LIBRARY OF PARLIAMENT

BIBLIOTHEQUE DU PARLEMENT
LIBRARY OF PARLIAMENT
3 2354 00525 528 9

DATE DUE

25/06/2014

Canada. Parliament.
House of Commons. Special Committee on Defence, 1964/65.
Minutes of proceedings and evidence.

J
103
H7
1964/65
D4
A1
v.2

DATE | NAME - NOM

CANADA. PARLIAMENT. HOUSE OF COMMONS. SPECIAL COMMITTEE ON DEFENCE.

J
103
H7
1964/65
D4
A1
V.2

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 16

TUESDAY, AUGUST 18, 1964

RESERVE FORCES

WITNESSES:

The Honourable Lucien Cardin, Associate Minister of National Defence; and Colonel C. P. McPherson, Director of Militia and Cadets.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21310—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—(24).

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, August 18, 1964

(26)

The Special Committee on Defence met at 11.20 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Asselin (*Notre Dame de Grâce*), Béchard, Deachman, Fane, Groos, Hahn, Harkness, Lambert, Laniel, Lessard (*Lac-Saint-Jean*), Lloyd, MacInnis, MacLean, MacRae, Martineau, Matheson, Pilon, Smith, Temple, Winch—(20).

In attendance: Hon. Lucien Cardin, Associate Minister of National Defence; and Colonel C. P. McPherson, Director of Militia and Cadets.

The Committee continued its consideration of the "Reserve Forces".

On motion of Mr. Groos, seconded by Mr. Smith,

Resolved,—That the *Suttie, Hendy* and *Draper* reports, respecting the Reserve Forces be printed as appendices to the Committee's evidence (See *Appendices "A", "B"* and *"C"* to this day's Proceedings).

Mr. Cardin supplied answers to a number of questions asked at previous meetings. He tabled a document entitled *"Summary of Militia Effective Strengths by Areas/Militia Groups as of May 31, 1964."*

Agreed,—That the above-mentioned document be printed as *Appendix "D"* to today's Proceedings.

The Associate Minister of National Defence then made a statement to clarify certain points respecting the role and functions of the Reserve Forces and he was questioned thereon.

At 12.55 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

21310—1½

EVIDENCE

TUESDAY, August 18, 1964.

The CHAIRMAN: Gentlemen, we now have a quorum. May we come to order please.

Before we start with the proceedings of the day, may I say that this will probably be the last meeting respecting the Reserve Forces. We have received the Hendy, Suttie and Draper reports dealing with this subject, and these reports have been circulated to Members of Parliament. However, they have not been included in the Evidence of this committee and I think, in order to make sense to outsiders who may be reading the transcript, these reports should be printed as appendices to our proceedings. I would therefore ask for a motion that the Suttie, Hendy and Draper reports be printed as appendices to today's proceedings.

Mr. SMITH: Why today's proceedings, Mr. Chairman? Why should they not be attached to the proceedings of the days to which they are related?

The CHAIRMAN: The proceedings of the previous days' hearings have been printed already. However, if they are attached to today's proceedings they will appear at the end of our deliberations on the reserve forces.

There is a summary which will be presented today by the Associate Minister of Defence which I suggest should be attached to today's proceedings. This summary gives the strengths and so on of various militia units across the country.

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

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

Motion agreed to.

The CHAIRMAN: Our witness this morning is the Associate Minister of National Defence who will start with an opening statement; and we will then proceed with questioning.

Mr. LUCIEN CARDIN (*Associate Minister of National Defence*): Before I start with the statement I have for you this morning I would like to answer a few questions that were asked when I was here last time.

I was asked to give the committee the number of officers, N.C.O.s and privates who are in the militia at the present time, and also the rate of turnover for each of these categories. The answer to that is as follows: In the Canadian army militia, from the period July 1, 1963, to June 30, 1964, the average strength was 6,616 officers, 44,568 other ranks, a total of 51,184. The maximum strength was 6,705 in August, 1963; other ranks, 48,624 as of July, 1963. The minimum strength was 6,550 officers as of June, 1964; other ranks, 40,023 as of May, 1964. The strength on June 30, 1964, was 6,550 officers; 40,213 other ranks, a total strength of 46,763. Enrolments: officers, 1,472; other ranks, 21,814, a total of 23,286. Releases: 1,612 officers; other ranks, 27,532, a total of 29,144. The percentage of annual turnover among the officers was 23.3 per cent and, other ranks, 55.3 per cent, making a total of 51.2 per cent.

As the Chairman has stated, in answer to a question that was asked I would like to present a table giving the summary of militia effective strengths by areas as of May 31, 1964. This being very voluminous, I think the best thing I can do is to table this summary and have it printed in the proceedings.

Mr. Chairman, on July 21, 1964, a question was asked with respect to the proportion of the non-permanent active militia who served on active service in 1939. The records are incomplete, but it has been determined from historical documents that the number enrolled in the non-permanent active militia was 51,418 all ranks, of which 46,521 were reported as trained in the fiscal year 1938-39. Almost half, or 24,089 all ranks who joined the active service force in 1939 were serving or had served in the non-permanent active militia. The historical records also indicate that enrolment into the active service force probably would have been greater but for the medical standards and age limits resulting in rejection of many old soldiers who had seen service in 1914-18 and the rejection of those who had more than four dependants.

There was a final question that was asked concerning the guarding of key points in the event of a serious emergency. As was mentioned at that time, it would not be in the public interest to list in detail the various installations designated as key points, but a general comment is in order to explain this particular role being assigned to the militia. As members of the committee know, it has been decided that some 2,500 militiamen would be required to provide trained officers and men for the guarding of key points, internment camps and like duties. Of this number approximately 1,700 are required for the guarding of key points. This, of course, is not the total manpower requirement for such duties. There are in fact two criteria in the selection of installations considered to require protection. First of all, there are military establishments designated as key points by army authorities. These would be guarded generally by regular army personnel, augmented in certain instances by members of the militia. In numbers the requirement would be approximately 1,400 militiamen.

Secondly, vital points other than military are designated by E.M.O. with the R.C.M.P. being primarily responsible for their protection. E.M.O. has asked the army to assist the R.C.M.P. at certain specific sites not under service control and this has been agreed to. A total of 300 militiamen within the 2,500 figure have been allotted to meet this requirement.

In sum, therefore, approximately 800 militiamen would be required for internment camps and similar duties, 1,400 to assist the regular army in the guarding of military installations and some 300 to meet specific E.M.O. requests in support of the R.C.M.P.

Mr. LAMBERT: On a point of information, I wonder if the table concerning strengths which the minister has asked to have incorporated in the record, refers to the question I asked on page 389, at which point I asked for a breakdown showing the militiamen by name and number, corps or base, and actual participation in higher formations.

Mr. CARDIN: I am not sure that the table I am giving would give that information. However, Mr. Chairman, I would like if possible to go ahead with the statement and then to hear questions afterwards.

Following the announcement of the Minister of National Defence last December of the reduction of the reserve forces of all three services from the level existing at that time, as the members of the committee know, one commission and two committees were established to present the views of the militia and the naval and air force reserves and to make recommendations relating to the organization and operation of those reserves. In a letter dated January 17, 1964, addressed to Lieutenant-Colonel LeSueur Brodie, E.D., Chairman of the Conference of Defence Associations, I set out the general terms of reference of the two committees in the following words:

> The Committees have been requested to put before the Associate Minister of National Defence their views concerning the future role and composition of the R.C.N.R. and R.C.A.F. auxiliary. They have also

been requested to propose alternatives to the presently planned reduction if in their views such alternatives are preferable, but they should bear in mind that the equivalent savings of the direct and indirect costs of the R.C.N.R. and R.C.A.F. auxiliary must be achieved.

You have had before you the terms of reference of the commission to enquire into the organization and operation of the militia which were included in part I of the report as appendix "A" Part I of the report of the commission, headed by Brigadier E. R. Suttie, has been made available to you together with copies of the report of the ministerial committee on the role and organization of the Royal Canadian Naval Reserve, headed by Commodore Robert I. Hendy, and the Report of the ministerial committee on the Royal Canadian Air Force (Auxiliary) headed by Group Captain J. W. P. Draper. The chairman of the commission and of the two committees have also appeared before you and given testimony in support of their submissions.

It should be clearly understood that the commission and two committees were not set up to establish reserve policy. Their function was to study the broad policy established by the government and make recommendations—from their viewpoint—on the manner in which that policy could be carried out. It is and must be the responsibility of the government to weigh these recommendations against all other factors.

As you know, national defence headquarters is now being reorganized as an integrated headquarters, and on August 1, the Chief of Defence Staff was given responsibility for the administration of the three services: the Royal Canadian Navy, the Canadian army and the Royal Canadian Air Force. I directed that the three reports be considered by the new defence staff on an integrated basis before decisions are taken in respect to the individual recommendations put forward. This consideration will be given as expeditiously as possible, and I estimate that it will be completed by late September or early October.

The defence staff, in its review, will, of course, be asked to determine the compatibility of the reduction in over-all strength to 30,000 with the recommendations of the Suttie commission, and the extent to which the committee recommendations dealing with the Royal Canadian Naval Reserve and R.C.A.F. auxiliary are compatible with the requirement set out in my letter of January 17:

> Alternatives to the presently planned reduction (must achieve) the equivalent savings of the direct and indirect costs of the R.C.N.(R.) and R.C.A.F. (Auxiliary).

There has been some misunderstanding before the committee between the terms strength and establishment, and about the intended strength of the militia. Let me make this clear: it is our expectation that the strength of the militia will be of the order of 30,000 all ranks. Now, based on experience, we fully realize that to obtain that strength it will be necessary to list an establishment of something in the order of 25-30 per cent higher than that strength.

It is recognized that, at any given time, not all of the strength will be fully trained or wholly effective. But it is our expectation that with stricter age limits, an improvement in physical standards, the provision of useful and interesting roles, and the furnishing of satisfactory training equipment to carry out those roles, the militia of the future will be greatly increased in true effectiveness. The difference between effective strength and total strength should be narrowed considerably. It is our aim to achieve as high a degree of effectiveness within the total strength of the militia as possible. This we believe will have significant benefits for the militia and in return on the dollars spent on the militia.

To supplement this potential we have, at all times, large numbers of ex-regular force personnel who provide a pool of trained men, many of whom would be available in an emergency. Prior to world war I and world war II no such body of trained officers and men existed.

In the terms of reference, the composition of the force has been broken down on the basis of the several roles for which reserve forces are required. It should be recognized, however, that some flexibility has deliberately been built into the requirements as set out. The over-all appropriation for the militia has been determined on the basis of a judgment in which many factors have been taken into account. These include the scale of probabilities in respect to various kinds of possible conflict, as set out in the white paper. As already indicated, the importance of mobilization potential has been lessened in proportion to the increased emphasis placed on the concept of operational forces-in-being. Related to this is the fact that with the substantial forces-in-being, the potential for mobilizing and training new recruits using the facilities of the permanent forces substantial compared with the pre-world war I and pre-world war II situations. The extent to which reserve forces must be relied on for mobilization purposes is correspondingly lower, and it is felt that the potential from an over-all strength of approximately 30,000 is the most that can be justified in the scale of priorities.

In the terms of reference, the composition of the force has been broken down on the basis of the several roles for which reserve forces are required. It should be recognized, however, that some flexibility has deliberately been built into the requirements as set out. The over-all appropriation for the militia has been determined on the basis of a judgment in which many factors have been taken into account. These include the scale of probabilities in respect of various kinds of possible conflict, as set out in the white paper. As already indicated, the importance of mobilization potential has been lessened in proportion to the increased emphasis placed on the concept of operational forces-in-being. Related to this is the fact that with the substantial forces-in-being, the potential for mobilizing and training new recruits using the facilities of the permanent force is substantial compared with the pre-world war I and pre-world war II situations. The extent to which reserve forces must be relied on for mobilization purposes is correspondingly lower, and it is felt that the potential from an over-all strength of approximately 30,000 is the most that can be justified in the scale of priorities.

One of the key factors in our expectation of improved effectiveness from the militia is our previously stated intention regarding corps training. We recognize that the decision taken in 1959 to restrict corps training in favour of an exclusive civil survival role had a detrimental effect on the morale of militia units. They felt, with considerable justification, that they were quite capable of undertaking both types of training.

In addition, there has been some change in the strategic situation during this period. As a result a condition of nuclear stalemate has developed between east and west, and the possibility of mobilization, though still remote, has gained credence. Considering all these factors, we have concluded that increased emphasis on corps training is justified, and will contribute substantially toward the creation of a more effective, enthusiastic militia. This decision does not, of course, eliminate civil survival training. All militia units, as well as regular force units, are trained in civil survival methods, and the militia will continue to be trained in this field.

In summary, there has been no change in reserve policy as outlined previously in the white paper and through ministerial announcements; the recommendations of the commission and two committees are being studied on an integrated basis by the new defence staff and announcements on the

specific method of implementing approved policy may be expected in late September or early October. The militia strength will be approximately 30,000; it will be improved in effectiveness through stricter age and physical requirements, and more useful and challenging roles. It will receive increased corps training but also training in the civil defence field. Although over-all financial outlay in reserves will be substantially less, it is our determination that their effectiveness in relation to cost will be substantially greater.

I would once again like to thank Brigadier Suttie, Commodore Hendy and Group Captain Draper, as well as all those excellent officers who served with them, for the thoughtful submissions they have made. I can assure them and honourable members of the committee that all the recommendations are being carefully studied and that the information supplied is helpful in assisting us in the discharge of our responsibilities.

The CHAIRMAN: Thank you, Mr. Cardin.

Before we proceed, we have about one hour and 20 minutes left for questioning and I think probably we should be able to complete our work at this sitting.

I would not like the committee members to restrict themselves in their questioning but to be as brief as they possibly can when putting questions.

Would you proceed, Mr. Deachman.

Mr. LAMBERT: Has the minister by any chance a number of copies of his statement?

Mr. CARDIN: Yes, I think there are some available.

The CHAIRMAN: Are there sufficient copies to distribute?

Mr. LAMBERT: Why were they not distributed before?

The CHAIRMAN: Mr. Deachman, perhaps you would like to proceed while copies of the statement are being distributed.

Mr. DEACHMAN: Yes, I will proceed.

Mr. Cardin, relating the two statements which you made this morning I think I am correct when I say that you gave the present militia strength in the order of something in excess of 50,000. Is that correct? That was in your first statement.

Mr. CARDIN: Yes, I think so.

Mr. DEACHMAN: It was something in excess of 50,000.

Mr. LESSARD (*Lac-Saint-Jean*): It was 51,184.

Mr. DEACHMAN: Then you felt the combined turnover rate for officers and men is running in excess of 50 per cent?

Mr. CARDIN: Yes.

Mr. DEACHMAN: So, you are turning over the force every couple of years on an average and this would mean, if no further recruiting was done, the force then would drop to a level of well below 30,000 in the course of a single year. Is that not correct?

Mr. CARDIN: Yes.

Mr. DEACHMAN: Now, looking at the figures that you have given us, I am wondering whether in settling upon a strength of 30,000 on a paper establishment in the order of 35,000 to 40,000 if you intend to achieve this by letting people out of the militia forces or do you intend to achieve it in the course of normal attrition of the forces while recruiting at a limited pace until it has adjusted itself?

Mr. CARDIN: This is a part of the study that is now being undertaken and on which decisions will be taken toward the end of September or the beginning of October. This is what we are looking into at the present time. We are trying to determine how we are going to diminish the force to the 30,000 strength.

Mr. DEACHMAN: Will you continue recruiting in the meantime or do you anticipate that recruiting virtually will cease while these decisions are being made?

Mr. CARDIN: I understand that recruiting may have slackened off a little. I think that recruiting applications may be taken in but I am not sure they will be put on strength before the decision is taken.

Mr. DEACHMAN: Has any step been taken yet to advise older members of the force that they may be expected to drop out because of the improved physical requirements?

Mr. CARDIN: No, they have not been specifically advised of this, except what they might have read in the newspapers; however, as I stated before at a previous meeting, any decision that will be taken will be made known to the members of the militia prior to making these announcements public.

Mr. DEACHMAN: And when do you expect this will take place?

Mr. CARDIN: The end of September or the beginning of October.

Mr. DEACHMAN: So, by the end of September or the beginning of October these militia people now in service and in uniform will know where they stand relative to this new force of 30,000?

Mr. CARDIN: Yes.

The CHAIRMAN: Does that complete your questioning, Mr. Deachman?

Mr. DEACHMAN: Yes.

The CHAIRMAN: Will you proceed, Mr. Smith.

Mr. SMITH: I think your statement, Mr. Cardin, says that by better recruiting procedures and a more interesting program you expect to be able to keep the effective strength closer to the maximum and reduce the turnover. Has there been any estimate made in respect of how much you can reduce the present turnover of 55 per cent a year by this improved program?

Mr. CARDIN: I do not think the actual figures have been worked out. I think it would be very difficult to do that. However, it is felt that a good percentage of the 55 per cent turnover relates to young student militia people who are more likely to change towns.

Mr. SMITH: Now, I do not think that a 55 per cent turnover is necessarily a bad thing because you do keep operationally trained and disciplined people in your community. However, does the defence department honestly hope they can get so good they will have to have only 30,000 enlisted men to provide 30,000 effectives.

Mr. CARDIN: I think the department feels the program will be good enough to interest people to stay on, as a result of which they will be closer to their effective strength than previously.

There is a possibility that the effective strength will be lower than the total strength but there are methods whereby this can be filled in case of emergency. For instance, there is a goodly number of well qualified ex-armed forces personnel who could be called upon in time of emergency, which did not exist either in 1938 or 1939.

Mr. SMITH: Then, it is not proposed to enlist the militia up to establishment?

Mr. CARDIN: No. The total strength will be 30,000.

Mr. SMITH: Which will be 25 per cent or 30 per cent less than its established strength?

Mr. CARDIN: Yes, that is correct.

Mr. SMITH: Then, how is it planned, assuming that emergencies did arise, when the 30,000 people all will have been designated for certain duties, to give continuity to the militia during an emergency.

Mr. CARDIN: Well, of course, it depends on the circumstances. If we were faced with an emergency, which was of a conventional type, there is a possibility that by mobilization and things like that we could meet these requirements, but under the circumstances and what is normally foreseeable it is felt it would be conceivable to have a militia where the total would be 30,000 and the effective strength would be a little less. But, there is some flexibility in the fact we do have well qualified ex-regular officers and men.

Mr. SMITH: Is a record kept of location and is there any continuity between forces and ex-officers now? Do you actually know where they all are and what they are doing?

Mr. CARDIN: I really do not know what is now being done but I presume it would be.

Mr. SMITH: And, if it is not being done now is there any plan to keep such a record? If we are going to count on them should they not be transferred at the end of their active service to some sort of—

Mr. LAMBERT: Supplementary reserve.

Mr. SMITH: —supplementary reserve, as Mr. Lambert stated. However, I was thinking of something a little more detailed than a supplementary reserve. I remember that all of us for many years after the war filled out the cards. Has there been any thought given to that?

Mr. CARDIN: Well, I will be happy to take that under consideration. So far, I do not think there is anything more than a supplementary reserve list.

The CHAIRMAN: Would you proceed now, Mr. Lambert.

Mr. LAMBERT: Turning back to this 30,000 effective strength, may I say that I think someone is looking at this with rosy tinted glasses because in the terms of reference to the Suttie commission the operational goals for the militia were outlined, and the defence program of Canada was looking to the reserve force militia for 30,000 men, which would be 30,000 men, and available.

Now, we saw in the Suttie commission report, and from the examination of the witnesses—even the minister himself indicated it—that to reach an effectiveness of 30,000 one would have to have more than that. The minister has indicated that there would be an establishment for more than that, but unless an establishment is filled it is meaningless.

This morning I want to get it quite clear in my own mind that the over-all strength of actual men will not exceed 30,000.

Mr. CARDIN: That is correct.

Mr. LAMBERT: As compared to the 50,000 that existed heretofore.

Mr. CARDIN: Mr. Chairman, it is possible that during the previous meeting which I attended I might have caused some confusion in the minds of the members of the committee regarding the establishment as compared to the total strength. I wish to apologize if this was so. I want to say here and now that the total strength would not exceed 30,000.

Mr. LAMBERT: We have got that clear now I hope because, after all, establishments are merely on paper and are meaningless unless they are actually filled out.

Does the minister feel that from here on in there is going to be the dawn of a new era in militia which is going to change the attitudes of men serving in the militia, their availability, their job transference, the high reliance on young soldiers to fill out the militia, and that you are going to be able to provide 30,000 people as sought for or claimed in your instructions to the Suttie commission out of 30,000?

Mr. CARDIN: Yes, Mr. Chairman, it is our hope that with the new role, the new look, that is being given to the militia, with a reduced age limit, with

increased physical requirements, that it will be possible to come close to 30,000 total strength. If there is a small margin, it can be filled in by ex-regular armed forces personnel.

Mr. LAMBERT: What hold have you got on these ex-regulars?

Mr. CARDIN: I am quite sure that if there were an emergency—and this is what we are talking about—they would be the first ones to come forth.

Mr. LAMBERT: In other words, you think they would respond to a waving of the flag?

Mr. CARDIN: They would respond to a call on their sense of responsibility. I believe that.

Mr. LAMBERT: I may say that I think the minister, to put it mildly, is just a little bit optimistic. I would go so far as to say that this has certain elements of a pipe dream because I do not think that a strength of 30,000 men is going to realize the objectives. I am not that optimistic. That is part of the policy and it may be right, but I think that to try to achieve the program in this way is to be completely unrealistic in so far as the effective strength is concerned.

Mr. CARDIN: I think the department is going to do everything it can to reduce the gap between the total strength and the effective strength of the militia, and I think it is possible.

