inquiries we have received in the last two or

three years. But, as Mr. Côté has pointed out, we will have to put forward a proposal for an increased allotment for literature if we increase our advertising appropriation.

In the matter of offices, we do need a west coast office; I believe the members of the committee have made that plain.

I can assure you that the industry—whether it is the private elements of the industry or provincial transportation organizations—are all heartily in support of a west coast office.

The CHAIRMAN: Mr. Field, on that we brought out the other day areas like the Detroit area where it was mentioned—since you are on the question of an office in the United States— there were probably 20 million within a day's drive. I do not think the Chicago office serves that area. Have you contemplated an office in Detroit?—because from that area they can cross into Ontario by bridge and by tunnel to Windsor; by bridge at Port Huron and Sarnia, and there are three or four different ferries between those areas. And you have excellent accommodation at Niagara Falls. Would you care to comment on that?

Mr. CÔTÉ: On that particular point, I would like to make one general observation. That is, the Travel Bureau and the department have considered the question of offices in the United States and, with the money likely to be available in any given year, the priority is for a west coast office. There is no doubt at all that Detroit and Cleveland would be excellent centres for further promotion, but the department believes that until a west coast office is established we should not look much further afield. Once you have that, then the question of priorities between offices in Detroit, Cleveland or Boston comes up.

The CHAIRMAN: My feeling is this—and I think it is the feeling of the committee—that you are not moving fast enough. Just because this Department of Northern Affairs has been consistently lagging over the years is no reason why it should continue, and I think it is the opinion of this committee that you have to be more aggressive. I am sure they are not going to be satisfied with just asking for one more office.

Mr. COATES: In that regard, it was brought out in evidence that these offices would cost the department about $40,000 a year. $40,000 a year is certainly not a tremendous expenditure, in light of the profit that the people of Canada will derive from the expenditure. I think, when we are making expenditures, we must consider very carefully what we are going to get for our money. I certainly cannot think of any better way to spend money than on the travel bureau, especially when you consider that one person in the Los Angeles area, in the Canadian consulate, is handling thousands and thousands of inquiries.

The CHAIRMAN: Mr. Field, I do not understand the statement made the other day, when you said it cost $40,000 to set up an office and $40,000 a year to operate it. Where do you get the $40,000 figure to set up an office in Cleveland, Detroit or Los Angeles?

Mr. FIELD: That would include the first years rent, plus the cost of decorating the office. These offices must be showcases for Canada; you just cannot have an ordinary office establishment. The amount mentioned also includes the first year salaries.

Our history shows that—for example, in the development of the New York office—the first part of the year costs about the same as a full year of operation. I think in Chicago, for example, we spent about $15,000 to decorate the office.

The CHAIRMAN: Because you put gold leaf in it?

Mr. FIELD: It is expensive, sir. You require the services of the best kind of decorators; you need attractive furniture; you have to have wall decorations, some of three-dimensional displays, and so forth—and it is expensive. Does that answer your question, sir?

May I just make another comment in connection with something the chairman said about the Michigan area? The charts prepared by D.B.S. indicate that Michigan is certainly one of the best producers of business for Canada. I know the chairman is referring to the larger hub of which Detroit is the centre; but the D.B.S. report shows that of non-resident automobiles travelling in Canada in the year 1957, 16.4 per cent were from Michigan.

Mr. KINDT: Mr. Chairman, may I ask a question of Mr. Field and the other witnesses? The question of costs has been discussed in relation to the increase in our tourist trade. I wonder if, in discussing these foreign establishments—$40,000 for setting up the office and $40,000 to operate it—we are emphasizing that angle of it and, to some extent, overlooking the cost that is going to be to the American tourist when he gets into Canada?

If we are going to get these travellers here, we are not going to get the $100 a day people: the person you are going to get in Canada from the United States is the man who has to pinch nickels; he has enouh to buy his gas, he has enough to come up here, and he is going to hunt for the best time he can get with the least amount of money possible. We can never lose sight of that fact.

Our efforts in government should be directed to bringing him to the point where he will want to come back and will spread that good news to the people in the United States. That is the way we are going to get tourists; it is not by setting up a $40,000 or $50,000 office across the line—it is what the people are going to talk about when they get back from Canada. Our efforts to attract tourists should be to provide the conditions here out of which we will get the tourist trade.

The CHAIRMAN: We have to get the tourists up here first; that has been emphasized all the way along. Most of the witnesses have been concerned about courtesy, and all that sort of thing, that goes with tourist promotion and is so necessary. But I think what Mr. Field and Mr. Côté were saying—and they have given figures on record here—was as to the value of these offices to attract tourists to Canada. I think your point is on courtesy, value, and so on, after they get here. But the question we are discussing now is, how are we going to get them up here?

Mr. CÔTÉ: Mr. Chairman, Mr. Kindt has a point that is of value. What has been brought out in the committee previously is that about 41 per cent of the United States tourists who were questioned on a sample basis last year indicated that they came to Canada because friends told them of Canada. That point is quite valid. The first friends getting to Canada are the ones who are also of interest to us, and that is why we want to get more advertising and more offices. Advertising brings Canada to their notice, they ask for literature, it stimulates their interest, and where we have follow-up offices on the ground in the states, we feel the United States tourists who visit these offices and ask for information are more likely to come to Canada than most. Then the word of mouth on going back to the states completes the circuit. We are very conscious of the importance of good, favourable word of mouth publicity; but we believe that all these factors have an importance in the business of getting United States tourists to come to Canada.

Mr. KINDT: What you have said is very true, except that I would not—from my personal experience—be too enthusiastic about the expenditure of a lot of money in an office down across the line. Advertising—yes; in their national magazines, and all the rest of it. But the expenditure of large sums of money

to have somebody sitting on their chair down across the line waiting for a tourist to come along, is not too effective in terms of increasing our tourist trade.

Mr. CÔTÉ: Mr. Kindt, I can assure you that the three men and women we have in Chicago, for example, have precious little time to sit down: they are kept very, very busy. Those in New York, likewise. During the summer months we have to supplement them by individuals who are loaned to us—very graciously and, I think, intelligently—by the various provinces. Ontario and New Brunswick, for example, lend people to us to supplement our offices, to meet the flood of inquiries that comes along in the early summer months.

The CHAIRMAN: Mr. Kindt, you were not here when it was brought out—I think, quite forcibly— that it is the responsibility of those in charge of these offices not only to distribute literature and grant interviews, and all that sort of thing, but to do a great deal of propaganda work by showing films, arranging talks, and so on. I think the figures were put on record as to the number of interviews that were recognized by the press, and also the number of times they showed films, and all that sort of thing.

Mr. FISHER: I think Mr. Kindt may be very close to what, to me, is the fundamental problem here. I have a different political approach than most of the other members of the committee, and I do not know whether this is what is really bothering him. If it is this, I think we should perhaps have discussion on it—and perhaps *in camera*. But is it the government's business to get into an extended kind of service like this and to keep building it up? I believe it is—I believe it is quite strongly. I believe that if we do not, we are going to lose out very completely. But I can certainly see there is a valid point where you can have hesitation on this.

What are the private people doing? This is a field where, in the end, it is private people who reap direct benefit; the government's benefit is very indirect. If that is the key to what is bothering Mr. Kindt, I think we should have a fairly long discussion on it—probably *in camera*— before we make any recommendation.

Mr. COATES: I do not think that is something that is bothering the committee as a whole.

Mr. PAYNE: On a point of order, Mr. Chairman: I would submit we are digressing into what should or should not be included in the report. I repeat, again, that I think it is a case where we are becoming repetitious. It is unfair to the witnesses and to the members of this committee to continue the discussion further. We are not going into new fields. We have had the evidence. If it is in order, I would like to move adjournment of the meeting so we can get on to the final study of bringing out the report.

The CHAIRMAN: I think your point is well taken, Mr. Payne. We have given item 293 a good going over this year.

Mr. FISHER: I will second his motion.

The CHAIRMAN: I would suggest, gentlemen, that we remain here as a committee *in camera* for a few minutes. Will that be satisfactory?

Mr. PAYNE: Before the witnesses depart, I think the committee should express their thanks to the Minister and his officials for their long and frequent visits with us, and for the help and information they have brought to the committee.

The CHAIRMAN: Yes, they have done very well.

Mr. CÔTÉ: Thank you, Mr. Chairman. Before the committee goes *in camera*, the committee did ask information about the times and types of Canadian travel films shown in the United States. I have here a table, which might

go into the record. It is somewhat lengthy. It shows the various travel films shown in the United States for October, November and December, 1958. These are films shown on television.

This report has been prepared by the National Film Board. It does not contain, however, an analysis of the times during which telecasts were shown. That information is not readily available in the National Film Board. What we did obtain, quickly, from the National Film Board was the report as to the month of September, 1958, which showed that of the 172 telecasts reported on, 27 were shown during the morning, 72 in the afternoon and 83 during evening hours.

Mr. COATES: In that regard, Mr. Chairman, may I ask a couple of questions? No. 1: have you any assurance that in these films that were telecast, the film was shown as is, when it was provided to the TV station; that is, whether it was cut, whether there was any publicity given to the fact that it was a film of Canada? Have you any information of that type?

Mr. CÔTÉ: I would like to have Mr. Field reply to that, if I may.

Mr. FIELD: Following the remarks made by the chairman yesterday, we have taken the matter up with the National Film Board. I want to give the committee an assurance that we will do all in our power, and the National Film Board will do all in its power, to prevent that sort of thing happening. If a Canadian film is loaned free of charge to a television station, then we feel that film should be used in its entirety; it should not be cut or chopped up. If the station does that, they will be warned that if it happens again, there will be no further loan of Canadian films to that station. I think in view of what has been said here, we have to adopt a pretty strong attitude to prevent this happening again, if it has happened.

The CHAIRMAN: Gentlemen, I have just glanced over this report. I see no reason why it could not be incorporated in the proceeding. Is it agreed it be put in the minutes?

Agreed.

SUMMARY

FREE CANADIAN TRAVEL FILMS TELEVISION IN U.S.A.

OCTOBER, NOVEMBER, DECEMBER, 1958

Total U.S.A. stations on Air as of July, 1958—540 (Includes Alaska, Guam, Hawaii, Puerto Rico)
Total U.S.A. cities with On-Air stations as of July, 1958—336
Total U.S.A. homes (ARF-Census data as of March, 1958)—43,000,000

PERIOD	No. of Titles	No. of Telecasts	No. of Stations	No. of Cities	No. of States
1954 (Sept.–Dec/54)	23	320	43	38	21
1955	32	2,124 (117 col.)	136	128	40
1956	42	1,524 (140 col.)	125	109	34
1957	56	1,826 (232 col.)	121	104	39
1958	70	1,835 (277 col.)	126	102	38*
Jan.–March/57	48	325 (36 col.)	48	48	25
Apr.–June/57	49	404 (69 col.)	72	67	30
July–Sept./57	52	649 (74 col.)	57	56	33
Oct.–Dec./57	54	448 (53 col.)	54	50	24
Jan.–March/58	59	408 (54 col.)	54	51	27
Apr.–June/58	65	380 (59 col.)	54	51	26
July–Sept./58	65	586 (62 col.)	83	72	31
Oct.–Dec./58	70	461 (102 col.)	68	63	31*
Cumulative to Dec./58	70	7,629 (766 col.)	331	243	50*
TELEVISITS					
June–Sept./58	10	568	26	26	16

NOTE: Figures in brackets are colour telecasts included in the total.
* Includes District of Columbia and Puerto Rico.

TABLE A

FREE TELEVISION ACTIVITY OF CANADIAN TRAVEL FILMS IN U.S.A. BY FILM TITLE
COMPARATIVE ACTIVITY AND CUMULATIVE TOTALS

Titles	No. of Prints	T.V. Release Date	Number of Telecasts Jan. – Dec. 1957	Jan. – Dec. 1958	Oct. – Dec. 1957	Oct. – Dec. 1958	Cumulative to Dec. 31/58
Abegweit	8	Feb./57	34	28	11	7	62 (9)
Atlantic Salmon	12	Feb./57	10	46	7	12	56 (30)
Banff and Lake Louise	5	Jan./58	—	33	—	4	33 (4)
Battling Blue Fins	12	Oct./56	24	28	6	10	52 (10)
Beautiful Bonne Bay	8	June/58	—	18	—	8	18 (2)
Birds of the Seashore	8	Oct./58	—	—	—	—	— —
Big Country—Big Fish	9	Jan./58	—	40	—	18	40 (8)
Bluenose Holiday	8	July/58	—	8	—	8	8 (1)
Calgary Stampede	7	Jan./57	21	23	6	2	44 (7)
Canada from Sea to Sea	2	Feb./57	9	11	6	4	20 (17)
Canada's Evergreen Playground	12	Apr./56	33	26	5	7	82 (8)
Canadian Cruise	8	Sept./54	50	37	13	6	271 (20)
Canoe Country	9	Sept./54	49	38	4	8	267 (24)
Carnival in Quebec	3	Nov./58	—	—	—	—	— —
Champlains of Today	10	Aug./57	17	39	16	7	56 (1)
Citadel City	8	July/58	—	6	—	6	6 (1)
Columbia Adventure	9	Oct./55	46	27	13	9	132 (15)
Escape to the Rockies	12	Dec./57	1	36	1	6	37 (9)
Family Outing	8	Sept./54	32	29	7	8	207 (19)
Famous Fish I have Met	8	Oct./55	48	34	6	17	136 (23)
Fishing the Last Frontier	9	Jan./55	37	43	9	7	213 (22)
Fundy Holiday	8	Sept./54	38	19	12	3	192 (7)
Gift of the Glaciers	8	Feb./55	31	20	8	5	128 (7)
Great Northern Tackle Busters (Withdrawn)	—	Feb./57	4	—	—	—	4 (3)
Grey Trout	10	Sept./56	38	55	14	10	93 (14)
Grounds for Fishing	12	Nov./56	43	34	15	10	77 (14)
Happy Valley	8	Nov./56	39	30	7	5	69 (7)
Highland Holiday	9	Sept./54	41	27	3	10	223 (19)
Highway North	2	Jan./58	—	8	—	3	8 (7)
Historic Highway—Lower Canada	8	Sept./54	26	26	7	5	181 (15)
Historic Highway—Upper Canada	8	Sept./54	25	25	9	6	179 (11)
Holiday at Waskesiu	9	Sept./54	45	26	6	1	212 (13)
Holiday in Manitoba	10	Sept./54	40	18	3	4	192 (12)
Holiday in Snow	8	Feb./58	—	5	—	4	5 (1)
Holiday Island	13	Sept./54	56	19	15	6	202 (14)
Hunting with a Camera	8	Sept./54	31	34	4	5	215 (17)
Keewaytinook	7	May/55	41	32	5	7	174 (11)
Klondike Holiday	5	Aug./57	5	23	5	4	28 (6)
Lake of the Woods	10	Sept./57	11	32	11	5	43
Land of Bubbling Waters	9	Oct./55	41	38	9	8	136 (17)
Legend of the West	12	Feb./57	39	22	17	8	61 (3)
Maritime Holiday	8	Sept./54	45	30	5	7	222 (15)
Marine Highway	7	Dec./57	—	17	—	2	17 (2)
Meet Manitoba	9	May/55	27	31	6	4	137 (15)
Mighty Muskie	8	Sept./54	47	46	9	12	234 (25)
Mighty Ones, The	12	Sept./56	44	39	4	12	83 (13)
Montreal, 1957	2	Dec./58	—	—	—	—	—
Musical Ride	12	Nov./56	36	34	6	10*	70 (8)
Newfoundland Doubleheader	8	June/58	—	25	—	16	25 (7)
North to Hudson Bay	8	Sept./54	44	23	8	7	183 (11)
Ottawa Canada's Capital	5	Nov./58	—	—	—	—	—
Picture Province	8	March/56	48	35	8	7	93 (16)
Road to Gaspe	7	Sept./54	39	29	8	6	208 (14)
Road to Keltic	12	Sept./56	39	18	15	7	57 (8)
Rocky Mountain Trout	9	Sept./54	50	47	10	14	269 (27)
Sailing in Canada	8	Sept./54	48	26	20	8	205 (19)
Sailing in Newfoundland Waters	8	Oct./58	—	2	—	2	2
Seaside Holiday	8	Sept./54	42	19	3	4	186 (15)
Silks and Sulkies	8	Sept./54	30	25	6	5	171 (12)
Ski Holiday	10	Sept./54	33	37	10	11	209 (18)
Skyline Trails	8	Mar./55	21	16	3	1	115 (6)
Story of Wine in Canada	2	Feb./58	—	7	—	—	7 (6)
Summer Escape	10	Dec./55	38	30	2	3	116 (13)

TABLE A—*Concluded*

FREE TELEVISION ACTIVITY OF CANADIAN TRAVEL FILMS IN U.S.A. BY FILM TITLE
COMPARATIVE ACTIVITY AND CUMULATIVE TOTALS—*Concluded*

Titles	No. of Prints	T.V. Release Date	Number of Telecasts Jan. – Dec. 1957	Jan. – Dec. 1958	Oct. – Dec. 1957	Oct. – Dec. 1958	Cumulative to Dec. 31/58
Talented Hands	8	Apr./58	1	20	1	6	21
To Catch a Fish	12	Sept./56	51	41	18	15	92 (14)
Vacation Land of Algoma	12	June/57	20	38	16	7	58 (8)
Wardens of Waterton	10	Sept./54	33	24	7	7	192 (21)
Welcome Stranger	7	Jan./58	—	14	—	2	14 (3)
Wildlife in the Rockies	12	Jan./58	—	40	—	6	40 (9)
Winter Carnival	8	Sept./54	40	38	15	11	209 (15)
You'll Take the Highroad	8	Sept./54	45	41	8	6	232 (18)
Titles used, Oct.–Dec., 1957–53			1,826	1,835	448	461	7,629
Titles used, Oct.–Dec., 1958–65			including		including		including
Prints on deposit at Dec., 1957–629			232	277	53	102	766
Prints on deposit at Dec., 1958–593			colour		colour		colour

NOTE: Figures in brackets are colour telecasts included in the total.
* Includes one telecast in Puerto Rico.

TABLE A—PART 2

TELEVISITS

Titles	No. of Prints	Release Date	Telecasts June–Sept. 30/58
Avalanche Ski Rescue	20	June/58	60
Calgary Dinosaurs	20	"	55
Columbia Icefield	20	"	70
Fort Henry	20	"	62
Harness Racing	20	"	62
Musical Ride	20	"	43
Niagara Falls	20	"	50
Pelicans and Cormorants	20	"	55
Rideau Cruise	20	"	61
Sugar Bush	20	"	50
TOTAL	200		568*

* Adjusted figure—additional reports for July–Sept./58 have been received.
Oct.–Dec./58 reports not available as yet.