Mr. LAMBERT: I will leave that alone for now because there is a difference of opinion here, and I think that events will prove who is right.

My next point is this, the minister has indicated it will be late September or early October before the whole reorganization can be considered. Will this also include the withholding of the issuance of training programs until that time, because it is my information that the militia have not yet received their training programs for the next year and that this is causing consternation among the militia?

Mr. CARDIN: For the next year? Yes, I am afraid so. The decisions will have to await until the end of September.

Mr. LAMBERT: I suppose this is done with the full realization of what is going to happen within the next few months as far as the militia is concerned?

Mr. CARDIN: Of course we are not extremely happy about it but we feel that the logical thing to do is to come up with a decision on what the over-all picture of the militia reserves will be in general. The time for that decision will be in September or October.

Mr. LAMBERT: I suppose you realize you are not going to have any militia at all, if I sense their reactions. I would urge the minister to move much more rapidly than is indicated because my understanding of the reaction within the militia is that while they would like to get on with it they do not know what units are going to remain, they do not know what strength they would go to, and they have not any training programs.

Mr. CARDIN: Mr. Chairman, I think Mr. Lambert realizes that although we are trying to deal with this as expeditiously as possible the problem that is involved is a very large one, particularly since we are trying now to come up, in September or the beginning of October, with a complete package decision concerning the reserves, and we feel that it is a logical way of treating the subject, rather than doing things now which will have to be done in October. We feel that time should be taken to study this thing thoroughly and completely and then come up with a decision by September or October regarding the whole of the reserves including the militia and the two auxiliaries, the navy and the air force.

Mr. LAMBERT: You would have done better I think to concentrate on the reorganization at the top, and not bite off too much. I am afraid this is what you have done; that there are very grave problems in the unification of command, and so forth, at the top. In addition to this, you have gone into a complete reorganization of the militia, and the same people are having to make decisions on that. They have not the time and the knowledge to do it.

Mr. CARDIN: I think the people on the defence staff are capable of handling the two questions quite adequately. As a matter of fact, it would seem to me that there is a relationship between the integrated force and the reserves and what we expect of the reserves.

Mr. LAMBERT: Quite right, but, Mr. Chairman, I think the minister will also agree that perhaps it would be better to move one step at a time instead of trying to solve the whole problem all at once, because certainly there are areas here in which they are feeling their way.

Mr. CARDIN: I agree there are areas where we are feeling our way, but in the over-all picture of the reserves we still feel it would be better to spend a little more time in analysing the problem as a whole and then to come up with a decision on the whole of the reserves. This can not be done before September or the middle of October.

Mr. WINCH: What about the battalion training officers now? I can imagine what they feel because I was a battalion training officer for three years.

Mr. CARDIN: I do not deny there is grave anxiety and concern on the part of the members of the militia, particularly the battalion trainers, and it is not pleasant for us to do this, but I still believe this is the logical approach to the whole problem even though it may create some anxiety in the minds of the commanding officers.

Mr. HARKNESS: In the terms of reference for the commission and the committees I take it, from what you have said, that the financial limit was the overriding consideration which this commission and the committees had to bear in mind. Was that the case?

Mr. CARDIN: That was one consideration.

Mr. HARKNESS: It was the overriding consideration, as I understand it from the wording of the terms of reference that we were given.

> But they should bear in mind that the equivalent savings of the direct and indirect costs of the R.C.N.R. and R.C.A.F. auxiliary must be achieved.

Mr. CARDIN: In that sense yes, they were given a figure. Certain decisions had been taken by the department, and the committees had other suggestions to make. The condition was that they should stay within the limit that had been placed.

Mr. HARKNESS: It would seem to me that this is not the best way to approach the most efficient and effective organization of the militia forces of this country.

Mr. CARDIN: I think that overyone realizes that even in the reorganization of national defence the question of cutting costs was an important factor. However, I think it is possible to cut costs and to try to get the best available defence for the dollar spent. The same principle applies to the reserves, and although it is quite evident that if we had twice as much money to spend we could perhaps get twice the effectiveness, we do not have that, and we still feel that within the limited amount of money that we have we are aiming to achieve the best possible service from the militia and the reserve forces.

Mr. HARKNESS: I will still maintain what criticism I made here several times before, that not only as far as the regular forces are concerned but also in particular as far as the reserves are concerned, the whole thing is viewed

on the basis of a certain financial consideration rather than on the basis of what is going to give you an effective defence force. I think this is the wrong way to proceed.

Mr. CARDIN: I think it would be unrealistic not to think in terms of cost in this or in any other matters.

Mr. HARKNESS: Certainly you can think in terms of cost, but to arbitrarily set down certain financial limits and say, "There you are", I do not think is going to produce a good result.

Mr. CARDIN: Here is what we did, we said: "This is the amount of money you are allowed, try to come up with the best possible effective organization within that amount of money." I do not think that that is unreasonable.

Mr. MATHESON: Could I ask a supplementary question on that, following Colonel Harkness' question. Is that not precisely the way we have always determined defence expenditures in Canada, certainly since world war II, that is on a large scale, splitting between the services, the navy, the army and the air force, but more particularly even in a breakdown?

Mr. HARKNESS: I would say that this is not the way the thing has been done. The basic premise that has been worked from, starting particularly at the time of the Korean war, was what defence forces were required to meet the needs.

Mr. CARDIN: I think also there is a difference between what happens in a period of war and what happens in peacetime, but I am inclined to agree with Mr. Matheson that so long as I have been in the department at least it seems to me that there was a limited amount of money available for defence, and this was broken down into the three services. Each service had a certain amount of money in which to turn out what they felt was the best possible organization in their particular service.

Mr. HARKNESS: There is a difference of opinion here.

I will go on to the matter of strength. Is this strength of 30,000 the strength of officers and N.C.O.'s the war establishment strength or a reduced basis from that?

Mr. CARDIN: What do you mean "war establishment strength"?

Mr. HARKNESS: There is a war establishment strength of officers, N.C.O.'s and men for an infantry battalion, let us say. Up to date, as far as the militia is concerned, the number of officers and N.C.O.'s was worked out on the basis of war establishment, and the strength of officers particularly, and of N.C.O.'s to a large extent, in good units, was up to that strength. In this limit of 30,000 that you put on, what is the situation here as far as the strength of officers and N.C.O.'s is concerned?

Mr. CARDIN: I think Colonel McPherson is here and perhaps could answer that question.

I wonder, Mr. Harkness, whether you could repeat your question?

Mr. HARKNESS: My question is whether as far as the units making up the militia are concerned within the over-all figure of 30,000 strength which is allowed, the number of officers and N.C.O.'s in the units making up the militia can be recruited up to the full war establishment strength, or whether their numbers are going to be cut down by 10, 20 or 30 per cent, whatever it may be.

Colonel C. P. MCPHERSON (*Director of Militia and Cadets*): The answer to this question would bear perhaps on the second part of the Suttie commission report. But our experience has shown that most militia units do not come close to their established strength. It is therefore likely that we shall be taking a realistic view of what should be the strength of each militia unit. What this figure is likely to be of course remains for further study. But for example I think it is well known that with a battalion of an established

strength of about 850, it cannot recruit up to that establishment figure as you will see from the figures given you.

Mr. HARKNESS: Yes, but in the past, as I have said before, all the good units have had their full strength of officers and senior N.C.O.s. It is proposed that this will continue to be the situation? In other words, can each unit really have what is the laid down war establishment in officers and N.C.O.s actually on strength?

Mr. MCPHERSON: If the total strength of the unit is to be restricted, then there is some likelihood that the number of officers and non-commissioned officers might be restricted. I am thinking of the well known saying that you do not want to have too many chiefs and not enough Indians. Perhaps these two figures would be brought a little more realistically together.

Mr. HARKNESS: Well, if that is to be the situation, I suggest we are not going to have effective units, and that it will be impossible to have effective units. The real effectiveness of any militia unit in my experience of something like 40 years now of having something to do with them—the effectiveness really lies in your cadre of officers and senior N.C.O.s; and if you fail to fill the gap—the cadre of officers and senior N.C.O.s of your unit—your unit will not be an effective unit and that it will be impossible to bring it up to strength in an emergency, and to have it operate at anything like effectiveness.

Mr. CARDIN: I think I should say, as has been said earlier, that the final decision on this matter will be taken towards the end of September or the beginning of October, when I shall see to it that consideration is given to the point you have raised.

Mr. HARKNESS: If there is such a projection that you will not have your full strength of officers and senior N.C.O.s, I would hope that the idea would be given up. Let us consider the time prior to the second world war when you had a comparable situation in a battalion of militia which I happened to be in, we had a strength of seven officers. I think the strength of the number of senior N.C.O.s was about the same. You were allowed to take to camp only 30 men because of the very small amount of money available for militia training. But you were allowed to take to camp your full slate of officers and senior N.C.O.s.

Under these circumstances we were able to train sufficiently, efficiently and effectively, so that when mobilization came in 1939 everybody agrees that the militia was able to produce a force in a short space of time. But if we had not had these officers and N.C.O.s, it would have been absolutely impossible to do it. In other words, if they had not been there actually earlier, there would have been considerable trouble in getting the unit up to full strength and to be on the job.

You speak of various guarding jobs and so on. But if you did not have a situation something along that line, it would be absolutely impossible to get the number of men you required and to do any of these jobs in a reasonably efficient way.

Mr. CARDIN: Let me assure you, Colonel Harkness, that consideration will be given to your views in this matter. May I answer Mr. Lambert's concern about the effect this will have upon training. Let me say that messages were sent out to each command by wire several weeks ago giving them instruction on training, and these will be followed by more detailed instructions concerning training between now and May 1, 1965.

Mr. LAMBERT: In other words, there will be an interim program?

Mr. CARDIN: Yes.

Mr. HARKNESS: As far as this strength of 30,000 is concerned, on the basis of the answer that you gave today in reply to a question which was asked some time ago—I believe I asked it myself—as to what proportion of the members of the militia did actually go into service when mobilization came in 1939, the proportion was something under 50 per cent.

Mr. CARDIN: About one half.

Mr. HARKNESS: On the basis of that experience it would seem probable that if an emergency developed in the future, and you required 30,000 men, under those circumstances you would actually get only something in the neighbourhood of 15,000.

Mr. CARDIN: No, I do not agree with you, because one of the reasons that only 50 per cent of the militia were taken on active service was the fact that a good many of them were either too old, or not medically fit. Again it was the question of their being not accepted, as people with four dependants.

Mr. HARKNESS: On what basis do you make that statement?

Mr. CARDIN: What is that?

Mr. HARKNESS: I repeat: On what basis do you make that statement? Because, in my own personal experience as far as the militia in Calgary were concerned, the number of people of that kind was very, very small indeed.

Mr. MATHESON: It was not that way in Quebec.

Mr. HARKNESS: In my own artillery brigade we only had one officer in that category who was too old or was physically unfit.

Mr. CARDIN: Perhaps you had an exceptional brigade.

Mr. HARKNESS: No. The same thing applied in other units, the engineers the signallers, and the Calgary Highlanders. The situation was good at that time. This situation that you mentioned just did not exist there. Where did you get those figures?

Mr. CARDIN: These figures were taken from the documents at that time. This is the result of the investigation.

Mr. HARKNESS: I would question this statement very much. It is all very well to make statements along that line, but my experience does not bear that out.

Mr. CARDIN: I would imagine that your experience was derived perhaps only in a brigade or so? But the documents were consulted, and we have had to do with the whole of the militia. These documents were taken as they were. We did not try to interpret them. We just put down the records as they were.

Mr. HARKNESS: In any event, I think you have previously admitted when we were discussing this matter earlier that in order to have 30,000 effectives at the time of an emergency, you would have to have considerably more than that number on strength within these units.

Mr. CARDIN: That is correct. I apologize to the committee if I have confused the issue on this question.

Mr. HARKNESS: It is not a matter of confusing the issue. I think there is no question but that this is the situation, where there is a total strength of 30,000, and you need 30,000 to do the job that you set, this is what is calculated to be needed in the event of an emergency if an emergency should take place, and you had 30,000, you would have to get something in the neighbourhood of 15,000, and if you thought you needed more than that at the most you would get 20,000. I think there is no question that the result is that the militia will not be able to do the job in an emergency which you, according to these calculations, think it must or it should do.

Mr. CARDIN: I feel that the effective strength will be far higher than it was in the past. And I also stated that there were of course experienced men that could be called upon to fill the gap between the effective strength and a 30,000 requirement.

Mr. HARKNESS: In the event of an emergency taking place, I think you will find that the men recruited are in jobs and are concerned in places where it will perhaps be difficult for them to get away and things of that kind, and that you will not have this rapid filling up of ranks which you seem to envisage, particularly of the men that are required who, by that time, in many cases, will have been away from military training activities by anything up to five, ten, or fifteen years.

Mr. CARDIN: I think you are forgetting that there is a normal attrition every year, and that these people are fresh out from the regular forces.

Mr. HARKNESS: There is normal attrition, that is right, but I think you will find that the number will be much less than the number required, and particularly that they are not going to be in an organization and are not going to be able to go ahead immediately.

Mr. CARDIN: I think we have a difference of opinion here. We feel that we can meet the requirement of 30,000 in these ways by increasing the standards of the militia, by reducing the age limit, and gradually creating a great deal more enthusiasm in the militia. If an emergency arises you can count on people from the forces who have been recently in.

The CHAIRMAN: I do not wish to interrupt, but I do have a number of members who have indicated that they want to ask questions.

Mr. DEACHMAN: I have a supplementary question. If you have a force now of 50,000, and if you propose to have a standard force of 30,000, does it not stand to reason that if you choose the 30,000 among healthier men, you can retain them longer. They will all be better physically, and it will be a great deal easier to maintain such a force of 30,000 than to maintain a force of 50,000, and that you would find it to be easier to maintain a force of 30,000 than perhaps to retain the present force of 50,000?

Mr. HARKNESS: I think you would find that the situation would work out in this way.

Mr. DEACHMAN: The figures are all set out, and the mathematics of the thing are clearly shown.

The CHAIRMAN: I have a number of other people who wish to ask questions.

Mr. MACINNIS: I have interpreted the Minister's remarks to mean that they only intend to recruit from 70 to 75 per cent of their establishments.

Mr. CARDIN: Yes, about that.

Mr. MACINNIS: That you would mean that you are recruiting from 70 to 75 per cent of your establishment, and that at no time is your strength going to require 30,000.

Mr. CARDIN: That is right.

Mr. MACINNIS: The implication which I would take from previous committee meetings is that the effect of it would be to permit you a greater leeway; in other words, I am of the opinion that it is 30 to 35 per cent that you people would need in excess of your strength; but would it not be the other way around, if you are going to recruit only 70 to 75 per cent of your establishment?

Mr. CARDIN: That is right.

Mr. MACINNIS: You referred in an answer to increasing the standards of the militia as such. Has such a program been worked out partially or otherwise,

and if so, what is the basic difference between today's set-up and this other training requirement?

Mr. CARDIN: There is I think a great field of possibilities in the ages, and in a comparison of the ages of the present people in the militia. I think we may very easily reduce the age limits, which will automatically increase the effectiveness of the militia. Standards of health I think are also a factor which could be looked into very carefully, and in that way also increase the effectiveness of the militia with younger and healthier men.

Mr. MACINNIS: We are reaching for something that is normal here?

Mr. CARDIN: Yes.

Mr. MACINNIS: It is a very normal thing to look for younger people, healthier people, who can do any job that may be required.

Mr. CARDIN: Yes, that is right.

Mr. MACINNIS: I am speaking of the actual programs within the new set-up. Just what changes are foreseen in this regard?

Mr. CARDIN: There are no programs that have been decided upon yet, nor can there be until decisions have been made on the whole militia, on what forms it will take, and what units there will be.

Colonel McPherson has reminded me that there will be considerably more corps training, for one thing.

Mr. MACINNIS: This is what I am reaching for. There will be more corps training? What else is there in mind?

Mr. CARDIN: There is what I mentioned last time I was before the committee, the matter of trying to give to the militia training with the regular forces on regular equipment during the summer months to a considerably greater degree than before.

Mr. MACINNIS: Has any thought been given in the larger centres to breaking down training units?

Mr. CARDIN: This is part of the study that is now taking place.

Mr. MACINNIS: Can you elaborate on that? What is the intention?

Mr. CARDIN: This is part of the study that is now taking place, and the decision will be made known in September or October.

Mr. MACINNIS: Possibly you can hear me out in what I was going to suggest in respect of the larger centres. I have in mind Halifax. We do not have the problem in Cape Breton that they have in Halifax where there is a main armoury available to militia units two days a week, or whatever it may be. This is placed in such a way that it is not very centralized for outlying units. It is felt by the militia units in that area that if there was a breakdown of facilities to the larger centres it could be much more successful than it is at the moment with the units having to come for miles around into the Halifax armoury. I think this has a great deal to do with the current failure of the militia units in the larger centres.

That is partially the case in Halifax, but I am not saying it is a failure there. However, if this is a problem in Halifax, it is much more of a problem in Montreal, Toronto and the larger western cities.

Mr. CARDIN: You are correct, and this is one of the objectives of the Suttie commission report. The second part of that report deals with that particular aspect. As I stated, the Department of National Defence is now looking carefully into the second part of the Suttie commission report in conjunction also with the other two committee reports but no decision has yet been taken in regard to what exactly will be done. Once that decision is made, then things such as training programs will automatically be implemented.

Mr. MACINNIS: Aside from this decentralization as Mr. Lloyd suggested it should be referred to, can the minister now elaborate on any further portions of this program with regard to which the committee has not yet heard?

Mr. CARDIN: No, I cannot elaborate further; this will be done in September.

The CHAIRMAN: Mr. Groos, Mr. Temple, Mr. Matheson, Mr. Asselin and Mr. Laniel have indicated that they wish to speak. Mr. Groos.

Mr. GROOS: This is the first time I have heard these very high figures on the turnover that has taken place in the reserve forces. Something over 50 per cent was mentioned. I would be very depressed if I were to think that this were to continue under the new arrangements. It seems to me that with this sort of thing happening in the reserve the standard of efficiency must have been a lot lower than I think the public would have realized. I wonder how long this large turnover of over 50 per cent has been continuing. How long has this been going on? That is my first question of the minister.

Mr. CARDIN: This, I understand, is quite a normal turnover and this, of course, is one of the reasons why we feel that a reorganization of the reserves is essential.

Mr. GROOS: Has any study been made of the reasons for this great turnover?

Mr. CARDIN: I am not sure that a study of the reasons was made; but as you know this is a voluntary exercise; one can get in voluntarily and one can get out voluntarily. There is also the fact that, particularly among the other ranks, who are usually younger people, they either change towns or they get married and some attrition takes place in this way. I think it would be very difficult to try to pinpoint any one particular reason why the turnover is so great.

Mr. LANIEL: Selection has something to do with it.

Mr. GROOS: I would think, Mr. Cardin, that if we are to offer the reserve units a more attractive job to do, if we are to offer them the tools to do that job properly, we should be able to be more selective in our recruiting. I hope we know how to go about this selection as a result of the experience that we have gained before. I wonder if any suggestion has ever been made that when one joins the reserve units there should be some sort of undertaking to serve for some specific period of time.

Mr. CARDIN: I do not know that this has been decided as yet but this to me is a logical follow-up of what we are trying to do. It would seem to me that selection of the people in the militia has a direct bearing on the turnover. I think we have not been too selective in the past in this field, and I would hope that there would be some kind of requirement to serve for a certain length of time. I think this would solve part of the problem.

Mr. GROOS: I would think Mr. Cardin that those in charge of the reserve units would feel there is a much greater possibility of their doing something useful if they were no longer faced with this very great turnover every year, and the efficiency of those units should be very much increased provided the considerations that I have put forward are taken into account. I am very hopeful myself that with this 30,000 proposal, there will be 30,000 really effective and keen militiamen, and that their effectiveness will be far greater than the active effectiveness of the much larger group that we have had in the past.

Mr. CARDIN: That is what we are trying to do.

Mr. MCPHERSON: I wonder, Mr. Chairman, if I might make a general comment on recruiting in the reserves and on trying to sustain interest in the reserves?

I held recent conversations with General Kerr of the Australian citizen force and with General Lang who is the Director of Training for the British army. We came to some general conclusions. One conclusion is that the young man of today does not really want to associate with people who are outside of his age group. This is general in Australia and in Great Britain.

Secondly, the young man of today does not like to be drilled too much. Many of the old soldiers here remember their own days, to put it in the vernacular, of square bashing, and although drill has its part and place in any military training program I believe there must be limitations to the amount of drill the young soldier is given. General Kerr, General Lang and myself concluded that we must have a different look at the kind of training we are giving to young men today in order not only to attract them but to sustain their interest and thereby keep them for a longer period in our reserves.

That is all I would like to say, Mr. Chairman.

Mr. GROOS: In effect, this is really a study of one of the reasons why there has been such a turnover?

The CHAIRMAN: Would you proceed, Mr. Temple.

Mr. TEMPLE: Mr. Cardin, the strength of the militia to be achieved is about 30,000. Is that right?

Mr. CARDIN: Yes.

Mr. TEMPLE: And in order to achieve this strength the establishment will be from 25 per cent to 30 per cent over and above that and, therefore, 37,500 to 39,000 is the establishment proposed?

Mr. CARDIN: Yes.

Mr. MACINNIS: Mr. Chairman, I have a supplementary.

The minister approved the suggestion of Mr. Temple that the establishment will be 37,000 to 39,000. Now, I put the question before in this way; my interpretation from what he said was that the recruiting would be 70 per cent to 75 per cent of the establishment, and the minister said yes to that. Now, you cannot have it both ways. Are we going to have an establishment of 25 per cent to 30 per cent above strength, which would give us at the outside, 39,000, or are we taking 70 per cent to 75 per cent?