TABLE B

FREE TRAVEL FILM TELEVISION ACTIVITY IN U.S.A. BY STATE, CITY AND STATION

OCTOBER, NOVEMBER, DECEMBER, 1958

State	City	Station	Telecasts Oct.-Dec./58	Cumulative Telecasts
ALABAMA	Andalusia	WAIQ	7	65
	Birmingham	WBIQ	7	75
	Dothan	WTVY	—	8
	Florence	WOWL	—	1
	Mobile	WKRG	3	18
	Munford	WTIQ	7	71
ALASKA	Anchorage	KENI	10	70
	Fairbanks	KFAR	8	70
ARIZONA	Yuma	KIVA	—	10
ARKANSAS	Fayetteville	KGRH	—	18
		KHOG	18	59
	Harrison	KHOZ	—	62
	Little Rock	KARK	2	3
CALIFORNIA	Fresno	KFRE	66	137
	Eureka	KIEM	10	19
	San Francisco	KQED	—	3
		KGO	—	23
COLORADO	Denver	KRMA	—	14
		KLZ	1	1
FLORIDA	Daytona Beach	WESH	—	58
	Fort Myers	WINK	—	12
	Miami	WTHS	24	126
		WPST	5	10
	Jacksonville	WFGA	5	9
	St. Petersburg	WSUN	—	14
	Tampa	WTVT	—	2
GEORGIA	Columbus	WRBL	—	12
		WBNS	—	1
	Savannah	WSAV	3	20
IDAHO	Boise	KBOI	13	47
ILLINOIS	Chicago	WGN	—	26
	Peoria	WEEK	—	7
		WTVH	—	4
	Rockford	WREX	6	78
	Tonica	WEEQ	—	15
INDIANA	Evansville	WTVW	—	25
		WEHT	—	14
		WFIE	—	26
	South Bend (Notre Dame)	WNDU	—	14
	Indianapolis	WTTV	—	2
		WIWI	—	2
IOWA	Des Moines	WHO	4	39
		KRNT	—	3
	Ottumwa	KTVO	3	35
KANSAS	Ensign	KTVC	7	13
	Hays	KAYS	7	7
LOUISIANA	Monroe	KLSE	11	23
	New Orleans	WYES	1	1
		WJMR	—	34
	Shreveport	KSLA	1	8
MARYLAND	Baltimore	WBAL	—	2
MASSACHUSETTS	Boston	WHDH	1	1

TABLE B—*Continued*

FREE TRAVEL FILM TELEVISION ACTIVITY IN U.S.A. BY STATE, CITY AND STATION
—*Continued*

OCTOBER, NOVEMBER, DECEMBER, 1958

State	City	Station	Telecasts Oct.–Dec./58	Cumulative Telecasts
MICHIGAN	Detroit	WWJ	2	9
	East Lansing	WKAR	—	72
MINNESOTA	Duluth	WDSM	—	37
MISSISSIPPI	Meridan	WTOK	—	48
MISSOURI	Jefferson City	KRCG	—	17
	Joplin	KODE	13	34
	Kansas City	KMBC	1	6
		KCMO	1	1
	St. Louis	KWK	—	4
		KTVI	13	41
	Springfield	KTTS	5	28
MONTANA	Billings	KGHL	—	1
	Kalispell	KGEZ	10	10
	Missoula	KMSO	—	125
	Glendive	KXGN	1	2
	Helena	KXLJ	1	2
NEW HAMPSHIRE	Manchester	WMUR	—	6
NEW JERSEY	Newark	WATV	—	1
		WNTA	1	1
NEW YORK	Binghampton	WNBF	—	57
	Buffalo	WBEN	2	14
	New York	WOR	—	4
	Plattsburg	WPTZ	—	17
	Rochester	WVET	—	28
		WHEC	2	18
	Utica	WKTV	7	39
	Watertown	WCNY	8	48
NORTH CAROLINA	Chapel Hill	WUNC	10	134
	Charlotte	WSOC	2	49
	Raleigh	WRAL	—	23
	Winston Salem	WSJS	3	13
NORTH DAKOTA	Bismark	KFYR	1	37
	Minot	KMOT	1	1
	Williston	KUMV	1	1
OHIO	Cincinnati	WLWT	1	20
		WKRC	4	4
	Columbus	WTVN	2	8
		WLWC	1	13
		WBNS	—	6
	Dayton	WLWD	1	15
		WHIO	—	4
	Youngstown	WKST	—	19
OREGON	Medford	KBES	6	36
	Portland	KPTV	6	20
PENNSYLVANIA	Altona	WFBG	—	1
	Lebanon	WLBR	4	69
	Pittsburg	WQED	1	118
	Scranton	WARM	—	59
		WNEP	4	10
	Wilkes Barre	WBRE	3	68
SOUTH CAROLINA	Columbia	WIS	1	78

TABLE B—*Concluded*

FREE TRAVEL FILM TELEVISION ACTIVITY IN U.S.A. BY STATE, CITY AND STATION
—*Concluded*

OCTOBER, NOVEMBER, DECEMBER, 1958

State	City	Station	Telecasts Oct.-Dec./58	Cumulative Telecasts
TENNESSEE	Johnson City	WJHL	2	76
	Knoxville	WATE	4	82
	Nashville	WSIX	—	10
		WSM	—	21
TEXAS	Austin	KTBC	—	6
	El Paso	KTSM	—	40
	Houston	KTRK	1	331
		KUHT	20	62
		KPRC	—	2
	Temple	KCEN	—	15
	Wichita Falls	KSYD	—	13
VERMONT	Burlington	WCAX	13	121
VIRGINIA	Harrisonburg	WSVA	—	57
	Richmond	WRVA	—	41
WASHINGTON	Kennewick	KTRK	5	8
	Seattle	KOMO	—	4
		KIRO	24	24
	Spokane	KXLY	—	27
	Tacoma	KTVW	21	47
WISCONSIN	Eau Claire	WEAU	2	12
	Madison	WHA	—	12
WYOMING	Thermopolis	KWRB	19	36
PUERTO RICO	Ponce	WSUR	1	1
July-Sept./58.				
Total: 31 (incl. Puerto Rico)	63	68	461	

The CHAIRMAN: Gentlemen, will you approve item 293 on the Canadian Government Travel Bureau?

Item 293 agreed to.

The CHAIRMAN: The meeting is now to continue *in camera.*

—Proceedings were continued *in camera.*

(NOTE: *The answer to a question on June 10, 1959, on Item 292, by Mr. Slogan concerning 35 reels of folk songs from the National Film Board, which was produced by the department after the Committee had adjourned this day, is printed as Appendix "A" to this evidence.*)

APPENDIX "A"

Question asked on June 10, 1959, on Item 292, National Museum of Canada, by Mr. Joseph Slogan in the Standing Committee of Mines, Forests and Waters concerning 35 reels of folk songs from the National Film Board. (*See page 1083 of the Committee's proceedings.*)

Answer:

In 1941 the National Film Board employed Mrs. Laura Bolton to prepare a number of motion pictures on folk songs in various parts of Canada. The sound for these pictures was recorded on discs, and subsequently incorporated in the sound track. Mrs. Bolton had the collaboration of Dr. Marius Barbeau, then of the Museum staff, in selecting material for these films. She visited western Canada to obtain Ukrainian and Indian songs, and Quebec and Nova Scotia for French-Canadian and English-Canadian folk songs. Later it was suggested that transcriptions of these songs should be in the collection of the National Museum. In 1958 the National Film Board transcribed the sound tracks from Mrs. Bolton's films to 35 reels of magnetic tape, and these were given to the National Museum at no cost other than the replacement of the tape.

INDEX

ESTIMATES—DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

PROCEEDINGS Nos. 14 to 24 inclusive and 26 to 38 inclusive.
PAGES 341 to 710 inclusive and 725 to 1165 inclusive.

Item No.		Pages
261	Departmental Administration	344–418 427–466 834–841
	see also	685–687
	and	755–758
	Territorial Oil and Gas Regulations (commencing with statement by Minister)	345–418 427–439 834–841
	see also	453–454
	and	755–758
262	Northern Research Co-ordination Centre	418–420 466–470
263	Contributions to the Provinces for Campground and Picnic Area Developments	471–476
	see also	508
264–270	NATIONAL PARKS BRANCH	476–485 487–507
271–274	WATER RESOURCES BRANCH	745–751
	see also	485–486
275–280	NORTHERN ADMINISTRATION BRANCH	758–804 809–834 841–963
	see also	741–744
	and	1112–1114
	and	1145
281–291	FORESTRY BRANCH	511–682 687–710 727–741
	see also	483–485
	and	807–809
	and	1149–1151
292	NATIONAL MUSEUM OF CANADA	1073–1112
	see also	1164
293	CANADIAN GOVERNMENT TRAVEL BUREAU	971–1073 1119–1144 1151–1163
476–477	Advances to Northern Canada Power Commission and Advances under agreements pursuant to the Atlantic Provinces Power Development Act.	963–968

HOUSE OF COMMONS

Second Session—Twenty-fourth Parliament

1959

STANDING COMMITTEE

ON

MINES, FORESTS AND WATERS

Chairman: J. W. MURPHY, Esq.

MINUTES OF PROCEEDINGS

No. 39

RECEIVED
JUL 20 1959
Library of Parliament

SATURDAY, JULY 4, 1959

Including

THIRD REPORT TO THE HOUSE

respecting the Estimates 1959-60 of the

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

21501-2—1

STANDING COMMITTEE ON MINES, FORESTS AND WATERS

Chairman: J. W. Murphy, Esq.,

Vice-Chairman: Erik Nielsen, Esq.,

and Messrs.

Aiken,
Baskin,
Cadieu,
Coates,
Doucett,
Drouin,
Dumas,
Fisher,
Fleming (*Okanagan-Revelstoke*),
Godin,
Granger,
Gundlock,
Hardie,
Kindt,
Korchinski,
Leduc,
MacRae,
Martel,
Martineau,
McFarlane,
McGregor,
McQuillan,
Mitchell,
Muir (*Cape Breton North and Victoria*),
Payne,
Richard (*Saint-Maurice-Laflèche*),
Roberge,
Robichaud,
Simpson,
Slogan,
Smith (*Calgary South*),
Stearns,
Woolliams—35.

Eric H. Jones,
Clerk of the Committee.

REPORT TO THE HOUSE

MONDAY, July 6, 1959

The Standing Committee on Mines, Forests and Waters has the honour to present the following as its

THIRD REPORT

1. Pursuant to its Order of Reference of April 29, 1959, your Committee has considered and approved items numbered 261 to 293 inclusive, and items numbered 476 and 477, as listed in the Main Estimates of 1959-60, relating to the Department of Northern Affairs and National Resources.

2. Your Committee held 34 meetings on the Order of Reference of the House concerning the said estimates, during which 11 briefs and papers were received and 26 witnesses were examined in addition to government officials; details thereof are set out below under the various branches concerned.

3. In addition, your Committee visited the Forest Products Laboratory in Ottawa. Circumstances made it impossible to arrange a visit to northern Canada as had been planned, but it is hoped that it may be possible for a subcommittee to carry out such a visit in the near future. Your Committee is strongly of the view that such a visit would be most valuable in order for it to be in a position to comprehend more fully and assess more accurately the programs and work under way for that area.

GENERAL

4. Your Committee heard a full explanation of the activities of the department and of developments in its plans and programs over the past year. The estimates for 1959-60 reflect the importance of the responsibilities assigned to the department in encouraging the development of Canadian resources generally. As in other recent years, they also show increasing recognition of the physical and human potential of northern Canada. Capital investment to develop this potential, notably through the construction of roads and the provision of educational and welfare facilities, accounts for over one quarter of the total current estimates of the department. While your Committee recognizes that this is a large sum, it supports expenditures of this order for these purposes. For physical development it is clear that transportation is the first essential. For the Eskimos and Indians of the north education is at present available for only 40 per cent and 70 per cent respectively. It is apparent that it must be made available to all if they are to be enabled to take an active role in northern development and derive full benefit from it.

5. While the Committee fully supports and agrees with the importance of northern development, it would like to see equal emphasis and sense of urgency accorded to some of the other functions of the department. It has in mind particularly those of the Forestry Branch and the Canadian Government Travel Bureau. By almost any criterion the forest-based industries are paramount in

the Canadian economy. In terms of foreign exchange earnings tourism ranks third, after only pulp and paper, and wheat—and your Committee is strongly of the view that, with more active policies for promotion, its earnings could be multiplied two or three times. Your Committee recommends for the future that consideration be given to greater appropriations and extended operations for the Forestry Branch and the Travel Bureau, to reflect more adequately the needs and the economic significance of these industries.

6. Your Committee is concerned by the fact that the department continues to have difficulty in recruiting and holding sufficient highly qualified staff, especially in technical and professional classifications. While terms of service in junior professional grades are competitive with those offered by other employers, there is apparently an increasing discrepancy as individuals gain experience and seniority. Loss of individuals at these senior levels can have, and undoubtedly is having, serious consequences in limiting the effectiveness of the work of some branches. Improved salaries at such levels would cost very little in total, and the net value gained by the country would undoubtedly be substantial. Your Committee recognizes that this is a complicated problem, but it considers that it should be examined as a special need of high urgency in this as well as in other departments.

7. Your Committee deplores that in this report, as in its earlier report on the estimates of the Department of Mines and Technical Surveys, it finds it necessary to recommend the expenditure of considerable additional public funds; but in the circumstances it considers that it has no alternative to doing so. Your Committee is of the opinion that if these estimates had been referred to a standing committee regularly in past sessions such recommendations might not now be necessary.

8. Your Committee also deplores that, under its Order of Reference, it cannot make recommendations to regroup certain of the crown agencies and branches of departments which are now incongruous, e.g., Northern Transportation Company Limited.

NATIONAL PARKS BRANCH

9. This branch covers all phases of the operation of our national parks. In reviewing the present regulations it would appear that some modernization of the National Parks Act should be undertaken. It is essential that our national parks be an asset to Canada.

10. Your Committee considers that certain sections of available lands should be set aside, within the foreseeable future, as park areas; the department should designate the boundaries of such lands so that they will not interfere with any industrial development or national resources.

11. The department is to be congratulated on the roads-to-resources program. The Committee believes that this feature will be of great benefit to our national parks in opening up the areas which to date have been inaccessible to the public. It would appear that there should be an intensive program to open up our national park areas.

12. Very little of the vast acreages now set aside is being developed for the benefit of the touring public and the residents of Canada. In those timbered areas of our national parks that are not specifically set aside as wilderness, each year trees come to maturity and begin to decay; thus millions of dollars in terms

of board feet of timber are lost. Your Committee recommends, in regard to those areas, that the department embark on a program of forest management which would treat the forest as a renewable resource.

13. In several instances the park boundaries have prevented industrial expansion and, in fact, have hindered industries not located in park areas. It is considered that some arrangements should be made for commercial traffic to be allowed to use main park highways. In these connections, in the creation of new national park areas, the regions close to major population should receive urgent attention. In discussions with the provinces, which have developed over the past years, your Committee considers this approach as both commendable and desirous, and that the new park areas should be established at an early date.

14. The promotion and establishment of more recreational services in our national parks are necessary. We have unlimited space for expansion and, with the unprecedented growth of the tourist industry, your Committee is of the opinion that immediate action should be taken to accommodate the travelling public.

15. Your Committee recommends: that private individuals be encouraged to construct motels and hotels within the park limits; and the assurance of land tenure and rental rates being of adequate duration to encourage the operators to construct first-class accommodation for the travelling public. Your Committee considers that representatives of the motel and hotel operators should discuss arrangements for credit with the department.

16. Your Committee was pleased to hear the announcement made to it by the Minister that discussions were going forward with various of the provinces in an effort to formulate a new policy to create "recreational areas" on a basis of joint financial participation with the provinces. Your Committee considers that this approach is desirable and recommends that such a policy be developed and made operative at the earliest possible time.

WATER RESOURCES BRANCH

17. Your Committee considered a paper on water and soil conservation in relation to irrigated farms and power development in southern Alberta submitted by Messrs. Dean R. Gundlock, M.P. for the constituency of Lethbridge, and E. W. Brunsden, M.P. for the constituency of Medicine Hat, both of Alberta.

18. The brief pointed out that conditions in relation to irrigation areas in that province would be duplicated in the area of the development of the Saskatchewan River Dam Project in the province of Saskatchewan.

19. Your Committee recommends that a study be made by officials of this branch in regard to water conservation in this general area.

20. Your Committee further recommends that consideration be given to establishing an interdepartmental body, in conjunction with the federal Department of Agriculture, to undertake a study of the soil-erosion problem in this irrigation area.

21. In view of the lack of study in the past, your Committee is of the opinion that the above agencies of the federal government should take the lead in this matter.

22. Your Committee reports that, due to the current negotiations between Canada and the United States in connection with the proposed development of the Columbia River in British Columbia, they did not call witnesses in this regard.

23. Your Committee recommends that an extensive review of Canada's water resources be made when the Committee is convened for the next session of Parliament.

NORTHERN ADMINISTRATION BRANCH

24. It became clear during the examination of the estimates of the Northern Administration Branch that the government policy in the North over many years has been a vacillation between inaction and reaction—inaction in not doing the things that obviously were required to be done, and reaction in doing things only when we were pushed into them by the activities of other countries. Judging from what has been done in Canada's North the government policy has fallen far short of being adequate in almost every aspect of research. Where Canada should have been a leading nation in northern research we have fallen behind. Improvements in recent years have been made, but much too slowly.

25. There are insufficient field laboratories in Canada's northland to accomplish adequate research. Small research laboratories or stations established in various northern localities are essential if we are to discharge our responsibilities in obtaining basic scientific data for development purposes.

26. Examination of the evidence reveals that two features of activities by the government in the North require closer scrutiny:

(a) existing government policies may be following the pattern set prior to the change of administrations in undertaking northern projects on an excessively lavish scale, and

(b) planning and construction methods in the performance of these projects may still be inefficient, resulting in waste and extravagance.

27. The tempo of northern undertakings by government and by private industry has increased substantially in the last two years. This is abundantly clear by the substantial increase in government spending in the North during these years. Development has been accelerated and the number of projects increased, but it would appear that government policies implemented by all departments concerned with northern development projects remain substantially those of the past. In the view of the Committee this is resulting in continuing injudicious use of government funds.

28. An increasing sensitivity to the growing demands being made on public funds to finance northern projects seems to exist. In this sensitivity there lies a very real danger which threatens the accomplishment of our national responsibilities in our northern areas. Your Committee expresses concern that

(a) the government may, because of *apparently* insoluble cost difficulties, diminish or abandon the essential development projects in Canada's northern areas, and

(b) the projects which are undertaken on the basis of past policies will result in the setting of standards which are unnecessarily high.

29. For instance, the standard of facility provided for the education of native northern children has been quite high. The hostel at Fort McPherson, the various buildings at Inuvik, and similar undertakings in other northern locations are examples in point.

30. Your Committee does not wish to leave the impression that public funds should be curtailed as far as northern undertakings are concerned. On the other hand, your Committee feels that the manner in which these funds have been spent is open to justifiable criticism.

31. That the cost of a construction project, be it a house, school or highway, is high in the North as compared with costs in the more settled areas is true but, in almost all cases that were examined by your Committee, it appeared that the costs of northern construction were unjustifiably excessive. There seem to be two factors that recur as the primary cause:

(a) unrealistic planning, based on questionable policies resulting in ostentatious schemes and overly-lavish projects, e.g., Aklavik—Inuvik, costing over $34 million.

(b) inefficient execution of plans once approved.

32. Policies which have been in existence obviously must undergo a change and efficiency introduced into those departments charged with implementing policy decision.

33. Your Committee emphasizes that these northern undertakings are necessary. Indeed, the development of Canada's North is essential as a national obligation and responsibility. At the same time, however, the costs can and should be reduced substantially without impairing the scope and the intensity of recently developed long-range northern development plans. Your Committee believes that the major part of the solution lies in policy changes as well as in departmental and inter-departmental efficiency reform—with all that the latter implies.

34. In considering the land settlements for personnel living at Aklavik and who moved to Inuvik on a voluntary basis, your Committee has considered the method employed in making settlements for those owning land in Aklavik and desirous of re-settling at Inuvik. Your Committee considers that the method of appraisal used in establishing values for those who so elected was of a very loose nature. Your Committee further considers that the practices involved in these land settlements establishes a very dangerous precedent, in that the transfer and the settlements are based upon the assumption that the government of the day had an obligation due to economic factors which the government assumed they themselves had created. Your Committee submits that this is a most dangerous practice and not justified by the facts.

35. The precedent of such adjustments to those living in Aklavik is based upon the operation of land take-overs done in connection with the St. Lawrence Seaway. Your Committee submits that there is no comparison between these land take-overs. In the case of the Seaway, the land-holders were physically dispossessed and their land flooded. In the case of the Aklavik—Inuvik land settlements, this justification does not exist. There was no forceful taking of lands. Land-holders were left on a free and elective basis as to their desire to move. The Committee was, as a matter of fact, rather astonished to learn that, contrary to the expectations of the government of the day, a large number of Aklavik residents are not intending to move to Inuvik.

36. Your Committee submits that the operation in the Aklavik-Inuvik land settlements are both dangerous and not based on any precedent whatsoever.

37. It is recommended that the practices involved in these northern land settlements should not be repeated at any time in the future.

38. Your Committee observes that the native peoples of the North are suited by temperament and by environment to form the nucleus of the labour force necessary to accomplish adequate northern development. The education of these northern people should be so designed as to give them the skills required in order that this considerable and valuable manpower resource may be utilized to the maximum. Their education should be accomplished in such a fashion as will result in the retention of this potential manpower resource in those northern areas where the development is contemplated.