Mr. CARDIN: The establishment has not been determined to the exact figure. What was said was that the establishment would be somewhere between 25 per cent and 30 per cent higher than the actual total strength. Now, you asked me whether the strength would be 25 per cent less than the establishment was and basing myself on the fact the establishment would be 25 per cent to 30 per cent higher I could say yes to your question.

Mr. MACINNIS: Yes, but as I mentioned at the time, my interpretation from the answers given to previous questions by Mr. Lambert and Mr. Harkness was that 30,000 was going to be the figure.

Mr. CARDIN: Yes.

Mr. MACINNIS: Then, I put my question directly and said that this is interpreted as meaning we are to recruit only 70 per cent to 75 per cent of our establishment, and the minister said yes. Now, it cannot be both ways. It cannot be 25 per cent or 30 per cent above 30,000, as Mr. Temple has indicated now or, say, 39,000.

Mr. CARDIN: The total strength will not be any more than 30,000. That should be clear. And, the same answer applies to Mr. Temple; it cannot be more than 30,000.

Mr. HARKNESS: Which means that at any time the actual strength actually will be less than 30,000?

Mr. CARDIN: The effective strength may be less.

Mr. TEMPLE: So that it is clear to me, and I think it is, at no time will we have more than 30,000 on strength?

Mr. CARDIN: That is correct.

Mr. TEMPLE: Of course, the establishment will be some 25 per cent to 30 per cent higher than that to allow for drop outs, people transferred and so on?

Mr. CARDIN: That is correct.

Mr. TEMPLE: Now, what is the present establishment and effective strength?

Mr. CARDIN: I think we have given that.

Mr. LESSARD (*Lac-Saint-Jean*): It was 51,000.

Mr. TEMPLE: That is about 50 per cent of what is is now?

Mr. CARDIN: Yes, about that.

Mr. TEMPLE: Then, to take it a step farther, the percentage of the militia which will be truly effective under the new plan will be much higher than it presently is due to using stricter age requirements and limitations of that kind.

Mr. CARDIN: Yes, that is correct.

Mr. TEMPLE: What length of time is it expected that will be taken to achieve this?

Mr. CARDIN: I think it would take about a year or so.

Mr. TEMPLE: Now, taking the air force for a moment, it was emphasized in the terms of reference they must bear in mind that the equivalent savings must be achieved. If the air force auxiliary can come up with a satisfactory plan whereby they can show the saving and still have more than the six auxiliary squadrons, is the government prepared to take cognizance of that, bearing in mind that you are forcing them to do some thinking in respect of this financial situation?

Mr. CARDIN: I would not like to give any encouragement at all in this field. We, after considerable study, cannot now see the possible requirements for additional squadrons, and I would not like to encourage them to think in those terms.

Mr. TEMPLE: Thank you.

The CHAIRMAN: Would you proceed, Mr. Matheson.

Mr. MATHESON: Mr. Cardin, following the question that was put to you by Colonel Harkness, would you subscribe to the need of our militia of a higher proportion of officers and N.C.O.s than normally would be considered desirable? I am thinking, in particular, of the proposition which Lieutenant Commander Fulford put forward to the militia committee. I questioned Commodore Hendy on this and he seemed to subscribe to the view that it took much longer to train a good officer or N.C.O. than it did another rank and, accordingly, the purpose of the militia simply should be to recruit people who will be making something of a career of this for some period of time and, therefore, should be prepared to work very hard in order to attain high N.C.O. and commission standings. Does this appeal to you?

Mr. CARDIN: It does in a way but I think it has to be relative. I do not think you could do very much if you had too many chiefs and no Indians or a very small proportion. I think you have to have some kind of proportion there. But, I agree, of course, it would take more time in order to be able to train N.C.O.s and officers than the ordinary militiaman. But, there is still a requirement for the other ordinary ranks. It is a question of proportion.

Mr. MATHESON: Then, taking the opposite view, may I bring up the question that has been troubling me, which I put to Brigadier Suttie. We are moving very rapidly now toward our centennial and we appreciate there are going to be tremendous demands across Canada for parade drill squads, bands, well

equipped forces and so on; is the department taking cognizance of the special needs in respect of this centennial, which is almost on our doorsteps, with regard to militia units that are going to serve the national interest in the way of ceremonies?

Mr. CARDIN: Well, yes. You know that the department is going to go ahead with the military tatoo across the country and in that connection the regular forces as well as the reserves will take part.

But I do not believe we could be justified—and I think this is what you are really arguing—in maintaining the militia just for the centennial celebrations.

Mr. MATHESON: No, sir, but bearing in mind the fact that we are spending, I think, hundreds of millions of dollars on the centennial arrangements, it would seem to me to be the height of folly to allow our militia, which is surely participating to a major extent in this general ceremony, on this great holiday, to fall down sharply so that it could not perform the functions that we would normally expect it to do at that time. In other words, I am really wondering whether the department should not consider some kind of slowdown as far as the reduction of strength is concerned, particularly for those militia units that can creditably add to our dignity as a country on its hundredth birthday.

Mr. CARDIN: I think that within the militia strength of 30,000 we would be able to take part in whatever military ceremonies might be required for the centennial celebrations. I do not believe that we would consider a slowdown in the reduction to 30,000. I think that there would be really no justification for a slowdown to my way of thinking. I would rather see 30,000 smart troops than 50,000 untrained troops.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Mr. Chairman, Mr. Cardin, I, too, like some of the other members of the committee, am a little disturbed about the strength of the militia. I think that the previous testimony, particularly when Mr. Suttie was before us, indicated that the effective strength of many of the militia units was not even of the order of 20 per cent, and that perhaps the average was somewhere between 40 and 50 per cent, as I recall the testimony. I am wondering how, even with an establishment which is 25 or 30 per cent higher than your strength, you are going to have an effective strength if the same conditions obtain.

Mr. CARDIN: I think you have answered your own question, the same conditions will not obtain.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): That brings me to the question I want to ask you. How are we going to do this?

Mr. CARDIN: By more selective recruiting, reduction of age, higher physical requirements for the militia, a more interesting and active role, trying to create enthusiasm within the militia, and a training program which will be far more interesting than the one they had in the past. We tried to get away in some areas from the social club activities of some of the militia and to bring it down to an effective force. I think that if you take a good look at the breakdown of the militia units in the country you will agree that there are some which are not essential and are not doing too good a job.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Perhaps we could look at it from another point of view. There are some militia units which are remarkably effective, whose strength is not far from their establishment in comparison to others. Perhaps the one that Colonel Harkness was associated with might be a case in point, and I know of one or two others which are standouts. Perhaps we might learn some lesson from these, possibly too rare, units on how the commanding officers obtain these results. I am not in complete agreement with what Colonel McPherson said some time ago. He indirectly blamed the problems of the militia on today's youth, in that they did not want to associate with

anyone else except themselves, their own age groups, and that they were against drill. I think this is too harsh a judgment to make. I think today's youth is as good as the youth of any other age, and perhaps if we examined those units which are successful we may find the answers to some of these problems, because I think that in the same areas in the large metropolitan districts you have successful and unsuccessful operations, and it is certainly the same youth that is being used in both cases.

Mr. CARDIN: I think you are right, Mr. Asselin. When I mentioned that there are some units, as you will see in the report, that are not very active, there are also some excellent units, and in those excellent units you will find that the total strength and the effective strength are not too far apart, whereas in the others the margin is quite large.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): In actual feet your new strength is probably not far off your present effective strength anyway.

Mr. CARDIN: That might be right.

Mr. ASSELIN: (*Notre-Dame-de-Grâce*): At present you have an establishment of 56,000, but your effective strength, according to the testimony that we have heard, is certainly not very far form 30,000, and may be even less. Consequently, what will be occurring is a change of figures, but in effective strength there will be no diminution.

Mr. CARDIN: I would think the effective strength will be not too different from what it is now.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): In connection with the air force report which was presented here by Group Captain Draper—

Mr. MATHESON: Mr. Chairman, I have a supplementary question. Is it possible, Mr. Cardin, in considering what changes have to be made, that special consideration will be given to the units that have done this, as Mr. Asselin has suggested, that is maintained a very high record?

Mr. CARDIN: Without question that is taken into account, without any question at all.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): In connection with the air force report of Group Captain Draper, he seemed to say, if I can take the liberty to summarize his complete report, that if the medical units and the technical training units were dispensed with, that in the same financial structure as has been suggested by the Department of National Defence and using civilian airfields, they could operate the same number of squadrons as heretofore. On the other hand, when questioned closely on this, Group Captain Draper was unable to substantiate with any investigation, particularly from a financial point of view, whether this was true or not. I am wondering, in view of the fact that perhaps the department has had the report longer than the defence committee, if any investigation of this aspect of the Draper report has been made, and if so, is the minister at this time prepared to give us some information? I for one feel that if the suggestion that the air force made is true and can be substantiated financially, then it would seem that their suggestion is one that should be considered.

Mr. CARDIN: There was a study made of this aspect of Group Captain Draper's statement. However, I do not think that I should now make any comment on what the decision will be. This is part of the study that the integrated defence staff has undertaken. We want to reserve all comments or decisions until we can make a complete and over-all decision on the whole of the reserves, including the R.C.A.F. auxiliary, and I do not think it would be of any use at this stage to give you whatever results there were in that field. I think it would be wiser to wait and then bring to you the whole decision of the department on the whole of the reserves rather than to do it by bits and pieces. Anyway, no decision has as yet been taken.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): I might infer from this that while you are unable to give us any more information, you have not as yet made a decision on the suggestions which were made in the air force report.

Mr. CARDIN: That is correct. But I want to repeat what I said to Mr. Temple. I do not believe that it would be wise to give any kind of encouragement to the auxiliaries that there would be additional squadrons kept on.

Mr. ASSELIN (*Notre-Dame-de-Grace*): I thank you.

The CHAIRMAN: Now, Mr. Laniel.

Mr. LANIEL: Bearing in mind what you just said to Mr. Asselin concerning the different means by which it is hoped to reduce the turnover and to keep the strength of the force closer to the total established one, one of the points referred to was the qualifications of personnel. You mentioned reduction of the age limit and physical qualifications. This brings up a question to which I do not know if you have the answer. Would you have any figures about the percentage of the R.O.T.P. officers, of those who leave the services after three or four years of service, who are inclined to join the reserves and who are attracted to this kind of service?

Mr. CARDIN: I have no figures on it.

Mr. MCPHERSON: There are some, but the number is small.

Mr. CARDIN: There are some. There is a small number who do.

Mr. LANIEL: Do you not think that this would represent the best potential to replace the last war officers and thereby make the militia officer more effective, younger, and also make the turnover smaller? It is actually twenty years since the last war, and you will have to get rid of these officers who are past 40 and are getting close to 50 years. I am sorry to have to say this, but I think if you want to make the reserves effective, that would be one way to do it; or, you might carry on your own officer training within the reserves. But I think you have to forget about the last war officers after a while, anyway. It is all very well to be sentimental, but you must be practical and effective.

Mr. CARDIN: Consideration has been given to something along this line. This will be made known later on when we consider the reserve question and the R.O.T.P.

Mr. LANIEL: Thank you.

The CHAIRMAN: That completes the list of questioners. Before we adjourn may I say that at our next meeting we shall be dealing with our interim report, and that, hopefully, will be at the end of next week. The committee now stands adjourned to the call of the Chair.

Mr. MACINNIS: As Chairman you are well aware of what I am about to speak. But I do wish that in future any decision made by the Chairman or the Co-chairman would be made known to the committee immediately so that a situation which arose in my case very recently would not be repeated.

Mr. ASSELIN (*Notre-Dame-de-Grace*): Are you able to tell us anything about the next meeting and when it will be held?

The CHAIRMAN: The next meeting will be to consider our interim report, that is, to prepare a report and see it through committee. Hopefully it will be next week. If we get it through the steering subcommittee in time, it should be a week from Thursday, and of course *in camera*.

APPENDIX "A"

NOTE—*Original pagination of this Report is indicated in margin*

REPORT

of

THE COMMISSION

on the

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

PART I

THE COMMISSION ON THE REORGANIZATION
OF THE CANADIAN ARMY (MILITIA)

June, 1964.

To: The Honourable Lucien Cardin,
Associate Minister of National Defence.

Page i

We, the undersigned members of the Commission on the reorganization of the Canadian Army (Militia), having carried out, to the best of our ability, the task assigned to us within the circumference of our Terms of Reference, have the honour to submit our report.

The certain knowledge that an effective Canadian Army Militia is vitally important to the Defence Policy of Canada has made the task worthwhile and rewarding.

The conclusions reached in this report are founded on information received from all sources and reflect our individual and collective thinking; the resultant recommendations have the endorsement of each and all of us.

We wish to acknowledge the honour and trust you have placed in us from the time of our appointment and throughout our deliberations.

We have the honour to be, Sir,

Your obedient servants,
(E. R. Suttie) Chairman

(J. P. Carriere) Brigadier
(D. G. Cunningham) Brigadier
(E. G. Eakins) Brigadier
(F. T. Jenner) Brigadier
(I. S. Johnston) Brigadier
(B. J. Legge) Lt Colonel
(V. de B. Oland) Brigadier
(P. Triquet) Brigadier

Page ii

TABLE OF CONTENTS

Subject	Page
Letter of Transmittal	(i)
Introduction and Scope of Investigation	(iv)
Summary of Recommendations	(x)
Public Relations	1
Authority of Commanding Officers	4
Training	7
Training Programs	7
Weekend Training	8
Equipment	9
Training Aids	12
Training Manuals	13
Corps Schools	13
Regular Army Support	15
Physical Fitness	16
Age Limits	17
Recognition Badges	18
Uniforms	19
Establishments	20
Special Reserve of Officers	21
Administration	23
Attestation	24
Boards of Inquiry	26
Accounting	28
Pay	30
Page iii Special Expenses	32
Contingency Allowance	33
Armouries	34
Composite Stores, Orderly Rooms and Messes	35
Disposal of Surplus Army Buildings	35
The Defence Association of Canada	37
Source of Funds	39
Implementation	40
Appendix A—Terms of Reference	42
Appendix B—List of Briefs	46

INTRODUCTION AND SCOPE OF THE INVESTIGATION

The formation of the Commission on the Reorganization of the Canadian Army (Militia) (The Militia Commission) was proposed by the Chief of the General Staff and approved by the Minister of National Defence. The task of the Militia Commission as stated in the separate Terms of Reference, was to "recommend to the Minister of National Defence the best means of fulfilling the Militia requirements of the Canadian Defence Policy and the changes which should be made in the organization of the Militia to carry out its revised roles more efficiently and realistically". These Terms of Reference (Appendix A), which defined the roles of the Militia and the estimated strengths required, were found to be adequate and provided sufficient scope for the performance of the task. The hope was expressed that the Commission could have its report ready in approximately four months which set the target date as early June 1964. Page iv

In the latter part of January the members were appointed and the Commission met for the first time during the week of February 4th. In order to provide the members of the Commission with background information, a series of briefing sessions were given by the respective elements of Army Headquarters staff.

Subsequent to the briefings, the Commission developed a plan to complete the mission within the time limit established. It was concluded that an on-the-spot fact finding investigation by the Commission as a whole was a logical starting point. This phase was considered essential because conditions vary from Area to Area. A general picture was necessary in order to avoid conclusions which might be applicable in one Area but inappropriate in another. Accordingly, a schedule was drawn up which would complete this phase in the shortest time possible. Page v

During the period February 10 to March 17, the Commission interviewed the four Command staffs, twelve Area Headquarters and the 27 Militia Group Commanders and their staffs. All interviews were recorded on tape and subsequently were reviewed and the various points raised were extracted. The frequency and the priority in which these points were voluntarily raised provided significant guidance on both problems and solutions. In addition to interviews, a number of briefs were received from a variety of sources; (a list of briefs submitted is Appendix B of the Report). These briefs were given full consideration by the Commission during its deliberations. The Commission wishes to express its appreciation to all those who, in a spirit of good citizenship, saw fit to offer constructive advice.

The Commission met again during the second week of April to review the information gathered and to develop the next step in the investigations. It was evident that Commanding Officers should be given an opportunity to record their views. It was equally clear that time did not permit the Commission, as a whole, to repeat the operation of travelling from St. John's, Newfoundland, to Victoria, B.C. Commanding Officers, therefore, were invited, by letter from the Commission, to advise their respective Commission representative if they desired an opportunity to present constructive suggestions, either verbally or in the form of a brief. The period between April 10th and April 30th was set aside to enable the Commission

Page vi representatives to hold interviews with those Commanding Officers who requested them.

The third meeting of the Commission was held during the first week of May. The Commission gave consideration to the recommendations which should properly form the main body of the Report. During this session discussions were held with the respective members of the Army Council to ensure that the recommendations were workable, from their point of view.

By the conclusion of this session the Commission had devised a firm plan concerning the form and timing of the Report. It was concluded that the most useful presentation would be to divide the Report in two parts. In Part I will be found the criteria and conditions which, in the opinion of the Commission, are best calculated to produce an efficient Militia capable of undertaking the roles assigned to it by the Terms of Reference. Part II has been confined to the detail of the reorganization and recommendations with respect to the disposition of those units and sub-units viewed in the light of the criteria established in Part I.

The Commission wishes to state that all the information it requested from the Chief of the General Staff and Branch Heads at Army Headquarters, General Officers Commanding, Area Commanders, Militia Group Headquarters and units was readily made
Page vii available. The Commission received the same cooperation in its dealings with the executive of the Conference of Defence Associations.

The White Paper on Defence

The White Paper on Defence was distributed to members of the Militia Commission immediately it became a public document on 26 March 1964.

It had been considered that the White Paper, which established the principles for integration, might require a major reorientation of the Commission's work. However after studying the document the conclusion reached by the members was that the White Paper did not materially change the plan under consideration by the Commission. There were a number of reasons for this conclusion.

It is considered unwise to attend any integration of Militia units before the Regular Army has assumed its new configuration. The Reserve Forces are on the periphery, and logically, integration should take place from the center outward. The evolution and implementation of integration of the Regular Forces will take several months longer than the period suggested for the Commission's Report. In any event, before integration of the Reserves can be undertaken, corrective measures should be applied to bring the organization and unit establishments to an acceptable standard in order to gain the maximum benefit from integration. However, it is recognized that the changes in organization of the Militia should be compatible with the planned adjustment in Regular Forces along
Page viii functional lines. Discussions were held with Army Headquarters staff to ensure that recommended changes in Command and control structure will fit into the expected changes in the Regular Forces.

Separate Ministerial Committees of Naval and Aair Force Reserve Officers prepared briefs subsequent to the unilateral decisions taken by the respective Regular Naval and Air Force staffs affecting the Reserves. These briefs were considered by the Associate Minister at

separate meetings prior to February 15th and it was the view of the Militia Commission that apart from endorsing the proposals made by these separate committees, no further consideration should be incorporated in our Report.

Facilities being surrendered by the Naval and Air Force Reserves across the country have been considered for take-over by Militia units where there is a need for them. In addition, consideration has been given to sharing accommodation in those instances where space is being released due to the reduction in the requirements of present occupants.

It is quite conceivable that a case can be made for the revival of Air Force Reserves in a transport role at the appropriate time. Air-portability is a required characteristic of integrated forces and it may well be that a need for light air transport will emerge after integration. Resources for such an organization exist in the Flying Clubs and there should be no special problem in reconstituting units for this purpose. Also, other air requirements can be foreseen for the Defence Forces such as reconnaissance and Artillery OP's and the close support of Infantry formations. Valuable and interesting training could be provided for the Militia by air cooperation in combined exercises. Page ix

Conditions

The revised roles for the Militia defined in the Terms of Reference require a force-in-being physically fit and trained for the assigned tasks. It must be recognized that the government has chosen a volunteer system for raising the Militia and that in the time available to volunteers the optimum training of the Militia will not reach the same standard as the Regular Force. Realistic training objectives cannot go beyond a militiaman fully trained in common-to-all-arms subjects with some familiarity in his particular corps. In the event of an emergency, time required to bring him to the Regular Force standard will be relatively short.

On the other hand the Regular Force is necessarily organized on a career basis with the result that many personnel would be over-age for combat operations. The chief role of the Militia should be to provide medically fit and youthful personnel trained to basic standards.

The recommendations which follow are considered essential conditions to ensure that Militia units can reach and hold the standards required to perform efficiently the tasks assigned to them.

SUMMARY OF RECOMMENDATIONS Page x

Public Relations Page 4

(*a*) That a positive public relations program in support of the activities of the Militia be implemented immediately.

(*b*) That such a program be financially supported by Federal funds and centrally controlled.

(*c*) That intially, the establishment and organization of such a program be placed in the hands of an agency, national in character and competent in its field.

(*d*) That the present system of one PRO per unit be abandoned being costly and ineffective. Public relations should be co-ordinated at Area and one regimental officer per unit should be detailed to keep the Area PRO advised of unit activities.

Authority of Commanding Officers Page 7

That authority be delegated to a Militia Commanding Officer consistent with his responsibilities to his unit and to his community.

Training Programs Page 8

That training programs be designed consistent with the stated objectives and full support in equipment, training areas and personnel be provided by the Regular Forces.

Weekend Training Page 9

That weekend training be encouraged in principle, but carried out at the discretion of the Commanding Officer, who is fully conversant with local conditions.

Equipment Page 11

(*a*) That the possibility of using commercial type equipment and vehicles be vigorously explored.

(*b*) That efforts be made to obtain surplus tanks from other NATO countries.

Page xi

Training Aids Page 12

That the pursuit of an imaginative program for the development of training aids be fully supported by the Department.

Training Manuals Page 13

That great care be given to the preparation of new training manuals.

Corps Schools

(*a*) That a concerted effort be made to revive the role of Corps Schools for both officers and NCOs.

(*b*) That course schedules be promulgated with firm dates at the beginning of the training year and that each unit receive a copy of the course manual.

Regular Army Support Page 16

(*a*) That a complement of Regular Force officers and NCOs should be posted to Militia units on the scale recommended in Part II.

(*b*) That Regular units should be responsible for providing courses and attachments for Militia personnel.

Physical Fitness Page 17

That more emphasis be placed on physical standards and militiamen be stimulated to take a personal interest in their own physical fitness.

Age Limits Page 18

That over-age officers and NCOs in combatant units should be retired in an orderly fashion.

Recognition Badges Page 19

That badges marking significant achievement should be awarded to all militiamen on obtaining the requisite qualifications.

Uniforms Page 20 Page xii

(*a*) That there should be no distinction between the Regular Force uniform and those issued to the Militia.

(*b*) That recovery of kit procedures be simplified and costed at a depreciated value to eliminate its obvious evils.

Establishments Page 21

(*a*) That Militia unit establishments be reduced to a reasonably obtainable total.

(*b*) That classification of units as major or minor will provide inherent incentive advantages.

Special Reserve of Officers Page 22

(*a*) That efficient officers retired for age only should be posted to a Special List, where they will be held available for assignment to static units and staff positions related to Internal Security and Survival, if required.

(*b*) That those officers who have demonstrated ability as instructors be employed as cadet training officers, where possible.

Administration Page 24

(*a*) That a complete review of the present administrative procedures be carried out with a view to eliminating costly practices and give Commanding Officers more authority.

(*b*) That units, as far as their involvement with administration is concerned, be on a modified field return basis.

Attestation Page 26

(*a*) That the system of re-engagement every second year be abolished.

(*b*) That a simple enrolment document be introduced and processed entirely within the unit.

Boards of Inquiry Page 27 Page xiii

(*a*) That Boards of Inquiry for minor losses, injuries and the like are not necessary and a Commanding Officer's certificate should suffice.

(*b*) That Commanding Officers be authorized to write-off minor losses.

(*c*) That Regular Army Officers, attached to units, be responsible for any necessary Boards of Inquiry being completed in an acceptable form.

Accounting Page 30

(*a*) That the accounting requirements of the Militia unit should be reduced to a reasonable level consistent with funds involved and the rate of turnover.

(*b*) That Area inspections should be revised to be less frequent and more realistic by a proper balance between inspection costs and the likelihood of serious deficiencies. Sampling with a scheduled number of detailed inspections should satisfy the requirements.

(c) That annual depreciation should be recognized and a system established whereby the percentage of depreciation becomes the write-off authority of the Commanding Officer.

Pay Page 32

That the present system of per diem pay be abolished and a bonus system substituted with tax deducted at source.

Special Expenses Page 33

That reasonable expenses related to purchase of required kit appropriate to officers, Warrant Officers and Senior NCOs be an allowable tax deduction.

Page xiv

Contingency Allowance Page 34

That Contingency Allowance entitlement should be altered to consist of two payments:

(a) a basic amount payable to major and minor units at the beginning of the training season; and

(b) payment of a bonus in addition, to be determined by the over-all efficiency of the unit.

Armouries Page 34

That the present administrative system for control of armouries be revised with a view to making it more efficient and that a greater degree of authority be delegated to Commanding Officers in the sphere of public use of these facilities.

Composite Stores, Orderly Rooms and Messes Page 35

That, where savings in space and personnel are required, composite stores, orderly rooms and messes be established.

Disposal of Surplus Army Buildings Page 36

(a) That, where practicable, facilities declared surplus be leased to communities at a nominal rate with the understanding that they become immediately available in the event of an emergency.

(b) That, in the case of facilities declared surplus to requirements and disposed of by sale, the monies resultant remain under the control of the Department.

The Defence Association of Canada Page 38

(a) That the present Conference of Defence Associations be re-designated the Defence Association of Canada and function as such after the annual conference of Defence Associations in January, 1965.

Page xv

(b) That delegates to the Defence Association of Canada be appointed on a representational basis from existing units of the reorganized Reserves and that this representation be limited to serving officers or to honourary colonels or honourary lieutenant colonels, or equivalent appointments, and to serving presidents and secretaries of Corps Associations.

(c) That Corps Associations be self-supporting.

(d) That the re-designated Defence Association of Canada be the recipient of the present total allocation of funds and that it assume the control and responsibility for its disbursement.

PUBLIC RELATIONS

Page 1

In the past the Militia has existed in a vacuum. If it is to survive, it must have positive support from government and local organizations. A positive public relations program emanating from the Federal Government is needed to inform the public and to induce civic organizations and the business community to give tangible support to Militia units in their locality. Across the country there are outstanding examples of vigorous units which are keenly supported by the community and local industry. In the main, however, this support is not forthcoming and without it, the best efforts of those serving in the Militia are impotent to produce an effective unit or sub-unit. Support from industry in the locality can be the most significant factor in the success of a unit. Unfortunately, industry and the business community, generally, are indifferent and render little or no assistance to the Militia. Most companies are sensitive to their responsibility in the community and would react favourably if their support was requested by the highest level of government. Such support could be solicited from industry by making employers aware of the obligations to the Militia which their employees have undertaken. This rapport should take the form of ministerial correspondence with the firms involved.

Page 2

The public has either a false image or no image at all of the Militia soldier. Generally speaking the public sees the Militia as "through a glass, darkly". Any distortion must be corrected and the best way to accomplish this is by means of a properly planned program which utilizes the facilities of the various news media. It is inconsistent that a serviceman should be a hero in wartime and a curiosity in peacetime.

A positive public relations program should be developed and centrally controlled in order to ensure that maximum value is received from money expended. It is not the propagandist or hard sell, soft sell Madison Avenue approach which the Commission advocates. It is the presentation, to the public, of the Militia clothed in all its true environmental aspects: its purpose; its work; its training; and its contribution to the community and the nation as a whole. This the tax-payer has a right to know and it is only through a well co-ordinated program of public relations that the public can know. As envisaged, such a program will benefit not only the Militia but will also satisfy the curiosity of the public in its search for assurance that its support is well merited.

Page 3

For consideration might be the purchase of space in the principal newspapers for a weekly report on Militia activities. Presently, the only activity given prominence is social events, which merely confirms the impression of the general public that the Militia is principally a social organization. Training activities, attendance at summer camps, and the participation of Militia during catastrophes such as the Winnipeg flood, forest fires and more recently the tidal wave on Vancouver Island, are not given the publicity they merit. The Militia have done, can do and are doing much in this field to enhance their image but they lack governmental and public support to be

truly effective. Initially, at least, the establishment and organization of such a public relations program should be placed in the hands of a national commercial agency.

It is the conviction of the Militia Commission that a properly informed public together with actively interested civic organizations and sectors of the business community would ensure the vitality of Militia units as long as the need exists. In this connection it is suggested that certificates of merit should be available for presentation to communities and companies for outstanding support of the Militia. Such certificates should be issued with care on the recommendation of the local senior Militia officer and approval of Area Commander.

The youth of the country, properly motivated, will accept the obligation of serving in the Militia. Social distractions which did not
Page 4 exist a generation ago are largely responsible for the difficulty in attracting and holding young men in Militia units. This condition can only be offset by vigorous and continuing public relations efforts.

Recommendations:

(*a*) That a positive public relations program in support of the activities of the Militia be implemented immediately.
(*b*) That such a program be financially supported by Federal funds and centrally controlled.
(*c*) That initially, the establishment and organization of such a program be placed in the hands of an agency, national in character and competent in its field.
(*d*) That the present system of one PRO per unit be abandoned as being costly and ineffective. Public relations should be co-ordinated at Area and one regimental officer per unit should be detailed to keep the Area PRO advised of unit activities.

AUTHORITY OF COMMANDING OFFICERS

It is axiomatic that responsibility must be complemented by a requisite amount of authority to perform efficiently the functions of any executive position. The Militia Commanding Officer has full responsibility and virtually no authority; he is so circumscribed by headquarters hierarchy and restrictive regulations that almost any
Page 5 decision he takes is bound to be wrong. Commanding Officers are generally mature and responsible citizens in their community and can be expected to discharge their duties in an acceptable manner. They must have reasonable opportunity to exercise judgment and make decisions in light of circumstances which are peculiar to the situation and frequently fall outside the wording, if not the intent, of restrictive regulations. A Commanding Officer should be the final authority in decision-making in the following areas:

1. *Training programs:* The Commanding Officer should be free to prepare his unit's training program. The training directive should be a guide, but determination of training time and subjects must be adjusted to suit local conditions.
2. *Training budget:* In the past, limitations on training have not provided the Commanding Officer the flexibility he needs to train effectively. He should be allocated a budget and providing he does not exceed the limits, the details of expenditures should be his own concern and responsibility, subject to a simple accounting. Training will be

more effective when the detailed design is a local responsibility. Any abuses that might occur would occur in any event and are a characteristic of the individual. These Page 6
cannot be excluded by restrictive regulations.

3. *Write-offs of Deficiencies:* Reasonable authority must be delegated to Commanding Officers to write-off deficiencies in a responsible manner instead of the present frustrating procedures.
4. *Special Training:* Units located near permanent depots should be permitted to arrange special training directly with the unit concerned and then obtain approval from the appropriate headquarters. Under the present system, the application may have to be processed up and down through five separate headquarters, with the result that it can take eight weeks or more to arrange special training. Regular units are cooperative and anxious to assist the Militia, and a direct relationship is highly desirable.
5. *Use of Armouries:* Particularly in smaller communities, the control of the armouries for uses other than training should be delegated to the appointed officer in charge of the armoury. Present regulations are so cumbersome that the public are barred from using facilities belonging to them for an important community activity.

Recommendation: Page 7

That authority be delegated to a Militia Commanding Officer consistent with his responsibilities to his unit and to his community.

TRAINING

General

As training is the cornerstone upon which an efficient Militia is built, the Commission has dealt with this subject under the headings of its several facets. Our recommendations follow our observations in each case.

Training Programs

The training objectives for the Militia should be set with due regard to the requirements of the assigned roles and should be obtainable within the established training time.

The basic requirements should be officers and NCOs well-qualified in their respective arms, and militiamen who can reach the level of fully-trained militiamen in a two-year cycle.

It follows from this that training must be progressive and designed to retain the interest of both officers and men. There is a continuing requirement for well-qualified officers and NCOs who must have a complement of militiamen sufficient in numbers to enable exercises to be carried out and to provide the needed experi- Page 8
ence in man management and leadership. Selected militiamen would progress to Junior NCOs and form the nucleus of NCOs which together with commissioned ranks would constitute the framework capable of undertaking rapid expansion in the event of an emergency.

Effective training calls for the provision of adequate facilities, a reasonable scale of training equipment, and instructional support from the Regular Army. For higher qualifications, a full range of

courses at corps schools is a necessary element, and summer camps as well as attachments to Regular units for selected officers and NCOs should be included.

Recommendation:

That training programs be designed consistent with the stated objectives and full support in equipment, training areas and personnel be provided by the Regular Forces.

Weekend Training

The Terms of Reference refer to the practicability of weekend training as opposed to conducting training in the evenings during the week. There is general agreement that weekend training is effective and beneficial beyond question. The advent of the five-day week does make weekend training a practical consideration, but it cannot be assumed that training can realistically be confined to
Page 9 weekends only. The improved standard of living, accompanied by greater mobility, has resulted in weekend social activity of the family unit. Militiamen are prepared to do weekend training occasionally but they must be available to their families with reasonable frequency. Moreover, in smaller communities, the five-and-a-half day week or time off other than Saturday is quite common. Also prevalent is the practice of a second job in free time to augment family income. Consideration of all these factors suggests that it would be unwise to attempt to make training exclusively a weekend activity. Local and personal conditions must be recognized.

Recommendation:

That weekend training be encouraged in principle, but carried out at the discretion of the Commanding Officer, who is fully conversant with local conditions.

Equipment

Training cannot be effective unless there is available to units a reasonable scale of equipment. The lack of equipment in the hands of units or available on a pool basis was a principal criticism in all Commands. It is imposible to hold the interest of militiamen if they have no opportunity other than in summer concentration to familiarize themselves with the equipment they are expected to use in war. It is recognized that the cost of outfitting units with a generous scale of equipment cannot be tolerated. However, there is a minimum re-
Page 10 quirement which must be met in order to train to the required standards. To expect infantry to maintain interest without their personal and support weapons is unrealistic. The problem increases in severity in direct proportion to the technical specialization of the individual units, e.g., signal, armoured, artillery.

It will be remembered that Germany was prevented by the Treaty of Versailles from rearming during the thirties. Nevertheless, with the use of civilian pattern vehicles and mock-ups, they managed to weld a formidable war machine which came perilously close to victory over the Allies. The same imagination and ingenuity applied to equipping Militia units can do much to overcome the equipment situation at a reasonable cost. Commercial vehicles cost considerably less than military pattern vehicles and if purchased in quantity could be disposed of at little loss before maintenance became a cost factor. An inexpensive 4-wheel drive vehicle costing

$2300 is approximately half the cost of an army model Jeep. This vehicle has remarkable cross-country performance and would be ideal for training units in manoeuvres and deployment.

There has been a chronic shortage of wireless sets and the limited scale in the possession of units is annually withdrawn before summer camp to provide transmitter-receivers in the price range of $600-$800 (compared to $3500 for a 42 set) will provide equipment to train signallers in all arms. An inexpensive ($60) two-way civilian band transistorized set with a range of two to four miles and up to 40 miles under ideal conditions is also available from commercial sources. Armoured units could be provided with obsolete tanks purchased at little cost from other NATO countries to give them the means of familiarizing themselves with track suspensions, crew space, etc., and would not be that much different from the latest tanks in use. Artillery units both field and medium can train with 105 mm. guns. However, a redistribution of guns and fire control instruments is indicated to provide the remaining units with a scale of equipment consistent with their respective strength. Imaginative pursuit of the foregoing will result in providing all corps with a reasonable scale of equipment at a relatively low cost. Page 11

It is a fundamental requirement that the infantryman should have his own personal weapon. It might be interjected at this point that the proper facilities to lock up portable weapons and stores must be provided. The cost of maintaining 24-hour guards on armouries would be considerably more than the capital cost of providing adequate lock-up storage.

Recommendations:

(a) That the possibility of using commercial type equipment and vehicles be vigorously explored.

(b) That efforts be made to obtain surplus tanks from other NATO countries.

Training Aids Page 12

Too little has been done in the development of training aids. A proper scale of training aids would not only stimulate interest but provide inexpensive facilities to do effective training. In Winnipeg the Commission was shown an indoor training range ingenious in design and costing only $600 in material. It was equipped with moving targets for rifle practice and also could be employed as a puff range to teach target recognition and correction-of-fire procedure. It was a most useful device for infantry, armoured and artillery units housed in the same armoury.

In Edmonton, we witnessed a demonstration of a sub-calibre mortar operated by compressd air and costing under $500. Here again, it was an inexpensive and valuable means of teaching mortar crews and correction-of-fire procedures. Plastic models for sand table exercises and models of personal weapons could well be devised at a low cost.

To stimulate the development of training aids, an award system should be considered for Militia units who successfully design a low-cost training aid. It is the conviction of the Commission that an imaginative approach to the development of training aids will result in a whole range of valuable and inexpensive substitutes which will make training effective and interesting.

Recommendation:

That the pursuit of an imaginative program for the development of training aids be fully supported by the Department.

Page 13

Training Manuals

The fundamental tool of Militia training is the training manual. Most of the manuals issued to units are out of date and the Commission is of the opinion that much can be done to improve the quality of the subject matter from a presentation point of view. It should be possible, in this area, to develop a system whereby training manuals for the Militia are kept under constant review and produced in a simple and attractive format. Additionally, when promulgated, training manuals should be issued on a pre-established scale to all units.

Recommendation:

That great care be given to the preparation of new training manuals.

Corps Schools

Important to the higher qualifications of officers and NCOs is the operation of strong Corps Schools. Prior to 1939, the Royal Schools played a vital part in the training of Non-Permanent Active Militia officers and NCOs. Instructional standards were consistently high and attendance at a Royal School was the goal of every serious-minded militiaman. Facilities to duplicate this performance are even

Page 14

better at the present time and a firm effort should be made to restore to Corps Schools the primary position they occupied in the training structure. The changed conditions existing in the current economic and social structure make it impractical to consider courses of six or eight weeks in duration. However, courses two weeks in duration are feasible and attendance at these for officers and NCOs should be stimulated. In this connection, Militia units should be consulted to determine the time of year most suitable for attendance by their personnel at Corps Schools.

It cannot be emphasized too strongly that scheduled courses once promulgated should be held. Instances were reported where candidates were informed of the cancellation of a course while en route. Inherent in this is the requirement that courses must be promulgated well in advance as the militiaman often must make arrangement to have his civilian annual holidays coincide with the course he wishes to take. It is suggested, therefore, that each unit should receive, at the beginning of the training year, a copy of the course manual.

Recommendations:

(*a*) That a concerted effort be made to revive the role of Corps Schools for both officers and NCOs.

(*b*) That course schedules be promulgated with firm dates at the beginning of the training year and that each unit receive a copy of the course manual.

Page 15

Regular Army Support

Within both Regular and Militia Headquarters there is unanimity of opinion on the matter of more Regular Army support.

Detailed recommendations are contained in Part II of the Report. It is mentioned herein because its acceptance in principle is important to both training and administrative efficiency. Under present arrangements 332 call-out personnel are posted to units and I staff numbering 738 are held in Area Pools. Posting of Regular Army personnel to units would be more effective and cost substantially less than the system now inforce.

The integration or cross posting of Regular Army personnel to the Militia is equally important and beneficial to both the Regular Force and the Militia. The new roles of the Militia in support of the Regular Forces demand a closer relationship between the two elements than has existed in the past. Moreover, the new generation of junior Regular officers and NCOs is not familiar with the Militia and unless this rapport is established, the sudden integration in time of emergency will not take place smoothly. It should be part of the career training of young officers of the Regular Army in the rank of Captain or junior Major to serve a tour of duty not exceeding two years with a Militia unit to assist in training and administration. Officers and NCOs should be carefully selected before attachment and their performance while attached should have Page 16
significant bearing on their future progression. The Militia should not be used as a repository for inefficient or unwanted personnel of the Regular Forces. Since this should be regarded as a normal part of Regular Force training, the Militia vote should not absorb the total cost.

In addition to providing posted personnel, each Regular regiment or battalion should have a constellation of Militia units with which they are closely identified. This identification should include providing personnel for instruction purposes, conducting courses, and providing attachment for selected Militia personnel. The linking of Regular and Militia units is a desirable condition but should not be imposed; rather it should be a voluntary matter between the units concerned.

Recommendations:

(*a*) That a complement of Regular Force officers and NCOs should be posted to Militia units on the scale recommended in Part II.

(*b*) That Regular units should be responsible for providing courses and attachments for Militia personnel.

Physical Fitness

One of the obvious requirements of the new concept is that the Militia must be physically fit. The lack of showers and changing facilities in most armouries makes PT parades impractical. Apart Page 17
from this, training time does not permit emphasis of physical fitness at the expense of other training.

A more productive approach would be to stimulate young soldiers in physical fitness which they would do largely in their own time. The issue of a modest scale of gymnastic equipment, e.g., ground mats, parallel bars, wall bars, etc., would not be costly and would have their greatest use on voluntary parades. PT instructors can be made available and inter-unit competition in organized sports and gymnastics could do much to raise the level of fitness.

Recommendation:

That more emphasis be placed on physical standards and militiamen be stimulated to take a personal interest in their own physical fitness.

Age Limits

Co-existent with the physically fit concept is the requirement that Militia personnel must be within the age limits for field service. At the present time, far too many officers and NCOs are beyond the age where they could serve in the field and would have to be replaced immediately in the event of an emergency. It is therefore essential that these over-age officers and men should be retired
Page 18 with honour as rapidly as can be accomplished in an orderly fashion. Many of these officers and NCOs have rendered valuable service over many years and it would be an appreciated gesture if their compulsory retirement was accompanied by a certificate or citation signed by the Minister of National Defence. As a guide it is suggested that officers and NCOs serving in combatant units should be qualified for and promoted to the respective ranks prior to attaining the following ages:

Lieutenants	Age 26	Jr. NCO	Age 26
Captains	Age 29	Sr. NCO	Age 32
Majors	Age 34	WO2	Age 37
Lt Cols	Age 37	WO1	Age 40

The retirement age for officers and NCOs in technical and service units should conform with Regular Army practice.

Recommendation:

That over-age officers and NCOs in combatant units should be retired in an orderly fashion.

RECOGNITION BADGES

Important to all individuals is the need for participation, a sense of belonging and recognition. A militiaman is motivated to join a unit in order to participate in a worthwhile activity and become a member of a significant association. Recognition of his
Page 19 achievements, the third important factor, is the responsibility of the organization. Every uniformed group recognizes achievement with badges indicating special qualifications as well as length of service by bars or chevrons. This recognition is equally important to the uniformed militiaman and there should be a badge indicating a trained recruit which would be replaced by a more permanent badge when he acquired the status of a trained militiaman. For consideration is the presentation of an identification card similar to that of the Regular Forces on the completion of two years' service and qualification. In addition, special tradesman qualifications should also be recognized by an appropriate badge. Chevrons indicating length of service in a unit should be granted on the completion of each year's service. A visible recognition of achievement will provide a worthwhile incentive to the individual militiaman and the unit.

Recommendation:

The badges marking significant achievement should be awarded to all militiamen on obtaining the requisite qualifications.