39. Your Committee wishes to express, in connection with the standards of construction of northern government projects, its concern insofar as those standards seem to be creating two distinct standards of living. The construction of government homes in which government employees are housed, and the furnishing of those homes by the government, in many cases is accomplished at a standard which is the envy of every northern citizen not employed in the government service. To accomplish the same standard of living, non-government residents in the North would have to be in receipt of incomes far beyond their capacities. This disparity in standards creates an extremely undesirable atmosphere for many obvious reasons, and curative measures should be explored to

(a) adopt more realistic standards in government construction of all kinds, or

(b) adopt policies which will provide through the National Housing Act and other media the opportunity for non-government employed northern residents to achieve an equal standard of living as that enjoyed by their fellow citizens in the employment of the government.

40. If some such measures as those suggested are not taken it is conceivable that inducements for northern settlement will only be provided to those seeking employment with government agencies. The government should not continue to follow policies which will result in the setting of living standards beyond the means of ordinary citizens.

FORESTRY BRANCH

41. The deep interest and concern of your Committee on the situation of the forest industries in Canada has witness in the scope and quality of the representation made to it. Your Committee received and considered briefs from the following:

(*a*) Woodlands Section, Forestry Industry Associations of British Columbia.

(*b*) The Canadian Pulp and Paper Association.

(*c*) Canadian Lumberman's Association.

(*d*) Northern Wood Preservers Limited.

The following papers received and considered, namely,

(*a*) The Forestry Situation in Canada, by D. V. Love, Associate Professor of Forestry, University of Toronto.

(*b*) The effect of Property Taxes on the Management of Timberlands.—A document containing excerpts from Forest Tenure and Taxes in Canada as published by the Canadian Tax Foundation. (Tax paper No. 11—1957).

(c) Letter from The Truck Loggers' Association, Vancouver, B.C., recommending certain aspects of forest protection.

42. The following witnesses appeared before your Committee and were extensively examined:—

From industry—

T. A. Beaupre, Chairman, British Columbia Division, Canadian Pulp and Paper Association;

John Burke, Secretary-Manager, British Columbia Loggers Association;

Ross Douglas, Vice-President, Forestry, Alaska Pine and Cellulose Limited;

Hon. J. V. Clyne, Chairman of the Board, MacMillan and Bloedel Limited;

Charles Chambers, Comptroller, MacMillan and Bloedel Limited;

L. R. Andrews, Executive Vice-President, British Columbia Lumber Manufacturers Association;

J. A. Schryburt, Director, Public Relations, Canadian Lumbermen's Association;

W. Breitenbach, President, Alaska Pine and Cellulose Limited;

M. J. Foley, President, Powell River Company Limited;

Charles Dickey, President, British Columbia Forest Products Limited;

W. A. E. Pepler, Manager, Woodlands Section, Canadian Pulp and Paper Association;

J. B. Matthews, Chief Forester, Abitibi Power and Paper Company Limited;

A. F. Buell, Woodlands Manager, E. B. Eddy Company;

D. W. Ambridge, President, Abitibi Power and Paper Company Limited;

Robert Prettie, President, Northern Wood Preservers Ltd.

G. E. Bell, Secretary-Manager, Canadian Lumbermen's Association.

Harold F. Staniforth, President, Canadian Lumbermen's Association.

K. O. Roos, Director, Canadian Lumbermen's Association.

Bernard Bock, President, National Hardwood Lumber Association.

43. Your Committee congratulates the organizations which put forward such excellent and helpful briefs; and, further, it commends the witnesses for their co-operation. Our thorough investigation of the problems of the woods industries rests on the high calibre of the briefs and testimony, and to the valuable, relevant, statistical data made available to us. Many of the witnesses are outstanding leaders in lumbering, pulp and paper, forest management and research, and the ancillary woods industries.

44. A detailed report on findings and recommendations must be prefaced with a forcible statement on the importance of the forests to our national welfare and economy. Their role in Canada's economy is vital.

45. Your Committee submits that insufficient recognition has been given to our present dependence on the forest industries. Their well-being and that of the nation must count on a re-awakening of government to the needs of the various phases of these industries. The potential in this field for healthy, continued growth provides a challenge to all levels of government. Market and investment problems, scientific and technical requirements, must all be met to sustain these industries and their balanced growth. In the past the

forest industries have developed without calls upon the federal government for assistance. Today there are international market and marketing problems which the industries cannot face alone. In contrast to mining and oil enterprises, these industries are harvesting a recurring crop which with care and good management does not deplete and can enlarge our natural resources.

46. In 1958 the export value of our wood, wood products, and pulp and paper, was $1,414,000,000; the total value of all our exports was $4,830,000,000. In the past eight years such forest products have represented annually from 29 to 36 per cent of the total value of our exports. The forests support industries which are first in the nation in terms of: employment, wages paid, freight loaded, new capital investment, and net value of the output product in dollars. As a factor in the gross national product, these industries represent twice the combined output of all the metal mines in Canada. The woods produce both more dollar products and a higher export value than the nation's second largest export, wheat.

47. In view of such importance to the nation of the forests and their related industrial activities, your Committee notes with regret that the Minister did not make any statement to it regarding the Forestry Branch.

48. There was a commonness of problems in the briefs and the testimony. Some of the problems are more acute in one region than another, but there was a noteworthy uniformity in the main. All witnesses expressed concern, supported with statistics, that Canada is not maintaining its previous share in expanding world markets; and this despite an infinitely greater capacity for sustained yield than is now being used. One brief presented by Professor Love of the Faculty of Forestry at the University of Toronto put one aspect of the challenge this way: ". . . above all, due to the uncertain economic position of investments in the growing of forests, governments must take the initiative in the development of forests, which will produce wood, so located with respect to the markets, of such quality and available at such prices, that Canadian wood-using industries can remain competitive in world markets."

49. The brief of the British Columbia Forest Industry Associations made an apt illustration of the marketing problem of lumber exports to the United Kingdom. There we face increasing competition from Scandinavia and the U.S.S.R. The Russians use the "fall clause" in their U.K. trade agreements, thereby guaranteeing that any drop in the price of lumber in the U.K. following the reaching of the agreement will be met by a lower Russian price on delivery. In 1957 our lumber exports to the U.K. were half those of 1954, whereas the Russians had upped their lumber exports to this market some 75 per cent in the same period. This brief added that: "Assisted by their lower production costs and comparatively short ocean haul, Swedish and Finnish exports are trading to show a profit. This is not necessarily the case with Russian shippers."

50. This significant statement points up one of the real threats we face. Fear was expressed by witnesses that the U.S.S.R. would become a factor in the U.K. pulp and paper market. Your Committee notes that new trade agreements completed in June, 1959, between the U.S.S.R. and the U.K. confirm this fear.

51. Representatives of the pulp and paper industry demonstrated that our main market in the U.S.A. is an expanding one but that our share in it had decreased in percentage terms as the Americans have supplied more and more of their domestic needs from plant using the Southern pine and the hardwoods in

the Northeast and lake states. It was made evident to the Committee that the pulp and paper development in the U.S.A. was favoured not because of the physical inability of Canadian forests to produce the required volumes of wood but rather because of the inability of Canadians to put this wood on the market at costs which will compete with U.S. production. Newsprint capacity in the U.S.A. has increased 141 per cent since 1951; in that period our newsprint capacity mounted only 44 per cent. The trend to our lower percentage share in the American market is apparent in both the newsprint and the pulp trades.

52. The brief of the British Columbia Associations high-lighted another aspect of the problem: "This province is extremely sensitive to the impact of world conditions, the decline in our lumber sales in the U.K., the U.S., and Canada clearly demonstrates our vulnerability to outside influence over which we have no control. The same conclusions apply to our plywood and shingle production. One fact is undoubtedly true—competitive sources of low cost pulp supply are rapidly becoming available to world buyers."

53. The Committee reviewed evidence which showed that other countries used centralized government agencies for long-term credit financing to assist importing nations. Such methods aid their sales of pulp and paper as well as lumber. Even the U.S.A. has government agencies operating in the export field with credit financing. One witness described Canada's trade pattern as "primitive—cash on the barrel-head", further stating that cash meant "hard dollars". This was confirmed by almost all delegations.

54. The subject of the trade potential of the Orient and Red China was discussed without reservation by witnesses from British Columbia. This is undoubtedly because of the geographical position of their operations.

55. One quotation in the brief of the British Columbia Forest Industry Associations gives an excellent summary:

"... it can be said:

(1) The production of forest products is, by a wide margin, Canada's largest industry.

(2) It is an export industry vital to the national welfare which must meet highly competitive conditions in price and quality on the world market.

(3) As a natural resource industry it is an industry in which government policies have a decisive role.

(4) It is an industry with a high employment potential, capable of substantial expansion."

"Unlike many other major industries, it receives no special subsidies or allowances or support from either national or provincial governments. On the contrary, we will show that our industry is singled out for tax burdens higher than any other industry in Canada."

56. Your Committee considers that its recommendations should be made under four headings: 1. Administration; 2. Research; 3. Marketing; 4. Taxation.

Administration

57. Your Committee strongly recommends consideration of steps which would widen the scope of the Forestry Branch, increasing its status in such a way that a Deputy Minister would be in direct charge. The fact that such a status, comparable to that of a department does not exist now reflects a lack

of appreciation of the importance of the forest industries to Canada, in the past, now, and in the future. Other departments of government are considered essential to serve industries or aspects of our national economy which are of much lesser economic consequence.

58. Your Committee noted that full advantage has not been taken of responsibilities and opportunities opened up to the Forestry Branch by the Canada Forestry Act. For example, it was noted that the Dominion-Provincial forestry agreements respecting forest inventories has lapsed as most inventories have been completed. These should be re-activated where work is incomplete and to cover the maintenance of such inventories on a current basis, for example, in keeping aerial photographic surveys up-to-date.

59. Your Committee approves the suggestion of a National Forestry Development Advisory Board, advisory to the Minister, and with representatives from this government, the provinces, and industry. If the Forestry Branch's functions were enlarged and elevated, relations with this advisory board and with the provinces would be on a more senior and important plane.

60. Your Committee recommends that strong consideration in such administrative re-organization be given to fill the lack of liaison with those parts of the logging and lumbering industry which are not getting full advantage from the highly technical information, embodied in departmental publications. Approximately 80 per cent of the companies engaged in logging and sawmilling are in the category of small operators. They are not easily able to avail themselves of the practical help which should and could be brought to their attention.

Research

61. Your Committee recommends that the entomological and plant pathology research relating to trees and forests, now under the Department of Agriculture, be transferred to and co-ordinated directly with the recommended and expanded forestry department. In research terms the following sections are recommended:

(*a*) forest product laboratories; (*b*) forest entomology; (*c*) forest pathology; (*d*) fire protection; (*e*) silviculture; (*f*) forest management and economics; (*g*) marketing.

62. Forest research of a planned and co-ordinated kind is difficult in a country that has 11 different authorities with forest responsibilities. The representatives from British Columbia pointed out a number of research fields, including tree seed production and collection, suitability of species to site, plant ecology, and fire protection, where the research work of the federal government shows an imbalance unfair to B.C. This is an area where the new department could best expand and increase its activities with the advice of the proposed National Forest Development Advisory Board.

63. Under the Canada Forestry Act, your Committee would recommend that the department expand the agreements respecting reforestation and nurseries. Federal assistance in this field should be increased in order to provide greater incentives to the provinces. A re-consideration should be given to the matter of allowing such financial assistance to go to assist regeneration on crown lands presently under license.

64. Your Committee recommends that one area for intense research study and conclusions is in the field of regeneration, related to the best possible sites in terms of both natural and economic factors.

Forest Fire Prevention and Protection

65. The need for greater participation by the federal government in the field of forest fire protection was stressed by a number of witnesses. While the major portion of our forests comes under provincial administration, witnesses expressed the opinion that, because of the importance of our forests to our national economy, and because an important part of the national revenue is derived from taxation of forest industries, the federal government should make a greater financial contribution towards forest fire protection. Your Committee concurs in this view.

66. Wastage of forest resources through fire is incalculable; but annually the loss amounts to millions, and would exceed the loss to the Canadian economy through other disasters of a far less frequent nature. The annual loss is equivalent to half the value of Canada's yearly wheat crop.

67. One important recommendation of witnesses for fire prevention and control was an enlargement and a speed-up of the forest access roads program to which the federal government contributes in a number of provinces. Your Committee feels that a long-term plan should be evolved as quickly as possible. This plan should envisage the creation of a system of road grids which would serve more than fire protection purposes. Your Committee suggests that the capital aid for fire protection agreements with the provinces for forest access roads be extended to a twelve-month period each year. Your Committee further suggests that the federal share of the labour content should be 60 per cent in winter and 40 per cent in the summer period.

Marketing

68. The Committee was made aware that there is a need for an adjustment and change in our marketing procedure. In a national way we have no imaginative program to assist in maintaining our share of world trade in wood products. Government must be prepared to give the lead, in the face of the new competitive factors which pit national strength against national strength in the trade field. Federal government spending in the field of defence, national development and social services cannot be maintained if we lose the great tax source provided for us by the forest industries.

69. Your Committee recommends that the government work in a close partnership in aiding the financing on a long-term basis of export marketing and aid in promoting markets.

70. Your Committee feels that Canada cannot afford to ignore a potential so great for lumber and pulp sales as is offered in the Orient and, therefore, it recommends that these markets be approached on an open-minded basis. Study should be made of our changing share of traditional markets in the U.K. and the U.S.A. A Marketing Section should be created within the proposed department of forestry to aid the Department of Trade and Commerce in the merchandising of our woods products.

71. Under the Canada Forestry Act there is provision for economic fiscal studies by the federal government in the forestry field. In effect, such work has not been done. The need for such information is urgent and your Committee thinks it should be undertaken by the Marketing Section or the forest management and economics section.

Taxation

72. Your Committee recommends that a general review of taxation as it applies to the forest industries of Canada be conducted by the Minister of Finance. No agency of the federal government has recently undertaken any survey or analysis of the factor taxation plays with woods industries.

73. Evidence to the Committee indicates that in two major areas of the forest industry, i.e. British Columbia and Ontario, a special provincial corporate tax is levied. This tax rate is 10 per cent on logging profits in excess of $25,000 per annum. In the case of integrated companies and companies producing their own logs a percentage of overall profits is considered as profits from logging and a 10 per cent tax is applied to this proportion. This means that in the overall picture the woods industries in these provinces bear a heavier tax than other industries, amounting, it was stated, to 3 per cent. With smaller companies this percentage can be even greater. Further, the more these Ontario and British Columbia companies process their product the more inequitable this tax application becomes. It may be a major factor in discouraging the complete processing of wood products in these provinces as well as new capital investment.

74. Your Committee believes such tax inequities are not in accordance with a sound national policy. They have developed as a result of certain terms and conditions existent in the tax-sharing agreements with the various provinces.

75. Your Committee recommends, without hesitation, that this matter should have the fullest review when discussions take place in July between the provincial and federal authorities.

76. Your Committee submits that the tax pattern on woods industries may not be in keeping with the national interest, and does not square with tax policies applicable to other resource industries such as mining and oil. In the latter cases, special tax advantages are granted to these industries, which deplete natural resources, unlike the forest industries.

77. All witnesses concurred that the forest industries do not want a program of vast federal spending in their field. Their request is for equitable treatment and recognition of their vital role in the national welfare. Your Committee agrees with them in these views.

NATIONAL MUSEUM OF CANADA

78. Your Committee enquired into the work of the National Museum and the extent to which the recommendations of the Royal Commission on the Arts, Letters and Sciences have been implemented. It noted that those recommendations have been carried out only in part; for example, there has not been any change since the Commission Report on the matter of a new statutory basis for the National Museum.

79. Your Committee also noted that the work and facilities of the Museum have not been expanded to the degree that the Commission thought desirable, nor have adequate measures been taken for extension work and other means of bringing the Museum and its work to the attention of people outside the Ottawa area.

80. Research in the human sciences, especially the archaeology and ethnology of the aboriginal peoples of Canada, is a national obligation in contributing to knowledge of the background of man in Canada, and should be undertaken

primarily by Canadian institutions, especially by the National Museum. Your Committee recommends that the government examine the adequacy of present legislation and regulations concerning protection of archaeological discoveries and artifacts, and their export from Canada. Such examination should include liaison with the provinces for exchange of information on archaeological discoveries and for uniformity of protective legislation throughout Canada.

81. The Committee learned that difficulties have been encountered in securing the services of Canadian scientists with proper training for employment in federal and provincial museums. It recommends that more encouragement be given to Canadians wishing to enter this field.

82. The Committee recommends that vacancies now existing on the Museum staff be filled as soon as possible.

CANADIAN GOVERNMENT TRAVEL BUREAU

83. Your Committee undertook a thorough enquiry into the tourist industry in Canada on the consideration of this item. The Committee considered briefs presented by Canadian Tourist Association, Canadian Restaurant Association and Province of Quebec Hotelkeepers Association. In addition to hearing the Minister and examining departmental officials, the following witnesses were examined, namely, Messrs. James W. McAvity, President, and John W. Fisher, Executive Director, of Canadian Tourist Association; Mr. E. di Tomasso, President, and Mrs. Florence Montgomery, Managing Director, of Canadian Restaurant Association; Mr. Gérard Delage, Legal Adviser and Executive Secretary, Province of Quebec Hotelkeepers Association; Mr. Charles Smith, Secretary-Manager, Montreal Tourist and Convention Bureau; and Dr. J. Lawson Mackle, Director of Public Relations, Joint Board of Ontario Travel Associations. The Committee records its thanks to the witnesses for their valuable evidence and constructive suggestions, and also for the briefs presented.

84. The expenditures made by the bureau are authorized under the Minister's responsibility for "tourist information and services" under Section 5 of the Department of Northern Affairs and National Resources Act. The Committee believes that the scope of government activity in the travel field should be enlarged beyond the present program.

85. Your Committee believes that the impact of the tourist industry upon the national economy is not fully realized; that statistics made public show only part of the picture; and that the benefit to Canada is declining from lack of attention and failure to obtain a sufficient proportion of the rapidly increasing United States tourist spending. Spending in Canada by visitors from all countries in 1958 was approximately $352 million, and this figure shows only the primary distribution of tourist expenditures. But secondary distribution of these funds in buying supplies and services, employing labour and paying taxes, circulates more "fresh" dollars in a given community than most other forms of industry.

86. Your Committee notes that for every dollar spent by Canada in the U.S.A. in promoting travel, $130 in U.S. currency is brought into the country. It also compares the entire Canadian expenditure of $2.6 million spent last year for advertising in the United States, with the single State of Florida which spent as governmental expenditures alone $4 million. The Committee considers that greatly increased expenditures in the advertising and public relations field are justified and recommends an increase for 1960 of not less than 25 per cent

over the current estimate. In this field, the Committee recommends that an improved public relations program in the United States should be undertaken. This would include sponsoring special events, engaging personnel to travel in the U.S.A. making more effective our travel offices, and improved travel counselling. The advertising season of the bureau should be extended, with increases in television and magazine coverage.

87. New travel offices are urgently required in the following centres: San Francisco, Boston, Detroit, Cleveland and other United States centres which are actual or potential markets for the Canadian travel industry; and the Committee recommends that they be opened early in 1960.

88. The Travel Bureau should give greater leadership in encouraging the extension of the tourist season in Canada, particularly in all Canadian areas where there is a winter recreation potential; and in the development of a distinctive national character in all tourist facilities and services.

Canadian Tourist Association

89. Your Committee is convinced that the Canadian Tourist Association is performing a useful function in improving facilities, service and accommodation within Canada for the travelling public. This service is just as important as advertising and promotion, since approximately forty per cent of visitors come to Canada because of word-of-mouth advertising; and this type of promotion is best handled by an industry-sponsored organization such as the Canadian Tourist Association, with government encouragement and support. Your Committee therefore recommends that federal participation in internal promotion might best be accomplished by a substantially increased grant to the Canadian Tourist Association, an organization devoted to co-ordination of effort across Canada; and that such grant be continued until such time as the association becomes self-supporting.