UNIFORMS

Dress is the outward expression of esprit. The Militia can never be well-turned out and take proper pride in appearance if they are dressed in hand-me-downs from the Regular Army. It should be possible for a militiaman to be as smartly dressed as his counterpart in the Regular Forces. Page 20

The Commission is in agreement that the entire problem of recovery of kit and write-off of lost clothing should be revised. Write-off based on replacement value at initial cost is unrealistic and unfair. It encourages units to buy lost articles in second-hand stores because it is cheaper and by the same token provides an outlet for the illegal disposal of issued clothing.

Recommendations:

(*a*) That there should be no distinction between the Regular Force uniform and those issued to the Militia.

(*b*) That recovery of kit procedures be simplified and costed at a depreciated value to eliminate its obvious evils.

ESTABLISHMENTS

Examination of unit strengths in all corps indicates very clearly that it is impossible for Militia unit strengths to approach the wartime establishments of the Regular Forces. Rarely does the effective strength exceed one-third of the war establishment and this unreal situation should be eliminated. Part II of this Report will include revised establishments for Militia units which are reasonably obtainable. The proposed establishments will provide a reasonable proportion of officers and NCOs to enable units to train effectively. This will be the foundation for quick expansion in the event of an emergency. Page 21

Co-effective with the introduction of revised establishments is the requirement that units be designated as either major or minor. A review of the unit's status should take place immediately prior to every change of command.

Recommendations:

(*a*) That Militia unit establishments be reduced to a reasonably obtainable total.

(*b*) That classification of units as major or minor will provide inherent incentive advantages.

SPECIAL RESERVE OF OFFICERS

The majority of officers who will be retired for age reasons have valuable administrative experience and ability which should not be lost for this reason alone. The requirement for Internal Security and Survival Operations could very well be fifilled in the key positions by officers drawn from this category. The same would

Page 22

apply to professionals, such as medical, dental and personnel selection officers, who will become surplus to requirement in the reorganization. The establishments for Internal Security and Survival units should be firmly fixed and officers from this special list posted to definite positions. It would then be possible to call them up for exercises and schemes to ensure this portion of the Militia responsibility would function immediately an emergency occurred.

It is also considered that among these officers there will be a certain number who have, throughout their careers, demonstrated a high degree of competence in the instructional field. These officers, carefully selected, would make ideal cadet training officers.

Recommendations:

(*a*) That efficient officers retired for age only should be posted to a Special List, where they will be held available for assignment to static units and staff positions related to Internal Security and Survival, if required.

(*b*) That those officers who have demonstrated ability as instructors be employed as cadet training officers, where possible.

Page 23

ADMINISTRATION

One of the hazards which the Armed Forces face in peacetime is a tendency to over-administer themselves. The inevitable result is that administration does tend to overshadow the primary purpose of a Military Force. In Canada the administrative functions performed by the Regular Army cannot help but overflow into the sphere of the Militia.

The principle that Militia units should struggle with peacetime administration on the same basis as the Regular Forces is unsound and unwarranted. In its investigations the Commission found that the tentacles of the administrative octopus reach into all aspects of the Militia organization with stifling results. The only detailed administration that a unit should be conversant with are the field returns they would complete in time of emergency. Other unavoidable peacetime administration should be the responsibility of the Regular Army increment.

The Commission wishes to point out that this division of responsibility for administration between the Militia and the Regular Force is not to be taken literally. There is a firm requirement for a complete review of the present administrative procedures in order to eliminate senseless and useless detail and thus reduce both the number and frequency of submissions. There are many instances where a handwritten message or a telephone report would suffice.

Page 24

Reports and returns appear to multiply with the rapidity of the amoeba and with as much purpose. Control can be exercised over one source of this multiplicity of administrative detail. Reports are initiated to prevent a recurrence of an incident which has caused some embarrassment. It then becomes a permanent requirement even though the probability of a repetition of the incident is extremely remote.

At the present time there are 332 call-outs under Canadian Army Order 94-2. This full-time assistance, provided Militia units to cope with administrative detail and QM Stores, is insufficient to

meet present administrative loads. The annual cost in excess of $1.5 million dramatically points out the urgency for a complete review of the administrative process.

Recommendations:

(*a*) That a complete review of the present administrative procedures be carried out with a view to eliminating costly practices and give Commanding Officers more authority.

(*b*) That units, as far as their involvement with administration is concerned, be on a modified field return basis.

ATTESTATION

The system of re-engagement every second year is not conducive to the development of a Militia-career attitude. The militiaman should be motivated not by the thought that he has joined for a short period, but by the fact that he has a vital role to play with career prospects throughout his Militia life. The present re-engagement policy works against this concept. It is responsible for unnecessary paperwork and the requirement of re-engagement, as it arises, in many cases forces a decision on the part of the individual to withdraw from the Militia. Page 25

The Commission is of the opinion that the present system of attestation on a parallel basis to the Regular Army is unnecessary and time-consuming. For normal enlistment in the Militia the card which was in use by the Non-Permanent Active Militia prior to World War II is all that is required. This card was an accepted document and contained all the essential personal details, medical report, and record of service.

Further, the enlistment of a private soldier should be done within the unit and completed on the parade at which the recruit presents himself.

Under certain circumstances, e.g., promotion to Junior NCO, the full attestation including personnel selection might be considered. The time for this is later in the career of a militiaman, not at the beginning.

Recommendations: Page 26

(*a*) That the system of re-engagement every second year be abolished.

(*b*) That a simple enrolment document be introduced and processed entirely within the unit.

BOARDS OF INQUIRY

With respect to the handling of Boards of Inquiry, there are several suggestions the Commission wishes to make and see implemented.

Firstly, it is our considered opinion that the requirement for Boards of Inquiry for minor losses is quite wrong. The most satisfactory solution to this problem is that part of the responsibility of Commanding Officers should be delegated authority to write off minor losses.

Secondly, under the present system of investigation a militiaman injured on duty must await the outcome of the inquiry before any payment is made. This is an unreasonable hardship and frequently means he is without income until he is able to resume his normal employment. Proof of attendance on parade or on an exercise, as evident from attendance rolls or Part II Orders, should protect the militiaman from monetary hardship and make him elegible for
Page 27 whatever compensation he is entitled to. In other words, an injured militiaman should receive his daily entitlement from the time of injury or illness incurred on duty. It will be the exception to the rule when "recovery of pay" action must be taken due to disqualification and this, in most cases, can be arranged. The principle of penalizing all to prevent an insignificant loss in isolated instances is grossly unfair.

Thirdly, the Commission consider it appropriate that Regular Army officers attached to units should be responsible for Boards of Inquiry being completed in an acceptable form. The frequent return of Boards of Inquiry for minor corrections delays action and teaches very little. A single submission should suffice.

Recommendations:

(a) That Boards of Inquiry for minor losses, injuries, and the like are not necessary and a Commanding Officer's certificate should suffice.

(b) That Commanding Officers be authorized to write-off minor losses.

(c) That Regular Army Officers, attached to units, be responsible for any necessary Boards of Inquiry being completed in an acceptable form.

Page 28

ACCOUNTING

The Regular Forces agree that the present system of accounting for stores and monies is archaic and should be drastically revised. Imposed on the Militia units it creates an enormous burden of administrative detail which has little resemblance to normal business procedures for the control of expendable stores and equipment. In particular, the accounting procedures for non-public funds are completely out of proportion to the amount of money involved and the nature of the activity. Regulations require that regimental institutes, e.g. canteens, should bank daily, but Militia institutes may only function one night a week. An observation demanding an explanation why banking was not done daily does nothing to endear the system or its interpreters to harassed Commanding Officers.

The same criticism applies to inspections which units must endure. An item by item count of low cost stores is presently the practice and it may be safely stated that the deficiencies determined by this method are only a fraction of the cost of carrying out the inspection. Until such time as the Regular Force accounting procedures can be sensibly revised, some relief should be given to Militia units. The present system of accounting, especially in con-
Page 29 nection with the operation of institutes, requires far too frequent returns. Accounting can and should be simplified and be on an annual basis. Non-public funds should be completely administered by trustees appointed by Commanding Officers.

A most vexing situation is related to the accounting for expendable items of stores, e.g., clothing. If an article is missed in the account and charged but later found surplus, taking it back on charge is a major operation. Conversely, deficiencies of literally worn-out clothing can only be written off at the full replacement value. Depreciation is universally recognized in the business community for capital goods and replacement stores. The Services do not recognize this accepted principle but insist on accounting for all items at their original cost. The result is that equipment and stores in the custody of units have an artificial value. It is probable that the real value would be something less than 50% of the book value yet it is the book value total that is the responsibility of Militia units. An agreed percentage of depreciation should be established and Commanding Officers should have the authority, after proper investigation, to write off deficiencies without the laborious process of convening a Board of Officers. This problem is particularly severe in attempting to adjust losses of issued equipment to militiamen who become non-effective. A reasonable effort should be made in every circumstance to recover the equipment, but when investigation shows clearly this is a near impossible task, the means of closing the matter should be available to the Commanding Officer. Page 30

Recommendations:

(*a*) That the accounting requirements of the Militia unit should be reduced to a reasonable level consistent with funds involved and the rate of turnover.

(*b*) That Area inspections should be revised to be less frequent and more realistic by a proper balance between inspection costs and the likelihood of serious deficiencies. Sampling with a scheduled number of detailed inspections should satisfy the requirements.

(*c*) That annual depreciation should be recognized and a system established whereby the percentage of depreciation becomes the write-off authority of the Commanding Officer.

PAY

The present system of per diem pay for Militia training is responsible for a heavy burden of administrative effort and is largely ineffective. A militiaman can qualify for a day's pay by attending every fourth parade. This means attendance during the training season of 25% entitles him to that proportion of annual training pay, despite the fact that the training he has received is of little value.

Part II of the Report will contain the detail of a new pay system, based on the bonus concept, which will eliminate administrative detail and provide an incentive to attend parades. Instead of a daily rate, the pay will be based on training blocks requiring 60% attendance to qualify for any bonus. A militiaman who, during the training season including summer camp, attends more than the minimum requirement for each block will receive an additional bonus. The total for full attendance in no case would exceed the net pay for full attendance under the present system. Page 31

As already indicated, it is our opinion that the emolument paid to the militiaman should be referred to, and classified as, a bonus

and not pay. In this way income tax would be deducted at source so that the bonus received would be free of any further taxation, a desirable feature in the minds of militiaman. It would eliminate preparation and processing of approximately 70,000 T4 forms annually by the Department of National Defence and the Departmemnt of Revenue. Further, it would reduce the present cumbersome paperwork to the completion of two simple forms.

The Commission also discovered that one of the several administrative burdens associated with this subject is that of unclaimed pay. To combat this evil it is suggested that all militiamen be required to sign a statement to the effect that when they fail to claim their entitlement within 30 days after the final pay parade of
Page 32 the pay year the monies are forfeited and can be placed in regimental funds for the benefit of the unit as a whole.

It is the opinion of the Commission that a revised pay system will provide an incentive to the individual militiaman to attend parades. An important by-product will be a substantial reduction in administrative paperwork.

Recommendation:

That the present system of per diem pay be abolished and a bonus system substituted with tax deducted at source.

SPECIAL EXPENSES

Officers, Warrant Officers and Senior NCOs, on assuming these appointments, must undertake mandatory financial commitments. They must provide themselves with a minimum scale of uniforms. This can easily exceed their total net income from Militia sources for a two year period.

The Income Tax Act recognizes that a person in his own business has unavoidable expenses in connection therewith and provides for the deduction, at a reasonable scale, when properly documented. The same principle should also apply to an individual who, on his own time, undertakes an important national duty which involves personal expenses. It is both logical and fair that serving militiamen
Page 33 should be allowed, as deductible expenses, financial outlays required by their respective units for uniforms.

Recommendation:

That reasonable expenses related to purchase of required kit appropriate to officers, Warrant Officers and Senior NCOs be an allowable income tax deduction.

CONTINGENCY ALLOWANCE

The Contingency Allowance exists for the employment of clerical assistance, the care and maintenance of arms, clothing and equipment and to promote the general efficiency of the unit.

The Contingency Allowance is related to the efficiency of the unit but the criteria for the total entitlement is based on effective strength. This produces two evils. First, because of the criteria, units are reluctant to declare a militiaman non-effective. Second, because of the efficiency element the Commanding Officer is never certain of his unit's entitlement until granted.

A more sound approach would be to allocate a basic amount to units which the Commanding Officers would clearly know as receivable and could plan accordingly. This amount should be paid at the beginning of the training season and should be complemented by a bonus based on the assessment of the all-over efficiency of the unit determined by annual inspection and performance at summer camps.

Recommendation: Page 34

That Contingency Allowance entitlement should be altered to consist of two payments:

(a) a basic amount payable to major and minor units at the beginning of the training season; and

(b) payment of a bonus in addition, to be determined by the over-all efficiency of the unit.

ARMOURIES

The control of armouries requires intelligent revision. The present arrangement, overburdened with administrative detail, is a full-time job for an officer. Commanding Officers should have more authority in making armouries available particularly in smaller communities for local functions. The matter of public liability, fire protection, and other like matters, should be established on a permanent basis so that armouries could be used for public purposes with the minimum of delay and administrative detail.

Recommendation:

That the present administrative system for control of armouries be revised with a view to making it more efficient and that a greater degree of authority be delegated to Commanding Officers in the sphere of public use of these facilities.

COMPOSITE STORES, ORDERLY ROOMS AND MESSES Page 35

During the course of our investigation we learned that some armouries housing several units were successfully operating composite stores and orderly rooms. There were instances where complaints were received but it was apparent that the complaints were related to local organization rather than to the principle. There are still armouries housing several units where there are separate officers' and sergeants' messes, QM stores and orderly rooms for each of the units. At the same time, there is a lack of adequate space for training requirement and men's canteens. In some cases private soldiers have no place to go after parade and proper recreational facilities should be provided.

Recommendation:

That, where savings in space and personnel are required, composite stores, orderly rooms and messes be established.

DISPOSAL OF SURPLUS ARMY BUILDINGS

The survey of ineffective units will result in Department of National Defence property becoming surplus. In large communities their continuing use may not be as important as in smaller centres.

Page 36

It is our opinion that good facilities should be leased to communities at a nominal rate with the understanding that they become immediately available in the event of an emergency. The name of the unit should be preserved in the redesignation of the building as a community or recreational centre. Responsible citizens in that community should become the custodians of public furnishings for which there is a continuing use.

In instances where disposal by sale of Army property is desirable, proceeds from such sales should remain under the control of the Department of National Defence. This would enable the Department to improve facilities where urgency requires, without the agony of securing funds in the annual estimates. There are instances where units have been promised new facilities for 25 years and the fact that these units still exist is quite remarkable. If funds were paid into a capital pool it would provide an additional incentive to the Department to dispose of and get a realistic price for surplus properties.

Recommendations:

(a) That, where practicable, facilities declared surplus be leased to communities at a nominal rate with the understanding that they become immediately available in the event of an emergency.

(b) That, in the case of facilities declared surplus to requirements and disposed of by sale, the monies resultant remain under the control of the Department.

Page 37

THE DEFENCE ASSOCIATION OF CANADA

The Commission has considered the role of the Conference of Defence Associations and its relationship to the Militia and has concluded that this organization can be a useful body in the future.

The Commission consider that much would be gained if the Conference of Defence Associations were re-designated "The Defence Association of Canada". This concept envisages the Association as a single body with delegates appointed on a representational basis from the existing units of the reorganized Militia. As such the Defence Association will become the voice of the Reserves and should be able to speak with greater force and clarity than can the present Conference of Defence Associations which is essentially a reconciling and discursive forum. It is further considered that representation be limited to serving officers of the Reserve or to honorary colonels and honorary lieutenant colonels, or equivalent appointments, and to serving presidents and secretaries of the Corps Association. The present practice of selecting delegates remote from close association with the Reserves tends to negate the usefulness of the organization.

Page 38

In conformity with this idea of only one body representative of the Militia is the suggestion that present allocations of funds made

separately to the Conference of Defence Associations and the Corps Associations be given, in total, to the re-designated Defence Association which would assume the control and responsibility for its disbursement.

With regard to Corps Associations, the Commission is of the opinion that they perform a useful function but should act in a subsidiary capacity only to the re-designated Defence Association. Additionally they should be self-supporting from membership dues.

Recommendations:

(a) That the present Conference of Defence Asociations be re-designated the Defence Association of Canada and function as such after the annual conference of Defence Associations in January, 1965.

(b) That delegates to the Defence Association of Canada be appointed on a representational basis from existing units of the reorganized Reserves and that this representation be limited to serving officers or to honorary colonels or honorary lieutenant colonels, or equivalent appointments, and to serving presidents and secretaries of Corps Associations.

(c) That Corps Associations be self-supporting.

(d) That the re-designated Defence Association of Canada be the recipient of the present total allocation of funds and that it assume the control and responsibility for its disbursement.

SOURCE OF FUNDS

Page 39

Many of the recommendations have attached to them an element of cost. This immediately raises the question of providing funds in order to put them into effect. The detail of cost reduction is contained in Part II of the Report, but it is possible to make an estimate of expected release of funds which will result from the reorganization. Consideration of the recommendations contained in Part I would be incomplete without some indication of funds which can be diverted from operation and maintenance costs.

The funds which may become available are estimated at $5,000,000. The sources which will provide this amount are the following:

Mil Group Headquarters	$ 700,000
Manning Depots	400,000
PSUs	100,000
Dental Units	100,000
Rentals	250,000
Armoury Maintenance	350,000
Call-outs	1,600,000
Changes in Pay and Reduction in Travelling Costs	1,500,000
Total	$5,000,000

Page 40

It is imperative that funds released through reduction in operating and maintenance costs should be retained for the purpose of

providing the Militia with the necessary financial support to meet the objectives spelled out by the Terms of Reference. This is consistent with the declared policy of the Department of National Defence and the only means of effectively re-establishing a Militia capable of undertaking the roles assigned to it within the Defence Policy.

In addition to the above there will accrue considerable savings in other areas from, for example, revised establishments, reduction in the number of units, COTC and PROs.

An efficient Militia is by far the least expensive method of providing a reserve for the Regular Forces.

IMPLEMENTATION

The Commission does not consider its responsibilities fully discharged with the presentation of the Report, but is prepared to assist in the effective implementation of the recommendations when approved. The Commission would like to state at this point that the Regular Forces have been cooperative in providing information,
Page 41 but are not in any way responsible for the conclusions. It is equally important that they should be divorced from the responsibilty of implementation.

Implementation, to be fully successful, must be carefully planned and under constant direction and control. The Commission submit that implementation must take cognizance of those recommendations concerning with reform and infusion of esprit as well as those concerned with increased efficiency and elimination of wasted effort. Concurrent implementation of recommendations in both categories is necessary to ensure the revitalization of the Militia.

A proposal for implementation, which is respectfully submitted for consideration, is as follows:

1. That the Commission should continue at the pleasure of the Minister and be available to review progress and to advise the Minister as required;

2. That the Secretary loaned to the Commission should remain seconded to be the Commission's representative during implementation. This officer has been closely identified with the Militia for 15 out of the past 19 years of his service career. In addition, he has been with the Commission during all interviews and during the discussions held at meetings. In consequence, he is thoroughly familiar with the intent of the recommendations;

3. That the Chairman be available to the Secretary from time to time for consultation as required.

Appendix A

THE COMMISSION ON THE REORGANIZATION OF THE CANADIAN ARMY MILITIA

Page 42

TERMS OF REFERENCE

The Militia has long fulfilled an historic role in the national security of Canada and its existence in peace has come to be regarded and accepted as a prerequisite to an effective mobilization base in the event of hostilities. Like all military forces, change to its roles and organization has been necessitated in the past to meet the needs of both changing strategical concepts and the priorities in the overall defence effort.

The Militia has been reorganized on four occasions since the First World War; following the Otter Committee in 1919-20, in 1936, in 1946 and again in 1954, when as a result of the Kennedy Report the Militia was reorganized into a number of Militia groups. It is noteworthy that each of these reorganizations involved conversion, amalgamation, dormantization and disbandment of units.

During the period 1946 to 1959 the roles of the Militia appeared to be obscurely defined. In 1959, although there was no change in organization, the roles of the Militia were changed by Order-in-Council PC 656 of 28th May to emphasize Civil Defence. In consequence, the total energies of the Militia were focussed, in the then unsettled international situation, on National Survival and training in the roles of support of the Field Force and Internal Security were relegated to an insignificant priority. Any consideration of the Militia as a factor in the "forces in being" concept was limited by this emphasis on the role of National Survival.

Studies conducted both within the Canadian Army and with our Allies, in the context of our international commitments and in the nature of the changed political-military world climate, have indicated that there is a definite and undoubted continuing military requirement for the Militia in the roles of support of the Field Force, Internal Security and National Survival.

To obtain a valid perspective of both national and informed military opinion as well as regional considerations in this matter it is most desirable to take advantage of the judgment of a group of Page 43 select gentlemen across Canada who have had considerable experience and background with the Militia. To this end, the Commission is given the task of recommending to the Minister of National Defence the best means of fulfilling the Militia requirements of the Canadian Defence Policy and the changes which should be made in the organization of the Militia to carry out its revised roles more efficiently and realistically.

The concept of the roles of the Militia is outlined in these Terms of Reference for guidance. Amplification of the requirements will be provided separately. In general terms an efficient and fit Militia is required to implement fully its part in the National Defence Policy.

In its primary role, there is a military requirement for the Militia in support of the Regular Army. The Emergency Defence Plan calls for the withdrawal of Regular Army personnel from the Defence of Canada Force and static installations to bring the Field Force up to war establishment. The Militia will be required to form

the framework for logistic and special units which are not provided in peace time. It is foreseen that approximately 9,000 Militiamen would be needed for these two tasks within this role.