Loans

90. In order to keep in the race at all, according to evidence submitted to your Committee, Canadians must embark upon tremendous building projects for travel accommodation. The Committee considers that such building should not be undertaken or sponsored by government, but should be assisted and encouraged. While Canadians spent approximately $22 million in 1958 in tourist accommodation, individual areas in the U.S.A. were exceeding total Canadian construction. Your Committee has given consideration to the subject of loans to tourist operators for construction and improvement of accommodation facilities, and recommends government action along these lines. Many tourists operators are engaged in seasonal business, in which credit facilities are at a minimum, but nevertheless provide facilities for the vital task of bringing to Canada its third largest amount of foreign dollars. Your Committee does not wish to compare other types of government-sponsored loans, but points out that on a straight business basis, loans for improvement of tourist accommodation would bring the greatest return from abroad, and would at the same time be wholly repaid. The Committee suggests that a system for government guarantee of a stated percentage of loans made by private lending institutions be adopted, which would call for no outlay of national funds. The procedure might be similar to that for National Housing Act or Industrial Development Bank loans, or alternatively involve a completely new system.

91. In viewing the overall picture, the Committee is of the opinion that tourist promotion and services in Canada have been placed on too low an administrative level. Since its organization in 1934, the bureau has been under the supervision of 7 departments of government and 11 ministers. Other countries such as Mexico, Japan and Spain have recently created Ministries of Tourism, with a resultant increase in tourist revenues. Mexico has increased its tourist revenues about 80 per cent during the past 7 years, mainly from the United States market, whereas Canada's increase was about 11 per cent in the same period. In 1958, Canada's travel deficit with all countries was $192 million as compared with $162 million in 1957; and with the United States was $102 million as compared with $78 million in 1957. The Committee recommends that tourist promotion become the single responsibility of a more senior official of government.

92. Your Committee recommends that the appropriate ministers encourage customs and immigration officials at Canada's borders and officials in our national parks to maintain a high degree of courtesy to all persons visiting Canada. The Committee appeals through the House of Commons to the nation as a whole to consider courtesy as the most valuable key to a successful tourist industry.

93. Your Committee records its appreciation of the assistance given to it by the Minister of Northern Affairs and National Resources, his officials and other witnesses.

94. A copy of the Minutes of Proceedings and Evidence in respect of the said estimates is appended.

Respectfully submitted,
J. W. MURPHY,
Chairman.

MINUTES OF PROCEEDINGS

MONDAY, July 4, 1959
(50)

The Standing Committee on Mines, Forests and Waters met *in camera* at 11.30 o'clock a.m. this day, the Chairman, Mr. J. W. Murphy, presiding.

Members present: Messrs. Baskin, Cadieu, Doucett, Fleming (*Okanagan-Revelstoke*), Granger, Gundlock, Hardie, Korchinski, Leduc, McFarlane, McQuillan, Murphy, Nielsen, Payne and Stearns—(15).

The Committee agreed that there be printed as appendices to these minutes the answers to certain questions which had been asked at previous meetings, and which had not earlier been available. (*See below for the detail of the said appendices.*)

The Committee considered the draft of a report to the House on the 1959-60 estimates of the Department of Northern Affairs and National Resources. The said draft report had been considered and revised by the Subcommittee on Agenda and Procedure which had recommended the draft as revised to the Main Committee.

The Committee made certain revisions to the draft report and, on division, adopted it as revised.

Ordered (on division),—That the said report as revised be presented to the House.

At 1.20 o'clock p.m. the Committee adjourned to the call of the Chair.

Eric H. Jones,
Clerk of the Committee.

DETAIL OF APPENDICES TO THESE MINUTES

APPENDICES "A" TO "F", relating to the estimates of the Forestry Branch, being information provided by the Forest Industry Associations of British Columbia.

APPENDIX "G", relating to the estimates of the National Museum of Canada, being answers provided by the Department of Northern Affairs and National Resources.

APPENDIX "H", concerning the contract with John MacIsaac Construction covering the construction of a bridge at Mayo, Yukon Territory, considered under the estimates of the Northern Administration Branch.

Note: This last answer was presented to the Committee by the Deputy Minister on June 11, 1959, but was omitted from the printing of the evidence of that date.

21501-2—2½

APPENDIX "A"

CONTRIBUTIONS BY THE FOREST INDUSTRY* TO EDUCATION IN BRITISH COLUMBIA

Information requested on May 13, 1959. *See* pages 528 and 536 of Evidence.

NOTE: This information was recorded in part on June 16, 1959, at pages 1150–1151.

1. ANNUAL GRANTS AND SCHOLARSHIPS, ETC.

(*a*) Scholarships, Bursaries, Prizes, etc.

H. R. MacMillan	$ 800	
B.C. Loggers' Assn.	600	
B.C. Lumber Manufacturers' Assn.	300	
Leon Koerner	1,500	
W. J. VanDusen (Vancouver Foundation)	1,500	
Timber Management Ltd.	250	
Canadian Forestry Assn.	200	
MacMillan & Bloedel Ltd.	1,450	
Truck Loggers' Assn.	250	
Canadian Forest Products	500	
Alaska Pine & Cellulose Ltd.	500	
B.C. Lumberman	150	approx.
Canadian Pulp & Paper Assn. (West Div.)	1,000	
Hoo-Hoo Club (Kamloops)	200	
Western Plywood Co. Ltd.	500	
E. L. Sander Lumber Co. Ltd.	2,500	
Walter Koerner	3,000	
Leon & Thea Koerner Foundation	3,000	
Crown Zellerbach	16,600	
H. S. Foley (Vancouver Foundation)	1,800	
Powell River	725	
Alaska Pine	1,500	
Kapoor Singh	500	
B.C. Lumber Manufacturers' Assn.	700	
Timber Sales & Dist. Ltd.	250	
Westminster Paper Co.	3,800	
Timber Preservers Ltd.	200	
National Box Co.	400	
B.C. Forest Products Ltd.	6,700	
MacMillan & Bloedel Ltd.	2,800	
C.P.P.A. (Pac. Coast Tech. Div.) (Loan)	250	
Cooper-Widman	500	
Sydney Roofing & Paper Co.	250	
		55,175

(*b*) Teaching

Powell River Co.	5,000	
MacMillan & Bloedel Ltd.	5,000	
H. R. MacMillan Esq.	7,000	
Alaska Pine & Cellulose Co.	1,500	
P.M.A.B.	1,650	
		20,150

(*c*) Research

MacMillan & Bloedel Ltd.	1,500	
H. R. MacMillan Esq. (Vancouver Foundation)	7,418	
Prentice Bloedel	500	
		9,418

(*d*) Lectureships

H. R. MacMillan Esq.	600	approx.
		600
		$ 85,343

APPENDIX "A"—Concluded

2. OUTSTANDING CONTRIBUTIONS SINCE 1945 NOT INCLUDED IN "1" ABOVE

B.C. Loggers' Assn., Establishment of University's Technical School of Forestry	$140,000	
Forest Industries (1949)	20,000	
B.C. Forest Products Ltd., Teaching and Research in Forest Entomology	50,000	
Alaska Pine & Cellulose, Teaching and Research in Forest Products	14,500	
H. R. MacMillan, Various Grants Prior to Capital Gift to Vancouver Foundation estimated at	50,000	
		$ 274,500

3. CAPITAL FUNDS

(*a*) Foundations

Leon & Thea Koerner Foundation		$1,000,000
Vancouver Foundation		
W. J. VanDusen Foundation	130,650	
Alex Sereth Fund	10,090	
H. R. MacMillan Educational Fund	512,133	
H. S. Foley Jr. Memorial Fund	22,864	685,737
		$1,685,737

(*b*) U. B. C. Extension Fund

Aggregate gifts and commitments to fund by the industry estimated to exceed	$1,000,000
	$2,685,737

* Includes the names of individuals closely associated with the Forest Industry.

APPENDIX "B"

(Information requested on May 13, 1959. *See* page 535 of Evidence)

PRODUCTION

The following table gives the production of the major items of forest products for the past ten years. Of the products named lumber, plywood, shingles, newsprint and some paper and board are finished products in the sense that no further processing is required before they are used. The industry also manufactures tissues, bags, cartons, etc., sufficient for the total consumption of Western Canada which takes a significant part of the total paper and board production.

B. C. PRODUCTION

(Quantity)

Year	Million Feet Board Measure			Million Square Feet 5/16th Plywood	Thousand of Squares Shingles	Thousand A.D. Tons Pulp	Thousand Short Tons Paper and Board	Thousand Short Tons Newsprint
	Logs Produced	Logs Exported (Net)	Lumber					
1949	4,050	142	2,951	300	2,689	171	95	378
1950	4,560	134	3,509	349	3,074	256	116	388
1951	4,696	78	3,724	406	2,867	468	125	385
1952	4,938	122	3,597	446	2,330	418	115	429
1953	5,292	116	4,045	580	2,430	503	134	501
1954	5,567	136	4,481	663	2,557	634	142	537
1955	6,109	84	4,914	855	2,525	679	145	561
1956	6,307	38	4,735	1,006	1,970	733	153	596
1957	5,662	27	4,244	971	1,652	631	170	584
1958	5,350	19	4,800	1,125	1,807	700	175	636

APPENDIX "C"

PRODUCTIVITY

(Information requested on May 14, 1959. *See* page 592 of Evidence)

Increased productivity can be measured in three areas—yield per acre, yield per unit of wood and value of Product.

1. Yield per acre

Exact figures are not obtainable, but some idea of increased utilization can be gained from the following table taken from the Sloan Report 1956, Volume 1, Page 211—

Inventory of Standing Timber in British Columbia

Year	Million Feet Board Measure
1910	240,000
1917	366,300
1937	254,500
1945	303,300
1951	431,500
1952	662,800
1953	757,000
1955	760,050

From the above it will be seen that in a period of 10 years, from 1945 to 1955 the total inventory of merchantable timber has increase by more than 150%. While the total cut per annum in this period has averaged about 1% of the content. the natural increment due to rate of growth would certainly not exceed 2%, so that the net increase from these two offsetting factors would not account for any more than 10% of the increase. While the remainder of the increase is due in large measure to more accurate surveys in the less accessible areas there still remains a very substantial revision of inventories due to greater utilization of the wood on a given area, i.e. a revision of the concept of "Merchantable timber". Since the advent of devices to remove bark and the increased manufacturing facilities in the field of pulp and paper foresters estimate that the increased utilization per acre would be in excess of 30%.