The second role for the Militia is to provide a training force which will be required in time of emergency to support the Field Force. In this role, the Militia must provide for the immediate and effective mobilization of three training brigade groups to replace the Regular brigade groups despatched overseas and to provide the source of trained reinforcements for these forces overseas. In the initial stages this training force will be organized along the lines similar to the Field Force but with only training scales of equipment. It will be built up in stages in accordance with the situation existing at the time and it must also be available for the Defence of Canada and other tasks. Preliminary investigation reflects a requirement of approximately 18,000 officers and men.

The opportunity of training, equipping and committing Militia units overseas is unlikely in the early stages of a future conflict except for special units.

In its third role, Internal Security, the Militia will be required to provide trained officers and men for the guarding of Key Points, Internment Camps and like duties. It is estimated that there could be a requirement for at least 2,500 Militiamen to be immediately available for these tasks in time of emergency.

Page 44 Its fourth role will be to assist in fulfilling the Army's National Survival responsibilities. There is the need for special Militia units to be available and trained to augment the Regular Army to staff, on a 24-hour basis, various National Survival installations. For this requirement it is estimated that a total of 1,500 officers, men and women of the Militia will be needed.

Notwithstanding, it must be recognized that in the event of an all-out nuclear war all military forces would be employed on Survival operations. Therefore, the Militia with all available Regulars would be required to provide a framework for the conduct of Survival operations using large numbers of civilians.

Based on studies of the continued requirement for the Militia, it is concluded that a strength in the order of 30,000 officers and men is required to fulfill the above roles.

In order that the maximum benefit may accrue from the examination of this complex problem by the Commission, it is essential that the scope of their studies embrace certain definite aspects of the organization, the training and the administration of the Militia. The Commission is, therefore, invited to consider the followng problem areas related to the Militia in fulfilling its roles within the Defence Policy.

The study of the reorgazination of the Militia should determine the suitability of the present Militia group system in relation to the requirements of war and the training needs in peace as reflected in the Canadian Army plans. There are many facets which require the closest scrutiny such as the distribution of units on the basis of both population and regional military requirements, the distribution of units vis-a-vis accommodation to avoid the extreme of either too many or too few units to each armoury, and the distribution of units to eliminate unproductive competition for available manpower caused by an excess of units of the same corps in the same locality. Other factors to be considered are the availability and suitability of

capital plant, such as armouries, and the cost/effectiveness of all units. Conclusions should lead to recommendations on the numbers, types and locations of units of each corps that should remain in the Order of Battle of the Militia, and the ultimate selection of units and headquarters for conversion, amalgamation, dormantization, or transfer to the Supplementary Reserve.

The training of the Militia requires study of the need for con- Page 45
stant physical fitness of all ranks for immediate service, the training assistance required from the Regular Army and appraisal of the best method of training that can be achieved in the present day pattern of living. Particular examination is needed of the effect of the five-day work week on training to determine the practicability and effectiveness of Local Headquarters training on weekends as opposed to conducting this training in the evenings thereby releasing armouries for courses during the week.

In the broad compass of administration within the Militia the problem, simply stated, is that far too much time is spent in day-to-day administration to the prejudice of time for training. Examination of this aspect of the Militia should include such matters as the use of composite stores and orderly rooms in each armoury, as well as permanent Regular Army assistance to the Militia, and should result in recommendations that may reduce the workload.

A reorganization of this magnitude is both important and complicated and must necessarily take into account many factors and considerations. It will be appreciated that detailed information has not been included in these Terms of Reference but rather a general statement of the problem and an outline of the problem areas. Any information that the Commission desires will be afforded by personal communication with the Chief of the General Staff and Branch Heads at Army Headquarters, General Officers Commanding, Area Commanders, Militia Group Headquarters and units, as well as by staff briefings at the convenience of the Commission. During the course of its deliberations, it is asknowledged that the Commission will also consult with the Conference of Defence Associations, through its Executive.

It is recognized that the Commission will critically examine each element of the Militia programme in terms of a more effective contribution to the National Security which demands combat readiness as its key note. It is expected of the Commission to recommend the selection of units to meet the aim of a reorganized Canadian Army Militia, methods by which this may be accomplished, as well as solutions to other questions relative to the place of the Militia in the defence of Canada.

Appendix B

Page 46

LIST OF BRIEFS

The following is a list of unsolicited briefs received by the Militia Commission from public-spirited citizens. Many other briefs were submitted by serving personnel of the Militia and the Regular Forces, either as individuals or in their official capacity. Only those which deal with the reorganization generally are included in this list.

George Addy, Esq., Ottawa, Ont., *Role of the Militia*; (statement on the roles for the Militia and the order of priority which should be followed).

W. R. Buchner, Esq., London, Ont., *Reorganization of the Militia*; (a specific review of the Militia concept in relation to the maintenance of law and order in time of emergency).

L. S. Caughill, Esq., Campbellford, Ont., *Militia School of Canada;* (proposal outlining the requirement and establishment of a central training school to run specific courses applicable to the Militia).

Brigadier M. E. Clarke, ED, CD, Peterborough, Ont., *Reorganization Canadian Army (Militia)*; (assessment of the roles of the Militia and constructive suggestions for accomplishing the task facing the Militia Commission).

G. L. Chatterton, MP, *Canadian Scottish Regiment (Princess Mary's)*; (regarding the concern of the people in the Vancouver and Victoria area with respect to the future of the Regiment).

G. J. Colwell, Esq., Halifax, N.S. through Gerald A. Regan, MP, *Princess Louise Fusiliers* (facts concerning the unit with an appeal that it be maintained within the Militia structure).

Lt Col J. M. Coupland, CD, Montreal, PQ, *Militia Administration*; (an examination of the state of Militia administrative procedures with recommendations for improvements).

Page 47

Jack Davis, MP, *Irish Fusiliers of Canada*; (enquiry as to the future status of the Regiment and enclosing a brief on the history and achievements of the Irish Fusiliers of Canada).

Brigadier W. P. Doohan, OBE, CD, London, Ont., *Establishments*; (development of the theory that units should have an establishment containing a training component and a reinforced component).

Lt Col Ian Douglas, Toronto, Ont., *Reorganization of the Militia*; (an analysis of the problems facing the Militia today and suggestions for its reconstitution).

Roy Farran, Esq., Calgary, Alta., *Guerrilla Warfare*; (a proposal advocating that Reserve units be trained for a guerrilla role).

Frank J. W. Fane, MP, *Vegreville Armoury, Alberta*; (concerning the future of the Armoury).

H. J. Henderson, Clerk-Treasurer, Grey County, *Grey and Simcoe Foresters*; (a resolution from the County of Grey endorsing one from the County of Simcoe requesting that the Grey and Simcoe Foresters be continued as a Militia unit).

W. A. Hack, Clerk-Treasurer, Midland, Ont., *Grey and Simcoe Foresters*; (resolution by the Town of Midland requesting that the unit be preserved).

J. W. Langmuir, Esq., Brockville, Ont., *The Brockville Rifles*; (in support of the continuance of the unit).

Lt Col B. J. Legge, ED, Toronto, Ont., *University of Toronto, UNTD, COTC, RCAF*; (concerns history, purpose, training plans and operations with suggested areas of economy).

Colonel M. V. McQueen, OBE, ED, CD, Dundas, Ont., *Plan for a Revitalized Militia*; (advocates the formation of a number of mobile, motorized, composite defence columns across Canada).

Colonel C. C. I. Merritt, VC, ED, QC, Vancouver, B.C., *Reorganization of the Militia*; (a general critique with proposals on the future role of the Militia).

The Honourable J. Waldo Monteith, MP, *Perth Regiment*; (representation on behalf of the continuance in being of the Perth Regiment).

Sherwood H. Rideout, MP, *8th Canadian Hussars (Princess Louise's)*; (concerning the future of the unit). Page 48

The Honourable Louis J. Robichaud, Premier of New Brunswick, *8th Canadian Hussars (Princess Louise's)*; (transmittal of a brief on this Regiment by Edgar Dixion, Sackville, NB).

P. B. Rynard, MP, *Grey and Simcoe Foresters*; (enquiry as to the future of the unit).

Lt Col J. Philip Vaughan, CD, Halifax, NS, *Royal Canadian Engineers*; (presentation by the Military Engineers Association of Canada regarding Militia Engineer Squadrons).

Eric Winkler, MP, *Grey and Simcoe Foresters*; (enquiry as to the future of the unit).

General F. F. Worthington, CB, MC, MM, CD, Ottawa, *Views on the Militia*; (containing suggestions for improving the quality of the Militia).

Lt Col F. S. Wotton, CD, Oshawa, Ont., *Reorganization of Militia*; (a proposed method of reorganization along service battalion lines).

APPENDIX B

Note—Original pagination of this Report is indicated in the margin.

REPORT OF THE MINISTERIAL COMMITTEE ON THE ROLE AND ORGANIZATION OF THE ROYAL CANADIAN NAVAL RESERVE

Letter of Transmittal

Ottawa, Ontario.
15th FEBRUARY, 1964.

The Honourable Lucien Cardin, M.P.,
Associate Minister of National Defence,
Ottawa, Ontario.

Sir:

At the 1964 Conference of Defence Associations a resolution was passed (copy annexed) requesting the setting-up of appropriate committees of the Conference to enquire into and bring forth recommendations directed to the structure, operational capability and establishment of the Royal Canadian Navy Reserve and the Royal Canadian Air Force (Auxiliary). Pursuant to this resolution and after discussion on the floor of the Conference and with the Executive of the Conference, committees were duly established in pursuance of your letter of the 17th January, 1964, to Lieutenant-Colonel LeSueur Brodie, E.D., then chairman of the Conference of Defence Associations. As a result the committee for the Royal Canadian Naval Reserve was established and consisted of the following members:

Commodore Robert I. Hendy, V.R.D., C.D., RCNR(Ret'd)
Chairman

Captain L. B. McIlhagga, C.D., RCNR(Ret'd)

Captain W. R. Inman, C.D., RCNR(Ret'd)

Captain A. W. Ross, V.R.D., RCNR(now Ret'd)

In connection with the work of the Committee, we wish to emphasize that where comments of a critical nature appear in the presentations to the Committee that these were done in the best of faith to ensure an effective and viable Reserve Force. Presentations were, for the greater part, made by officers of the Naval Reserve whose interest in the welfare of the Navy as a whole is unquestioned but who perhaps have not had an opportunity to air their views in the circumstances provided by the Committee heretofore. We feel bound to point out that the fact where criticism appears in some presentations this was not dictated by any lack of loyalty but rather in the hope of ensuring that the Committee's report will be useful and objective. It would seem that some consideration might be given to the establishment of a continuing body to ensure that the views of experienced persons outside the Regular Service who are sincerely concerned with matters of national defence may be heard. In this regard the Conference of Defence Associations would seem to be admirably suited, being composed of personnel from all three Services. We feel we should make this suggestion as perhaps a collateral

observation not directly connected with the purposes behind the formation and work of the Committee for such consideration as you may see fit.

Due to the great interest evinced in the establishment and work of the Committee, written briefs have been received up until the final draft of this report. It has, therefore, not been possible to comment adequately on all this material which has however been indexed and forms appendices to the report. Further material is expected after the presentation of this report, which will be forwarded for such action as may be appropriated. The Committee is aware that there are many differing opinions contained in the written material but in summarizing our findings and recommendations we have endeavoured to weigh the presentations given both orally and by written brief. The number and diversity of the many suggestions received certainly indicate room for further examination to which the comments in the next preceding paragraph may be deemed germane.

In conclusion, the Committee wishes to express its appreciation for the confidence that you have placed in it. It is hoped that notwithstanding the shortness of time and in perhaps some cases the cursory manner in which many topics have had to be dealt with that the report will be of value and assistance. We wish to express our appreciation to you, your assistant, Brigadier H. E. T. Doucet, members of your staff and personnel in all Commands of the Navy who gave us much assistance, thereby facilitating our work and deliberations. This Committee has now therefore completed its work and respectfully presents the annexed report for your consideration.

We have the honour to be, Sir,

Your obedient servants,

Robert I. Hendy (Chairman)
Liston B. McIlhagga (Member)
W. Robert Inman (Member)
Andrew W. Ross (Member)

Page i

REPORT OF THE MINISTERIAL COMMITTEE ON THE ROLE AND ORGANIZATION OF THE ROYAL CANADIAN NAVAL RESERVE

Table of Contents

	PAGE
I. Factors relating to the Formation and Operation of the Committee	1
II. Background of the RCNR with Historical Comparisons	4
III. Basis for the Requirements for the RCNR	5
IV. Comments on Reductions Planned for the RCNR	6
V. The Role and Tasks of the RCNR	6
(i) General support of RCN	6
(ii) The RCNR as a force-in-being	8
(iii) Representation and Presence	9
VI. Particular elements in the Organization of the RCNR	9
(*a*) Complement, Manning and Turnover of Personnel	9
(*b*) Naval Training by RCNR Personnel	12
(*c*) Training Sylabus and Procedures	12
(*d*) The UNTD	14
(*e*) Naval Reserve Air Squadrons	15
(*f*) Medical Procedures	17
(*g*) Clearance Diving	17
VII. Factors relating to Indirect Costs of the RCNR	18
(*a*) The Commanding Officer Naval Divisions Command	18
(*b*) RCN Recruiting Organization	20
(*c*) Navy League activities—Sea Cadets, Navy League Cadets—Summer Camps	21
(*d*) RCN support and activities in relation to Naval Divisions	23
VIII. Factors relating to Direct Costs of the RCNR	25
(*a*) General Financial and Budgetary Considerations	25
(*b*) Pay and Allowances	29
(*c*) Administration procedures in Naval Divisions	29
(*d*) Utilization of Accommodation	30
IX. Analysis of possible economies and comments on Divisions scheduled for closing	31
X. Summary of Findings	40
XI. Summary of Recommendations	45
XII. Schedules:	
1. Letter of Chairman of Committee, 21 January, 1964	
2. Reprint of article from Atlantic Advocate—June, 1962	
3. January 1964 Issue of Navy League (reference at Page 15)	
4. Proposed RCNR Complement	

5. Complement/Manning of Divisions deleted
6. RCNR Personnel statistics
7. Breakdown supplied by COND of Expenditures relating to Naval Divisions—1 April 1963 to 31 March, 1964
8. UNTD Promotions 1960-1963
9. RCNR Active Lists Complements
10. CNP Memorandum, NSS 2200-64 Pers (N) "M" dated 28 November 1963

XIII. Appendices—Briefs and other written material filed with the Committee: Page ii

1. CO, HMCS PREVOST
2. NOAC, London and district
3. Captain G. A. MacLachlan, RCNR (Ret'd)
4. UNTD, Western University
5. NOAC, Sarnia Branch
6. NOAC, Windsor, Ont.
7. NOAC, Windsor, Ont.—Supplement by RADM W. Hose, CBE, RCN (Ret'd)
8. CO, HMCS STAR
9. Kitchener Tender to HMCS STAR
10. HMCS YORK—LCDR F. M. McKee
11. CO, HMCS DISCOVERY
12. Reserve Pay Procedure
13. IBM Data Processing
14. Chief and Petty Officers, HMCS DISCOVERY
15. Assistant Area Officer Sea Cadets, Pacific
16. Navy League of Canada, B.C. Mainland Division
17. NOAC, British Columbia
18. UNTD, HMCS DISCOVERY
19. University of British Columbia
20. CO, HMCS MALAHAT
21. Chief and Petty Officers' Association, Victoria
22. NOAC Victoria
23. CO, HMCS NONSUCH
24. CO, HMCS TECUMSEH
25. Chairman, Divisional Group, Naval Reserve Consulting Group, Calgary
26. CO, HMCS QUEEN
27. Supplement to QUEEN's Brief
28. HMCS QUEEN—LCDR Beesley
29. HMCS QUEEN—LCDR Cheesman
30. CO, HMCS CHIPPAWA
31. Supplement to CHIPPAWA's Brief
32. Navy League of Canada, Manitoba Division
33. NOAC, Winnipeg
34. NOAC, Lakehead
35. CO, HMCS GRIFFON
36. CO, HMCS HOCHELAGA
37. XO, HMCS DONNACONA
38. Staff Officer, DONNACONA
39. Supply Officer, DONNACONA
40. HMCS DONNACONA—LCDR Williams
41. CAPT D. F. Mason, RCNR (Ret'd)
42. CDR W. D. Moncur, RCNR (Ret'd)
43. Navy League of Canada, Montreal Branch

44. CO, HMCS DONNACONA
45. Brief by CAPT Mason and CDR Moncur
46. CO, HMCS UNICORN
47. HMCS CATARAQUI—LT Fulford
48. HMCS CATARAQUI—LT Slack
49. HMCS CATARAQUI—LCDR Berry
50. CO, HMCS SCOTIAN
51. NOAC, Halifax Branch
52. HMCS SCOTIAN—Proposed RCNR Pay System
53. CO, HMCS BRUNSWICKER
54. CO, HMCS CABOT
55. CO, HMCS QUEEN CHARLOTTE
56. CO UNTD, QUEEN CHARLOTTE
57. NOAC, PEI Branch
58. CO, RCSCC Kent
59. CO, NLCC Hyndman } CHARLOTTETOWN
60. Main Brace Veterans' Assocn. }
Page iii
61. CO, HMCS CARLETON
62. Navy League of Canada, Ottawa Branch
63. NOAC, Ottawa
64. LCDR Gaunt, RCNR, Lecturer at CMR
65. NOAC, National Group
66. Navy League of Canada, National Secretary
67. SNO, Toronto Area
68. NOAC, Toronto
69. NOAC, Montreal
70. Navy League of Canada, N. Alberta and Edmonton Branches
71. NOAC, Edmonton

XIV. Minutes of Hearings at:

(*a*) London
(*b*) Hamilton
(*c*) Toronto
(*d*) Victoria
(*e*) Vancouver
(*f*) Edmonton
(*g*) Regina
(*h*) Winnipeg
(*i*) Montreal
(*j*) Halifax (not yet received)
(*k*) Ottawa (not yet received)

I—FACTORS RELATING TO THE FORMATION AND OPERATION OF THE COMMITTEE

Because the Committee was formed on short notice, time did not permit extensive preliminary research and it was not practicable to visit every Naval Reserve Unit or Centre, however either written or oral presentations were made to the Committee from all but two centres where RCNR units are located, namely Prince Rupert and Quebec City. Those units which were visited were considered to be representative and opportunities were given for representations to be made from persons or organizations in centres other than those visited by the Committee. The Committee would like at the outset to express its appreciation to all who took the trouble to prepare material for submission and who appeared before it. The high degree of interest evinced in the future of the Royal Canadian Naval Reserve (RCNR) was in the Committee's opinion, the most tangible evidence of the importance which this group plays in the defence establishment of the country. This constitutes assurance, that there are in this country many persons actively interested in this aspect of our national life. The opinions and submissions made before the Committee by the various persons and organizations were on the whole of a constructive nature and where written submissions were presented, these have been included in this report as Appendices which have been indexed separately. Much thought and study obviously went in to the preparation of the material presented to the Committee which greatly facilitated the work in the preparation of this report. In addition to the many experienced voices which the Committee was privileged to hear in respect to the role and organization of the RCNR, the Committee feels it is only reasonable to point out that the Committee itself constitutes an accumulated service in the RCNR of some one hundred years and the members of the Committee have probably unconsciously in some cases, drawn on their own experience in arriving at opinions where perhaps sufficient material of an appropriate nature was not forthcoming in the course of the hearings. In this regard the members wish to emphasize that they have taken an objective and unbiased approach to the matters under review.

Terms of reference for the Committee were outlined in the letter of the Honourable Associate Minister of National Defence on the 17th of January, 1964 to Lieutenant-Colonel LeSueur Brodie, E.D., Chairman of the Conference of Defence Associations in the following words:

> The Committees have been requested to put before the Associate Minister of National Defence, their views concerning the future role and composition of the RCNR and RCAF Auxiliary. They have also been requested to propose alternatives to the presently planned reduction if in their views such alternatives are preferable, but they should bear in mind that the equivalent savings of the direct and indirect costs of the RCNR and RCAF Auxiliary must be achieved.

It early became apparent in the hearings that some material would be presented which might not directly relate to the role and organization of the RCNR and where contained in written briefs this material could not be rejected. The Committee also felt that

in view of the instructions that equivalent savings in direct and indirect costs of the RCNR must be achieved, there was a wide area where certain costs were incurred in respect to other items in the Naval appropriation which might or might not be considered as strictly attributable to the RCNR but were in fact being charged to it. Putting it another way the Committee felt that some latitude had to be given in hearing submissions on the matter of costs and operation which, if implemented, would result in obtaining a better result for the money being spent for Naval defence and its particular component as comprised in the RCNR.

On the opening of each session of the Committee, the Chairman outlined to those present the terms of reference summarized in the letter of the Honourable the Associate Minister of National Defence of 17 January 1964, the background of the Constitution of the Committee through the Conference of Defence Associations and read the Naval Board Minute of 9 November 1960 outlining the role and tasks of the RCNR as follows:

Page 2

The Role

To provide Naval personnel and facilities in support of the RCN.

The Tasks

(i) To provide personnel who will be readily available to activate or augment facilities as required by the Defence plans of the senior officers in chief command, including the following:

(*a*) N.O.I.C. Organization including harbour defences and logistic support bases;

(*b*) Maritime headquarters;

(*c*) Naval control of shipping organization;

(*d*) Communications.

(ii) To maintain an organization capable of providing RCNR personnel for increased support of the RCN ashore and afloat in time of emergency.

(iii) To provide personnel, not engaged in the foregoing tasks, to assist in survival operations.

(iv) In peace time, to provide naval facilities, naval representation and contact with the civilian population.

The announcement of the establishment of the Committee was made by a general message to all Naval Divisions and repeated to the Flag Officers of either coasts by CANDIV 009/64 as follows:

A Ministerial Committee to discuss the reorganization of the R.C.N.R. has been established. The Committee comprises of CMDRE R. I. Hendy, RCNR(Ret'd) as Chairman and Captains L. B. McIlhagga, A. W. Ross and W. R. Inman as members.

2. The Committee will receive written briefs and hold hearings during the next four weeks in centres across Canada, and report to the Minister of National Defence by Feb. 15. Facilities are to be provided by Naval divisions as may be required to hold hearings in centres to be visited and as the

Committee will advise. Written briefs in quadruplicate may be sent to the Chairman, suite 300, 590 Jarvis St. Toronto. Due to the limited time available, this matter requires prompt action.

3. Divisions may pass this information to organizations which would be considered as interested either in presenting a brief or in appearing before the Committee.

and the Chairman of the Committee by letter to the various Naval Reserve Consulting Groups being components of the Conference of Defence Associations advised the 22 divisional groups of the establishment of the Committee by letter dated the 21st of January, 1964 (Schedule 1). The itinerary with respect to the hearings of the Committee were outlined in the last mentioned letter as well as by YORK's message 212010Z, January as follows:

Reference CANDIV NINE from Chairman Committee on RCNR. Hearings will be held as follows all times local read in two columns.

Prevost 251030Z Jan. Page 3
Star 26100 Jan.
York 261500 Jan.
Discovery 290900 Jan.
Malahat 301400 Jan.
Nonsuch 310900 Jan.
Queen 010900 Feb.
Chippawa 021000 Feb.
Donnacona 061000 Feb.
Scotian 081000 Feb. and 091000 Feb.
Carleton 120900 Feb.

2. Presentations from the following centres which will not be visited by the Committee may be made at nearest convenient point of divisions in para one read in two columns

Windsor, Kitchener
Prince Rupert, Calgary
Saskatoon, Kingston
Port Arthur, Quebec City
St. John, St. Johns
Charlottetown

3. Chippawa pass to Capt McIlhagga Carleton pass to Capt Inman.

A subsequent amendment to the itinerary was made by including a visit to Charlottetown on the 9th of February, 1964 in place of an extra day in Halifax. This was considered to be well worth while under the circumstances.

As a background and to obtain general information to assist the Committee in its hearings it was arranged for the Committee to consult with the Commanding Officer Naval Divisions on the 24th of January, 1964, which really constituted the first meeting of the whole Committee and the entire day was spent with Commodore Paul D. Taylor, DSC, CD, RCN, the Commanding Officer of Naval Divisions and his staff. The Committee would like to emphasize its appreciation for the assistance and support that it received on this occasion from Commodore Taylor and his staff who made themselves available and provided information and assistance without which the Committee's

work would have been severely handicapped. Following the meeting on the 24th of January, 1964 at COND Headquarters in Hamilton the Committee held meetings in the following centres:

25th of January, London, Ontario.
26th of January, Hamilton and Toronto.
29th of January, Vancouver.
30th of January, Victoria.
31st of January, Edmonton.
1st of February, Regina.
2nd of February, Winnipeg.
6th of February, Montreal.
7th and 8th of February, Halifax.
12th to 15th of February, Ottawa.

Most of the time in Ottawa was utilized in the completion of this report.

Page 4

II—BACKGROUND OF THE RCNR WITH HISTORICAL COMPARISONS

As a background to the organization of the RCNR and perhaps to explain the approach by some of the submissions made to the Committee insofar as the capability of the reserve is concerned a brief outline of the history of the RCNR and its predecessors as reserve units, the RCNVR and RCNR might be of value. The RCNVR and RCNR which were the two reserve components of the RCN were established in the mid '20's' as a support for the fleet by providing at modest expenditure a group of personnel available with training in Naval matters. At this time the regular RCN was a force about equal in number to its reserves and the total emergency requirements for the Navy were envisaged to be small. Thus the strength of the two reserve forces was just under 2000 officers and men on the outbreak of the war in 1938. Apparently no figures exist as to the numbers actually on active service on the declaration of war by Canada on the 10th of September 1939 but it is presumed that substantially all the 2000 reservists were by then on active service in one form or another. During all this time the Naval capability measured in ships was limited to a few destroyers, which even in 1939 only totalled six, plus a few minesweepers and there was no reserve fleet or other vessels with the exception of some RCMP marine section vessels available for Naval service on the outbreak of war. Canada was largely an agricultural nation and as stated above any naval commitments foreseen were minimal. The events of World War II changed this picture and today by virtue of alliances Canada has a substantial Naval commitment and contribution to make to NATO and its allies. Thus today with the far greater complexities which are inherent in modern war at sea the RCN now supports an establishment of about 21,000 and some 50 ships ranging from an aircraft carrier down. The planned active reserve establishment is to be 2,400 officers and men plus UNTD cadets under training at the universities, the whole as a back-up or support for the regular force. The Committee is aware of the fact that any planning for war must take into account certain probabilities and factors but it does not seem realistic that only 2,400 active list reservists would be on immediate call in event of emergency to back up a fleet of 21,000 whereas in 1939 the strengths of the two

components of the service were approximately equal. Later in this report it will be demonstrated that this figure of 2,400 is inadequate. The material resources and commitments then and now are in no way comparable. At the present time and in the event of emergency, many bases which for some months or years after the commencement of hostilities in 1939 were not activated would presumably be activated forthwith.

In contrast to 1939 when there were relatively few vessels with any military capability in the service of the Government, there are now many vessels of the Department of Transport, RCMP, Coast Guard and Hydrographic Survey which would be militarily useful. The problem of manning these ships for hostilities even if most of their crews entered the Naval Service would create further demands for Reserve personnel, especially in the realm of Communications and Weapons.

Shortness of time precluded more than cursory information being obtained by the Committee on the role and resources of the ships of these various services in event of emergency which combined with ships held in reserve by the Navy constitute a substantial potential naval capability in the event of war. While many of these may not have any built-in capacity for weapons at present, this should not be ruled out as a possibility, and in the case of some they are eminently suitable to perform Naval tasks with very little conversion of re-equipment; for example, the ice-breaker Labrador, which was originally designed as a Naval vessel. Taking the experience of 1939 therefore, as some criterion in this regard there would seem to be a much greater potential requirement for persons with technical Naval training to augment even the present crews of these ships if all the personnel were enrolled in the active force in the event of an emergency. Thus apart from the fact the 2,400 strength figure proposed for the Reserve permits fulfilment of the mobilization needs of the Navy as set forth in the Emergency Defence Plan, the other factors referred to above with respect to Coast Guard and RCMP vessels do not seem either to be taken into account or have perhaps been disregarded. The same holds true with respect to the newly constituted Reserve Fleet and Port security requirements. The planned strength of the RCNR should take these added factors into account. The Committee also feels it is worthy of comment with respect to the history of the establishment of the Naval Reserve, despite the fact that during the 1930s when funds available for defence were much more restricted than at present and the commitments of the Canadian Navy were considerably below what is now anticipated, yet during this period increases were authorized in the RCNVR, and new units were established in such centres as London, Port Arthur, and Kingston, Ontario and a second unit in Montreal, Quebec. These are in addition to overall strength increases in other units, notably Winnipeg, Montreal and Toronto, which increased from 100 men to 150 men each by the time of the outbreak of World War II. During this time cutting the Reserve was not considered yet the Regular force had difficulty. An article in the June 1962 issue of the Atlantic Advocate is of interest in this context. (Schedule 2). Page 5

It should also be pointed out that these establishments were on a much less elaborate basis than at the present but in the opinion of the members of the committee who had experience with the pre-

war reserve units the esprit de corps was high and the standard of training was, in comparison with the requirements of those days, considerably higher than the attainment of today's Reserve. Engagements were completed to a greater extent and turn-over in the units was at a low figure with many units carrying a waiting list of aspiring recruits. Again, although no submissions were made to the committee on this particular field it would be the observation of the committee on the experience of its members that a return to the ideals of service which motivated many of the reserve personnel in those days when pay and other benefits were either negligible or completely absent would be of great benefit both to the country and to the efficiency of the reserves generally. The precise method of obtaining this situation or restoring it is not completely clear but it would seem that the solution might lie partly in continued emphasis by the Government and especially the Department of National Defence of the importance of the reserve and the necessity for everyone to do his "bit" so that the reserve serviceman will in effect feel that his efforts are not only well intentioned but greatly appreciated and something for which the country is truly grateful. The committee cannot help but comment that Canada, like many other modern democracies, tends to downgrade the status of the serviceman in peace time with the result that it becomes harder to create a solid foundation for possible emergency, which is a factor to be taken into account under the present conditions of international politics.

The importance in which the Reserve forces of other countries are held is demonstrated by an Article on the U.S. Marine Corps Reserves in the January issue of the U.S. Navy League publication. (Schedule 3 at page 15). Also the Brief of the Naval Officers Association of Canada, Victoria, B.C. is especially significant. (Appendix).

III—BASIS FOR THE REQUIREMENT FOR THE RCNR

Operational commands of the RCN expressed their assumption that Reserve personnel would be available and such were required in the event of emergency and it was based on numbers greater than would appear to be available under present plans.

The Committee therefore proceeded on the basis that if ways and means can be found to train and have available a larger number of Naval Reserves than was planned this would be in keeping with mobilization requirements under present planning and everything should be done to try and increase this pool of manpower through the best use of the funds available. Other activities which might not be as essential and perhaps on a cost basis not as productive were also considered. This is without regard also to the desirability of maintaining units in large centres of population where they have been traditionally established and the value of the "presence" of Naval representation in these centres. However account should be taken of the fact that some units now being considered for closing are in comparatively new quarters designed especially for the operation of a Naval Reserve unit and can be operated more efficiently from an overhead and maintenance point of view than some of the other units which are in older quarters and carry heavy maintenance costs.

IV—COMMENTS ON REDUCTIONS PLANNED FOR THE RCNR Page 6

Insofar as the actual reduction of the Naval Reserve is concerned the committee is also mindful of the fact that this reduction affects personnel who are already trained or are in the process of being trained and this is not merely a re-adjustment of what might be called paper strength of authorized complements which are not contributing any effective personnel. Thus perhaps in comparison to the militia situation the Naval Reserve will have to release trained men to reach its new complement. This comes about by reason of closing divisions and personnel from which will then be lost insofar as any immediate availability for service is concerned as well as removing their local focal point at which they could assemble in emergency. It is recognized that it becomes uneconomic after a certain point to maintain large and elaborate quarters for small numbers and there was plenty of evidence insofar as the Committee's hearings were concerned that greater utilization of some buildings occupied by RCNR units could be made. Greater utilization by the Department of National Defence would of course serve to reduce the monies appropriated to overhead and maintenance of Naval Reserve units for the Naval Reserve alone.

It is understood that in arriving at decisions to close out certain Divisions four factors were considered as follows:

1. Productivity;
2. Value to EDP;
3. Representational value, and
4. Assessed effectiveness.

While the Committee are confident that due consideration was given to these factors in respect to the Divisions ordered to be closed it does seem that there is some room for re-assessment in the light of the Committee's information about the mobilization requirements for the Reserve and the adequacy of the planned strength to meet it. When one is considering the fulfilment of a plan on mobilization another factor that is availability is of the utmost importance. By this is meant the possibility that the people who are needed are in or can get to the places where their duty will require them as well as being able to leave their civilian jobs. In the early stages of an emergency there may be a severe strain on transportation arrangements, to say nothing of the need to find suitable accommodation and provide people with good local knowledge. Thus while the Divisions on the coasts were Naval control is to be set up such as in the Halifax and Esquimalt areas may add little to the "Navy's presence" in the sense of day-to-day representation, these Divisions do provide the personnel to take up apopintments in NCSO and NOIC staffs and can do so with little or no transportation requirement whatsoever. This becomes more pronounced in the case of Prince Rupert and Charlottetown where there is no other Naval establishment but the occupancy of Naval quarters in these two cities means that with a minimum of effort the staffs required for these functions can be established and go to work. This has a double value insofar as the undesirability of transporting people in the early stages of a build-up is concerned as these people can be put on 24-hour alert in their cities and thus constitute a "force-in-being" for these particular functions. Observing that in the case of Halifax and Victoria the

physical requirements to maintain the Reserve unit are relatively small in relation to the numbers available, it would seem the height of economy and good sense to maintain Divisions in these areas. In the case of Prince Rupert and Charlottetown however the additional factor of maintenance of Naval establishment weighs very strongly with the continuance of units there and full weight should be given to this. It may be that sharing of accommodation with other service units can be arranged to reduce the rateable cost to the RCNR budget and this is a matter which has been dealt with in other parts of the report. But in summary the desirability of maintaining some Naval presence for emergency purposes in the coastal areas would seem to be established.

V—THE ROLE AND TASKS OF THE RCNR

(i)—*General Support of the RCN*

A consideration of the role of the RCNR as contained in the Naval Board minute quoted above, indicates there are two aspects, one is the provision of Naval Personnel and secondly to provide facilities in support of the RCN. Much of the material placed before the Committee related to the question of the facilities being provided in support of the RCN through Naval reserve establishments,
Page 7 notably the Naval divisions located in various major centres throughout Canada. In regard to the personnel the Committee is of the opinion and as already indicated, has proceeded on the basis that as result of information supplied to it the planned strength of 2700 RCNR personnel (inclusive of the UNTD Cadets) will not be adequate to meet the possible mobilization requirements of the RCN even on the basis of the present planning of a period of hostility of very short duration. Further, with respect to facilities, it appears that many of the facilities and the resources which enter into the support of these facilities are not properly chargeable to the establishment of a purely reserve unit designed to produce reserve personnel. That is to say, that it was felt that fleet establishments as they are known and which include Naval divisions could in many instances be much less elaborate in their organization and manning if the needs of the RCNR and support of its administrative and logistic requirements alone were being provided.

The tasks as outlined in the Naval Board Minute are realistic and suitable. There are particular tasks or what might be called functions in support of the various tasks such as underwater or clearance diving and Naval aviation which were the subject of particular presentations before the Committee and of course would fall under item 2 of the tasks outlined in the Naval Board Minute.

In accepting the role and tasks of the RCNR as in the Naval Board Minute as a framework on which to build the organization of the RCNR, it should be pointed out that the officers and men of the RCNR consider themselves an integral part of Naval Forces ready to discharge the Commitments of Canada. They do not consider the Reserve as a separate Navy. It is only for the purposes of the Committee's analysis, especially with respect to financial matters, that perhaps the opposite inference may be drawn. This is emphatically not the case. The pride of being associated with the Navy is strong throughout the Naval Reserve. There has, however,

been a noticeable drop in morale and esprit de corps in the Reserve as a consequence of the announcement of the disbanding of Divisions some of which have been established for upwards of 40 years. This is combined with the regret that there was no opportunity before the establishment of the Committee to make representations and suggestions for alternative ways of achieving the necessary economies without injuring the basic organization of the RCNR. It is hoped that in considering this report due regard will be given to the fact that the Committee's establishment was evidence of good faith to have this matter thoroughly reconsidered and notwithstanding that the Committee has in some respects been critical of certain measures that have been taken or policies adopted it is hoped that this will not have any influence in determining the action to be taken on this report. There was a feeling that perhaps the announced reductions were the first step in the total elimination of the Naval Reserve and this has caused serious misgivings in the hearts and minds of persons not only on the Active List of the Reserve at the present time but many other informed and interested people who are concerned with the welfare and defence of Canada. Budgetary conditions are recognized as determining what can be established in respect to money available but it was the impression of the Reserve Commanding Officers that while a reduction was contemplated it would have been effected by an across-the-board reduction rather than the elimination of any specific unit. For purposes of efficiency and discharge of the role of the Reserve the Committee feels that this approach is still a valid one. It should be pointed out that even after the presently planned reductions are effected the RCNR will have a strength of about 2,400 spread in 22 Divisions and this is hardly in excess of the numbers in 1939 in the same number of units with the exception that there is now one tender at Kitchener not in existence at that time. While the Committee does not agree that a figure of 2,400 is an adequate Reserve to meet present requirements yet this figure would still permit units of larger size in all centres than were allowed in 1939 and with economies in sharing buildings or seeking less expensive quarters a tactic which has been well demonstrated as being feasible in at least one place, namely Kitchener. It should be possible to maintain the existing units and reduce across-the-board through attrition instead of eliminating many units whose trained personnel will be difficult to replace for some years. While the Committee does not wish to dwell on the matter of morale extensively we feel it is pertinent to point out that the attitude of the Reserve in the face of the announcement of the present plan was that they had been abandoned by the RCN. It is against this background however that some rather bitter opinions were expressed to the Committee as to the thinking behind the present plan. This of course is much to be regretted but the Committee would be less than objective if it did not comment thereon as this is a factor which can be important in the future from the point of view of efficiency and morale of the Reserve which is to continue.

Page 8

(ii)—*The RCNR as a Force-In-Being*

The Committee is aware that present defence planning emphasizes the existence of forces-in-being that are readily available for service as may be required. It would seem that if this

availability can be achieved with maximum economy that the goals of present planning to reduce budgetary economies without prejudice to potential would be achieved. Under the National Defence Act, Section 15, the Canadian Forces are defined and under Section 16(3) the Reserve components are included in the overall establishment of the Canadian Forces. Under Section 32(1) of the Act the Governor-in-Council may call out any component of the Canadian Forces on Active service either for emergency or in support of the United Nations Charter, North Atlantic Treaty or other collective defence arrangements. Further, under Section 35(2) in the case of national disaster the Reserve Forces may be called out for active duty. It would seem, therefore, that the Active component of the RCNR can, insofar as its capabilities extend, be considered as available under existing legislation for full-time service and an examination of its capabilities in this regard is therefore pertinent.

The Committee, through the experience of its members and also as a result of representations made to it, can report that in many instances Reserve Forces have met immediate requirements in line with the foregoing commitments. While in most cases these have been in the realm of such national disasters as the Red River floods in Winnipeg, Hurricane Hazel in Toronto and Fraser River floods in British Columbia to name a few, there are also frequent instances where appropriately trained Naval Reservists have rendered service which is not only in the field of giving comfort and assistance but also shows direct economic return. Examples are the employment of Reserve Air Squadrons in search and rescue and clearance divers in rendering assistance to ships where civilian facilities are either not available or appropriate. Thus in recent history at HMCS YORK the clearance divers have cleared propellers of men-of-war fouled by wire, recovered aircraft sunk through thin ice and carried out bottom surveys of hulls thereby avoiding drydocking. These are services made available literally by a single telephone call and apart from economic value serve to enhance the stature of the Defence establishment as a whole in the eyes of the public.

The Committee is of the opinion that, as indicated elsewhere, Reserves could have been equally useful in the event that their services had been called upon in connection with the Cuban incident which under present conditions would seem to be more likely to be repeated than an out-and-out declaration of hostilities between the free world and the communist bloc.

The cooperative support of secondary military powers (although individually small compared to the strength of the United States) forms a not inconsequential adjunct to forces-in-being of the leader of the free world. This cooperative support should strengthen the hand of the U.S. in leading from strength in the crises that may develop and which apparently may result in a nuclear stand-off situation with conventional forces an important part.

In this concept a strong and well-trained Reserve can play an important part as being available on short notice but while not required is relatively inexpensive to maintain.

The Commitee is therefore of the opinion, while recognizing that economies must be effected in the defence budget, that perhaps the proportion of the cut now being directed toward the Naval Reserve component thereof should be reviewed.

(iii)—*Representation and Presence* Page 9

This relates to the fourth item of the tasks of the RCNR. It is appreciated that these are most intangible factors but they cannot, in the opinion of the Committee be entirely disregarded for two reasons:

(1) providing a base to maintain contact with the civilian population by bringing the story of the Naval service to communities remote from the sea, and

(2) acting as a centre or rallying ground for groups which are interested in the Navy and which would be expected to lend encouragement to recruiting.

It is observed in particular that three of the units being closed are in provincial capitals where they have traditionally formed the naval representation since their establishment.

While the provinces have no direct responsibility for the Reserve Forces, nonetheless a naval presence in a focal point of intermediate government with its associated concentration of provincial members and civil servants drawn from an entire province cannot help but be a reminder to that province as a whole that in the defence of Canada the Navy plays a vital role—a role reflected by its presence across the country. Putting it in the bluntest possible terms, if the Naval Reserve were to concentrate on either coast, which from the point of view of availability might be the most advantageous, the greater part of the country would have no cause to be reminded of the Navy and its purpose. This, in the opinion of the Committee, would be most unfortunate. While it is impossible to put a dollar value on these intangibles, they represent a valuable public relations element and rather than the Reserve being charged it should be given credit for its contribution under this heading. The Committee is not suggesting public relations should become the end-all of the Reserve effort but under our present system, to use advertising terminology, a good "image" is important from the point of view of an understanding of the service and its ability to continue to attract recruits.