2. Yield from a given unit of wood.

Elsewhere under the title "Production" a table is given showing the annual production of logs and the quantities of products made from these logs. The following table gives a comparison of the yield obtained from the raw material based on generally accepted rule-of-thumb conversion factors. While these latter factors may vary in different mills they are pretty well accepted averages and the fact that they are applied to the years 1949 and 1958 without change produces a valid comparison.

TABLE 1

	1949			1958		
	Production	Conv. Factor	Log Requirements (MM)	Production	Conv. Factor	Log Requirements (MM)
Lumber MM	2,951	1.05	2,810	4,800	1.05	4,571
Plywood MM 5/16	300	5/16	94	1,125	5/16	352
Shingles M Sq	2,689	10.0	268	1,807	10.0	181
Pulp M ADT	171	1.15	148	700	1.15	609
Paper and Board M Tons	95	1.15	83	175	1.15	152
Newsprint	378	1.8	210	636	1.8	353
			3,613			6,218
Logs Produced Less Exported			3,908			5,331
Yield from a given Volume of Wood			92%			117%
Gain in Yield						27%

APPENDIX "C"—Concluded

It might be explained at this point that a sawmill equipped with modern barking devices and other improved milling techniques can recover from 1000 FBM of log, in addition to 1,100 FBM of lumber, sufficient chips to make 4/10ths of a ton of pulp. This works out at approximately a utilization one third of the log content which formerly was burnt as waste or sold as firewood for a negligible return.

3. Value of Product.

The greater yield in volume obtainable from a given quantity of raw material has the additional advantage of securing a greater value. Referring again to the table of production for the years 1949 and 1958 it will be noted that there has been a reduction in the proportion of low price product with a corresponding increase in higher priced products. The following table shows the relative increase in value obtained by applying the same approximate sales values to both years.

	1949		1958	
	Proportion of each 1M of log usage	Sales Value of Product	Proportion of each 1M of log usage	Sales Value of Product
Lumber	778	$ 59.22	735	$ 55.95
Plywood	26	5.82	57	12.77
Shingles	74	6.66	29	2.61
Pulp	41	5.66	98	13.52
Paper and Board	23	3.57	24	3.73
Newsprint	58	12.01	57	11.80
	100 FBM	$ 92.94	1000 FBM	$100.38
Increase in Value				6.5%

The combined effect of these three factors namely 30%, 27% and 6.5% is accumulative so that the increased productivity now being achieved amounts to 76%.

APPENDIX "D"

COMPARATIVE FREIGHT RATES

(Information requested on May 14, 1959. *See* page 593 of Evidence.)
(Cents per 100 Lbs.)

Woodpulp Freight Rates	To Appleton, Wisc.	Berlin, N.H.	Camden, N.J.	Holyoke, Mass.	Middleton, Ohio	Peoria Ill.	Richmond, Va.
FROM							
Harmac, B.C. "A"	113	134	134	134	127	113	131
Hinton, Alta. "B"	97	106	106	106	101	99	104
Marathon, Ont. "C"	93	64	81	72	84	93	97
La Tuque, Que. "C"	96	56	92	74	86	95	102
Brunswick, Ga. "C"	99	101	78	92	76	—	64
Demopolis, Ala. "C"	96	109	88	101	68	—	78
Evadale, Texas "C"	97	131	116	128	94	—	110
West Point, Va. "C"	97	—	50	69	70	88	—

"A"—Minimum 80,000#
"B"—Minimum 100,000#
"C"—Minimum 50,000#

Rates in effect Feb. 14, 1958.

APPENDIX "E"

INCREASES—WAGE RATES

(Information requested on May 14, 1959. *See* page 593 of Evidence)

	B.C. Pulp and Paper Industry Average Hourly Earnings	B.C. Lumber Industry (I.W.A.) Average Hourly Wage
	$	$
1949	1.30	1.27
1950	1.34	1.40
1951	1.52	1.63
1952	1.79	1.68
1953	1.89	1.83
1954	1.99	1.87
1955	2.07	1.97
1956	2.15	2.00
1957	2.21	2.11
1958	2.42	2.24
1959	2.44	2.24

APPENDIX "F"

HISTORY OF GENERAL FREIGHT RATE INCREASES

(Information requested on May 14, 1959. *See* page 593 of Evidence)

A—Pulp from B.C. (Harmac) to N.Y. State.

	Cents per 100#
June, 1949	90
Aug., 1952	98
Dec., 1955	113
Feb., 1958	134
Feb., 1959	124

B—History of General Canadian Freight Rate Increases

	% Increase	Cumulative
	%	%
Apr., 1948	21	121
June, 1950	20	145
Feb., 1952	17	170
Jan., 1953	9	182
Mar., 1953	7	198
Jan., 1957	11	220
Dec., 1958	17	257

APPENDIX "G"

The following information is submitted in reply to questions asked by Mr. Argue during the meeting of the Standing Committee on Mines, Forest and Waters on Wednesday, June 10, 1959. The questions appear in the Minutes of Proceedings and Evidence No. 35, pages 1091 and 1092.

Question:

Amount of money contributed to the Arctic Institute from non-Canadian sources.

Answer:

The Department of Northern Affairs and National Resources is informed that approximately $1,000,000 was contributed last year from non-Canadian sources for work to be carried out during the year by or through the Arctic Institute of North America. This figure includes projects for research between the Arctic Institute and Government Agencies. Approximately $930,000 of this sum was from United States sources.

Question:

Extent to which the Arctic Institute will carry on activities in Canada this year.

Answer:

The following is a list of projects planned by the Institute for this year:

Amount	Name	Affiliation	Project	Place
$				
1,600	Mohamed Ather Ali.	Professor, Zoology Dept., McGill University, Montreal, P.Q.	A histo-physiological study of the reaction of the *Gammarus* eye to different light and temperature conditions and its comparison with their behavioural responses and rates of oxygen consumption.	Churchill and Montreal
2,800	P. M. Driver.....	Post graduate student, McGill University, Montreal, Que.	Continuation of study of ethology and ecology of Mergini.	Belcher Is.
700	M.M.R. Freeman	Post graduate student, McGill University, Montreal, Que.	An ecological survey of the littoral and shallow water fauna of the Belcher Islands, with particular reference to the Seal population of the region.	Belcher Is.
5,000	Charles J. Krebs....	Post graduate student, Univ. of British Columbia, Vancouver, B.C.	A study of the population dynamics of the Collared Lemming (*Dicrostonyx greenlandicus*) with particular emphasis on the role of stress and the endocrine system in controlling fluctuations in the numbers of *Dicrostonyx*.	Ellesmere Is.
1,800	Olav M. Loken.....	Post graduate student, McGill University, Montreal, Que.	Study of glacial geology in a small area especially with regard to the deglaciation process and evidence of local glaciation later than the continental one.	Torngat Mts., Labrador
965	Erik Mortenson.....	Post graduate student, McGill University, Montreal, Que.	Investigation to determine the relation between daily temperature and stem elongation in *Picea glaca*.	Knob Lake
1,500	John M. Powell.....	Post graduate student, McGill University, Montreal, Que.	To continue the collection of plant material and study of vegetation in the Lake Hazen area and to extend the survey to Alert. Micro-climatological observations and Phenological records will be kept and an investigation made of 30 species found at Lake Hazen in 1958 but as yet unknown further north.	

APPENDIX "G"—Concluded

Amount	Name	Affiliation	Project	Place
$				
1,600	R. B. Sagar.....	Post graduate student, McGill University, Montreal, Que.	To conduct glacial-meteorological observations at Gilman Glacier snout during 1959 ablation season, as a continuation of studies by D.R.B. "Operation Hazen" parties of 1957–58. Complementary observations to include survey of the ice-land zone, accumulation/ablation data at previously established glacier stations and a comparative study of nearby glacier snouts.	Ellesmere Is.
1,550	D. I. Smith.....	Post graduate student, McGill University, Montreal, Que.	Extension of glacial geomorphology and geology commenced in 1957–58.	Ellesmere Is.
2,400	Stanwyn G. Shetler..	Dept. of Botany Univ. of Michigan, Ann Arbor, Mich.	Studies of populations of Campanula rotundifolia (Campanulaceae)	Alaskan Highway
1,000	Maynard M. Miller..	Dept. of Geology, Columbia Univ., New York 27, New York	Investigation of geophysical character of thermal regimen of two highland polar glaciers	Ellesmere Is.
650	Spencer Apollonio....	Zoology Dept., Yale University, New Haven, Conn.	Summer primary organic productivity of fresh and salt waters of the high Arctic	Alert
Approx. 15,000	Four scientists.....	U.S.A.F. Cambridge Research Centre	Investigation of suitability of snow and ice areas for aircraft operations.	Ellesmere Ice Shelf.

APPENDIX "H"

Question by Mr. R. C. Coates, M.P.:

What are the details of the contract with John A. MacIsaac Construction covering the construction of a bridge at Mayo?

Answer:

Further information obtained from Department of Public Works, supplementing the answer given on June 4, 1959. (*See page 910 of Evidence.*)

Description and Unit	Estimated Quantities	Contract Unit Price	Amount
Borrow Excavation cu. yds.	11,500	1.50	$ 17,250.00
Common Excavation cu. yds.	16	5.50	88.00
Furnishing 40′ timber piles lin. ft.	1,040	1.00	1,040.00
Driving Timber Piles lin. ft.	780	2.00	1,560.00
Concrete cu. yds.	105	75.00	7,875.00
Reinforcing Steel lbs.	8,130	.70	5,691.00
Superstructure		Lump Sum	96,000.00
Demolition of Existing Bridge		"	1,200.00
Hand Placed riprap cu. yds.	100	20.00	2,000.00
Gravel Surfacing cu. yds.	650	2.50	1,625.00
Crib Abutment MFBM	—	287.00	—
Backfill for cribs cu. yds.	170	8.00	1,360.00
Supplying Sheet Piles Lin. ft.	2,137	9.50	20,301.50
Driving Sheet Piles Lin. ft.	2,137	7.90	16,882.30
Painting Sheet Piling per sq. ft.	280	1,80	504.00
			$ 173,376.80