VI—PARTICULAR ELEMENTS IN THE ORGANIZATION OF THE RCNR

(a) *Complement, Manning and Turnover of Personnel*

The Committee appreciates that complement must be related to need. However, it is a fact that in any Reserve establishment, and for that matter the same applies to Regular Force, there will be at any particular time a large number of personnel under some sort of basic or new entry training whose availability and usefulness in time of emergency is very limited. Also there is an age factor to be considered as at the present time the Naval Reserve recruits personnel at the age of 16½ who might not be authorized for Active service, certainly at sea or outside of Canada. Therefore in considering the needs of personnel from the Reserve in the event of emergency a realistic appreciation must be taken of the true potentialities of the Reserve in light of the foregoing. It becomes difficult to predicate the Reserve requirements on mobilization exactly to the authorized complement as this leaves nothing for new entries,

some personnel who may be frozen in their positions or unavailable due to many factors including sickness, temporary absence from the community and other factors over which there can be no positive control. The Committee is aware that this in fact happened on several occasions in 1939 when personnel of the Active Reserve Forces could not be immediately located because of absence from their communities and also after mobilization were recalled by their employers on representations to the government as being necessary for the industrial war effort. The Committee is also aware that the original forecast of the strength of the RCNR for 1964 was 4,100 excluding UNTD cadets. As this estimate was presumably made some time in the early part of 1963 it is difficult to reconcile this with an acceptable limit on the Active Naval Reserve (excluding UNTD) as now contemplated of 2,400, if in fact the 4,100 figure was completely supportable and a viable assessment.

Page 10

Further the yearly enrolment for the RCNR has varied from 2,000 in 1953 to 1,000 in 1958 and 1959 with an average of about 1,400 over the last ten years. This means there is a turn-over of approximately one-third in the Naval Reserve each year. By comparison the Regular force figure for recruiting is about 3,500 men per year for a strength of 21,000. This, of course, is of grave concern to the overall efficiency of the Reserve and part of this reason is attributed to the low age of the recruits in many centres. One Division reported that almost 80% of its strength in men is in the 16 to 18 bracket. This means this unit will have grave difficulty in meeting its EDP requirements. It would be the Committee's recommendation that the age limit for entry into the RCNR be reviewed and raised to at least 17 so that a more stable base for new entries will be achieved in the hope that boys of greater maturity will have made up their minds and will be more likely to remain in the Reserve for such a length of time as to make them useful. This matter is, or course, entirely involved with comments which are passed from time to time about the need for some sort of compulsory service. The Committee received one representation in this regard which is being passed on for comment only. (Brief from HMCS CABOT Appendix 54). As an alternative the Committee emphasizes the desirability of continually stressing the need and importance of the Reserve in defence planning to ensure attracting to the Reserve the type of person who will remain in it. The problem of turnover is also affected by the type of training programme and this will be discussed elsewhere in the report.

There is also the problem of obtaining sufficient numbers to meet complements. Thus while the complement of the RCNR in 1956 was 12,000 (excluding UNTD) the numbers borne were only 5,850, which represents the peak for the last 10 years. (Schedule 9). Even at the end of 1963 Divisions were not meeting authorized complements by some 900. (Schedules 4 and 5). This is mentioned here because it was the opinion that many units seemed to reach a peak in strength beyond which it is difficult to rise. Notwithstanding this in two cases divisions are being granted increases in personnel, yet there is little likelihood of these higher figures being achieved. It is suggested that to ensure at least meeting the broad requirements of personnel that complement deficiencies of understrength Divisions be allocated to other Divisions.

As indicated, the Committee feels that the present complement of 2,400 is inadequate to meet the requirements the Reserve will have

to meet in case of emergency. Also there are many unknowns in respect to any planning of this nature, not least of which is the suitability of people for various positions in the Emergency Defence Plan and the nature in which mobilization or call-up may be effected. Taking into account the present planning for establishment of NOIC and NCSO bases however it is apparent that the commitments that the RCNR will have to meet in the event of future emergency are vastly greater than in 1939. It should also be pointed out that while Canada was not a major maritime nation at that time it had a much larger ocean-going merchant fleet than it has now and there were some 500 experienced seamen in the RCNR of that time who were available to man auxiliary vessels and support the Active Fleet as well as fill the few NOIC and NCSO bases which were established on the outbreak of World War II. These men are now practically non-existent so far as Canadian service is concerned and would be expected to probably be available to the Royal Navy if they are sailing under a United Kingdom flag but otherwise their availability and dependability as well as Naval training is doubtful and questionable. Comment should also be made with respect to the requirements of Reserves for filling tasks in such situations as the Cuban crisis of October, 1962. At that time, notwithstanding that ships of the fleet were put on the alert, further steps to withdraw large numbers of personnel from Fleet Establishments ashore were not pursued and it is understood that Reserves would have been most valuable and welcome if authority for their call-out had been given. In this regard apparently one of the problems was availability of money to pay Reserves for special duty, and as a full emergency was not declared the appropriate steps were not taken to overcome this. It is understood many Reserves did in fact offer their services.

Therefore notwithstanding the many variables in any sort of planning for defence the Committee is of the opinion that a Reserve of not less than 3,700, exclusive of UNTD Cadets, is closer to requirements. However, because of the steps that have already been taken in the allocation of funds for the next fiscal year it appears that only 3,000 can be maintained within the budgetary limits now laid down although the Committee would also express the opinion that this figure is one which should not be recognized as meeting requirements. This would give about a 20% cushion for personnel under age or who had not been fully trained or could not be used immediately, for instance Wrens in outlying ports with NOIC and NCSO organizations. In this regard the Fleet itself has a certain cushion in that of its total strength a large number are under training at any one time and there is always going to be a number who cannot be immediately put into Active service by reason of inexperience or other obvious reasons. If this 3,000 can be supported this would still result in a reduction in complement of the RCNR of 700 which would soon be achieved through attrition and the slowing of recruiting observing that this represents approximately 6 months intake of recruits into the RCNR. Percentage-wise this would mean a reduction of approximately 20% in strength and applied to the nearly $2,000,000.00 for RCNR pay and allowances for the current fiscal year would mean a saving of about $400,000.00. This saving should be increased by the proposed reduction in pay for officers for Divisional Drills by one-third.

Page 11

It is emphasized that it is implicit in the Committee's recommendations under this heading of "Complement" that the Operational

Commands on the East and West indicated they would like to be able to call on more Reserves notwithstanding the Emergency Defence Plan which is felt to be a bare minimum and the Committee gained the impression that a figure was given as to what was going to be provided and the Commands directed to tailor their requirements to that figure rather than basing requirements on need and endeavouring to see whether those needs could be met.

Page 12

(b)—*Naval Training by RCNR Personnel*

In the context of the remarks herein the term Naval Training applies to the annual training undertaken by Naval Reserves as defined in QRCN Article 1.02(1ii) and required by Article 9.02. Prior to 1956 Reserve personnel for the greater part took their training at either Halifax or Esquimalt. In the year 1956, under the direction of COND, the Great Lakes Training Centre was established which is now equipped to handle new entries of the Reserves as well as certain higher trades such as communications. Recently it has been the practice to attach to GLTC ships from the Atlantic Command which are placed under the command of COND for the purpose of giving sea training to the Reserves. In addition, some small auxiliary vessels have been allotted to COND which are brought forward each year into commission and are manned with Reserves on special duty for the summer months with a small nucleus, especially in engine-room personnel, from the RCN. Insofar as making sure that sea training is available for the Reserves this principle is heartily endorsed. It is also believed that the standard of training at the GLTC is as satisfactory as may be expected for a training establishment functioning sporadically. Some comments were made as to the unsuitability of accommodation arrangements for senior men who did not like having to find accommodation off the base. There was also some comment as to the unsatisfactory standard of catering. As one of the large items of expenditure in the Naval training of a Reserve involves his transportion due to the distances involved in Canada and taking into consideration that before the establishment of GLTC all training was done on each coast, representations were made by Divisions located near the coast, especially in the West, that, not only as an economy measure but also from the point of view of achieving satisfactory training, the schools operated on the coast be made available for Reserve training. It is understood that this would not create any insurmountable difficulties, especially as Reserve training staffs could be drawn from Reserves on special duty in the same way that they are now employed at GLTC. This would not involve the employment of any more personnel as GLTC would not have as great a requirement due to fewer numbers being sent there. Thus for a large Division such as DISCOVERY the saving in transportation costs would in each year amount to a considerable item and savings of a lesser but still important degree would be effected insofar as Calgary and Saskatoon, and of course Edmonton if this Division can be continued. As between Winnipeg and Port Arthur the balance would seem to be slightly the other way as economy air fare from Winnipeg to Toronto is less than to Victoria. Thus it would be the suggestion that GLTC be continued on its present basis but at a reduced capacity and direction be given that Divisions from Saskatchewan west go to Esquimalt, from Manitoba east to Quebec to GLTC, and

Maritime Division to Cornwallis. The one problem which the Committee were unable to achieve any satisfactory conclusion on was the availability of accommodation in ships of the Atlantic or Pacific Flags for Reserve Training. This would seem to be a problem which is capable of solution if given adequate attention. In the important field of specialized training, particularly Communications, the same principles of decentralization should be adopted.

(c)—*Training Syllabus and Procedures*

The Committee has not had sufficient time to carefully analyze the Training Syllabi set forth for Reserves. While the general content and approach appears to be generally satisfactory there is a Page 13
widespread feeling among Reserve officers that the syllabi as presently constituted seem to enforce an inflexibility on training as a whole with a lack of scope for local diversification where this seems beneficial. In some cases it has been represented that the time table of training is overly long and does not represent a sufficient challenge to the calibre of young man who is entering the Reserve. This is, apparently compounded by an over emphasis on classroom training and a dearth of instructors qualified in instructional technique who might succeed in making such a classroom course interesting. The Committee noted that a young man who sits under qualified school teachers during the day is unlikely to be interested in carrying out the same form of classroom instruction under amateurs for three hours on the same night.

The committee also notes that the emphasis on lectures continues during GLTC when surely the great bulk of instruction should be of a practical nature.

The Committee did not receive many opinions as to the efficiency of the present system of Reserve Drills whereby men attend for a minimum of one night a week and take instruction for approximately three hours. It is realized that some of this time is absorbed in activities not directly related to trade training but which have a value from the point of view of building up the sense of belonging to the Service through participation as a unit. While the amount of instruction that can be given on a one night a week basis is recognized to be limited, the regular nature of weekly parades has a cohesive effect on a reserve unit which engender "esprit de corps" and would not be obtained by longer periods such as complete weekend training held on less frequent intervals.

Training is of course the major pre-occupation of the RCNR but the Committee has not had time to sift all the many suggestions received on this subject and recommends that these be reviewed to determine their merits. The one important facet being the need for a more practical as opposed to theoretical approach to instruction.

(d)—*University Naval Training Divisions* Page 14

In the Committee's opinion the purpose of the UNTD is to supply trained officers for the RCNR and as incidental thereto also to serve as a further source of officers for the Regular Force. As a result the UNTD cadets are enrolled as RCNR personnel and on completion of their training and commissioning as Acting Sub-Lieutenants they are eligib'e to become officers on the Active List of the RCNR. The standard of training and quality of the UNTD cadets is considered to be entirely satisfactory and this training scheme has produced a

great many efficient officers serving in the RCNR. Not all Divisions are satisfied with the numbers of officers they get from the UNTD scheme and this would seem to a great extent to depend on the particular locality and the location of the UNTD units. Many UNTD units are located on campuses which are removed from the cities where the Naval Divisions are located and while it is probably a fact that most university graduates become employed in cities, if they have not had any direct association with the Naval Division as undergraduates through the UNTD scheme, their desires to join the RCNR Active unit if one exists in the city where they settle is probably reduced.

There is comment, and perhaps criticism, in some quarters that the UNTD does not require its graduates to affiliate with the RCNR on graduation and also that it is training far too many officers for the numbers required to man the Reserve Active list. There is also certain comment that the UNTD really provides a form of subsidy to assist the cadets to achieve a university education at the expense of the Crown without any corresponding obligation to become members of the Active Reserve for any period afterward. There does not seem to be a unanimity with respect to the objectives of the UNTD and there are those who feel that the more cadets that can be trained the better it will be for the Naval service and the building-up of a strong potential of qualified young officers available in case of emergency. On the other hand there are those who feel, from an economic point of view, that if the UNTD is designed to supply officers to the Active Reserve the programme should be adjusted so that the maximum possible number of cadets would be available to Naval Divisions and this perhaps would entail the maintenance of UNTD units only in those cities where Naval Divisions are located. From the point of view of an effective use of money being spent on defence, the latter view seems to have much to commend it and if the complement of the UNTD is to be reduced certain units will be left at some of the smaller universities of such a size and nature as to hardly warrant their continued existence on the respective campuses. It is the Committee's view therefore that from the point of view of supplying officers to the Reserve, the UNTD programme, so far as it is chargeable against Reserve activities, should be brought into line with the requirements of the Reserve and the possibility of cadets on graduation joining the Naval Division in the city which they live being a condition of enrolment at the time. It is realized that such a policy cannot have one hundred percent effectiveness but it would seem, for instance, very unlikely that a student entering the faculty of say, Forestry, who comes from a Northern Ontario town would remain in a city where a Naval Division exists and therefore his enrolment into the UNTD programme should be discouraged. If, however, the objective of the programme is to aid education and to create a larger pool of trained young officers on the Retired list of the Navy than can be absorbed by the Active Reserve, then this is a matter which should be considered not only by the Department of Defence but by other agencies of Departments both within and without Defence. Thus from the point of view of the Naval Reserve any monies allocated in this latter direction should not really be a charge on the Naval Reserve vote when such figures are being closely scrutinized with a view to obtaining the most effective Reserve force possible for the funds available. It would be difficult to rationalize these two conflicting views into straight dollars and cents. Thus if it is desired to

create a "presence" of persons having association with the Navy in many centres in Canada, notwithstanding the absence of Naval Divi- Page 15
sions, and also to assist in higher education, then these items should be treated separately and are perhaps more appropriately a responsibility of some other budget than the RCNR's. This proposition is advanced with the full realization that if the UNTD programme is continued on its present basis there would be no overall saving in expenditure. Nonetheless it is mentioned in line with the Committee's task of assessing the direct and indirect costs of the establishment of the RCNR, which for practical purposes is regarded as the Active Reserve.

It is the Committee's view that perhaps the UNTD programme was set up on too elaborate a basis at a time when expenditures for wartime were not scrutinized in great detail and the concept of training large numbers of young officers at the universities was attractive, especially as these officers would go directly on to Active service as soon as their studies were completed. While this may have been true to some degree, the UNTD scheme had not really been in operation long enough before hostilities ended to really become effective and the establishment that had been set up was allowed to remain without a hard look at the requirements in the light of post-war needs. Also perhaps the availability of UNTD training on many far-flung campuses has come to be regarded more as a vested right than a basis for the needs of the Naval service.

Schedule 8 is an analysis provided by COND of promotions of UNTD Cadets for the years 1960 to 1963 inclusive which shows that over this period about 70% of cadets commissioned remained in the Active Reserve. This is considered satisfactory but perhaps could be improved if the effective contribution of individual units were more closely examined. Our comments and opinions on this subject should be correlated to and discussed with the Military Studies Committee of the National Conference of Canadian Universities and Colleges which it is understood also has this matter under review.

(e)—*Naval Reserve Air Squadrons*

The proposed reorganization of the Reserve contemplates the development of two Reserve Flying Squadrons located at Toronto and Victoria. It is fully appreciated by the Committee that Reserve flying is probably the most expensive activity of the Reserves on a per man basis because of the type of equipment being used, the fact that pay for officers is higher and also more time is frequently put in by personnel attached to Air Squadrons in order to maintain proper flying efficiency. However, the Committee feels that notwithstanding the relative greater expense of the Air Squadrons that certain factors are important from the point of view of the readiness of the Reserve and its personnel in event of emergency. It was represented that pilots of the Reserve Air Squadrons were probably more efficient in their techniques of flying by reason of their weekly duties and piloting of aircraft than many RCN pilots who are on staff appointments which only enable them to fly infrequently. This is a matter on which the Committee merely wishes to make an observation although this opinion has received some professional corroboration. Therefore, if this is true, and also taking into account the fact that many of the pilots flying are qualified

to fly the S2F aircraft and some have qualified in helicopters, this pool of highly training personnel would seem to form a very important part of the Naval Reserve if a true back-up is to be given to the Air Squadrons of the RCN. While the aircraft presently in use by the squadrons are of a transport nature the usefulness of this type of light aircraft in emergency and for search and rescue and transportation of personnel from time to time certainly would seem to weigh heavily in favour of the retention of the air squadrons. It was represented that a trained pilot represents an investment of some $100,000.00 and if Reserve squadrons are disbanded this investment representing a total outlay of some $2,800,000.00 in

Page 16

trained personnel, will be lost, and only recoverable after extended refresher training in the event of emergency, by which time it might be too late. It would seem that if the Navy is to continue Naval aviation as a part of its ASW function and Reserve pilots can be maintained in such a state that they can take their part on an immediate basis in such functions then these persons truly represent a force-in-being of the greatest value. It is also assumed that the RCN has a large investment in Short Service pilots who are continually leaving the Service. The Reserve squadrons therefore provide an inexpensive method of retaining their valuable skills for many years.

It is believed that the reasons for the introduction of aviation into the Naval Reserve in 1953 are as valid now as they were then as the Navy continues to support an almost similar size aviation component as then and while there has been some change in aircraft the aircraft now being used are within the capability of Reserve aviators to maintain a reasonable operational efficiency. In fact with the abandonment of jet fighters and the concentration on low performance propellor driven aircraft, both fixed-wing and helicopter, the potential usefulness of Reserve flyers has increased.

It is interesting to note that in the instruction to be given to Reserve personnel in General Training, Part I (A), Parts I and II as revised to the 14th January, 1963, in the lecture on the role of Naval Aviation, Lesson 7.02/3 is a comment that the Reserve Air Squadrons form a back-up for the Fleet. It would seem, therefore, that the establishment of these Squadrons rests on basic requirements that in the Committee's opinion there does not seem to be any change in this regard. Further it is understood USN Reserve Squadrons are trained and equipped to carry out operational roles especially with S2F aircraft and in fact take part as operational units in joint exercises of the USN and RCN. Observing the high standard of training of RCNR pilots therefore it seems to the Committee that the two Squadrons remaining certainly provide the very minimum back-up required for the Regular Squadrons and should if possible be retained. In this connection while the squadrons are designated as Communications squadrons, the training of the pilots is in fact directed to ASW.

Page 17

(f)—*Medical Procedures*

Consequent on the formation of the Canadian Forces Medical Services all regular force medical matters are dealt with on a tri-service basis. This has not yet been extended to the Reserve with the result that Naval Reserve medical matters are dealt with through the Commanding Officer Naval Divisions although in each of the

military commands throughout the country are medical personnel, some of whom are actually Naval notwithstanding they are attached or belong to the CFMS. It was the opinion of one of the most experienced Reserve medical officers that considerable economies could be effected if advantage was taken of the CFMS personnel in various commands to process medical documentation in connection with Reserve recruiting where this would effect economy. It is understood that in the case of RCN recruiting this is being done. There is also the anomalous situation of senior and experienced medical practitioners having to submit reports of medical examinations to a medical administrative officer on the staff at COND who is not a qualified medical practitioner. This would seem to be a cause of unnecessary irritation and would hardly seem to be justified in view of the high standard of medical officer which serves in the Reserve forces. It was also thought by some medical officers that the x-ray examination could be eliminated as part of the recruiting routine and economies would be effected in this direction which in a Division the size of YORK might amount to $900.00 a year. The experience in Toronto was that out of 52,000 x-rays taken of candidates for recruitment into the RCNR since 1953 there were only two non-active cases of tuberculosis discovered. As men are also liable to x-ray examination on taking Naval training at the coast in the establishments there, it would seem that the cost of x-rays on recruitment is something that should be eliminated. It is observed that in this regard the Militia have eliminated the x-ray examination.

Further widespread duplication must exist because of the widespread existence of Government and private health plans and services. It would only be fair to state however that the one dissenting comment in this regard was made by a medical officer who is a radiologist. Further it is thought that the extensive referrals are unnecessary and a clinical examination which is within the competency of the medical officers in the Division with the equipment available there should suffice. Observing that eye consultations in some areas are as high as $15.00 each this is certainly worthy of consideration as an economy measure without any detrimental effect on the standard of recruit. This was the opinion of two senior Reserve Surgeon Captains.

(g)—*Clearance Diving*

Some Divisions have established clearance diving units. While these are not specifically called for in the tasks allotted to the RCNR in the Naval Board Minute referred to it would seem they come squarely within Items (ii) and (iii) of the tasks. The Committee was convinced of the usefulness of this activity as it can draw upon proficient amateur underwater divers whose enthusiasm and interest is most commendable. It is known that throughout the winter in Divisions having diving teams, regular exercises even in the coldest weather are carried out. On several occasions teams have been called out on short notice to perform tasks in the public as well as the military interest. This has been done to the satisfaction of those concerned. It is the Committee's recommendation that this type of activity certainly not be curtailed. A need exists for personnel trained in this field in the case of emergency and through

their peacetime activities they do generate much goodwill for the Navy. It is understood their competency is equal to that of like personnel in the RCN.

Page 18

VII—FACTORS RELATING TO INDIRECT COSTS OF THE RCNR

(a)—*The Commanding Officers Naval Divisions Command*

This Command was established in 1953 to administer 22 Naval Divisions across Canada and it is believed by the Committee that the eventual objective was to establish the Command as a Flag Officer Central Canada with functions covering the area between the Flag Officers of the Atlantic and Pacific. This plan has never been brought to fruition and COND remains as administrator of the Naval Divisions, the RCNR and Sea Cadets as well as establishing certain training facilities on a summer time basis at Hamilton, Ontario at the Great Lakes Training Centre. Prior to the establishment of COND all Reserve administration was centralized under the Director of Naval Reserves at Ottawa with a staff of about four officers and an appropriate number of civilian help. In 1953 the strength of the Naval Reserve was about 5,300, a figure which has not been achieved since that date. At the present time it is understood that there are approximately 34 officers, 15 other ranks and 50 civilians on the staff of COND which represents a reduction from a peak of possibly a total of 125 of some years ago. The committee was advised that it was not contemplated to make any reduction in the staff of COND consequent on the closing down of 1/3 of the establishments of the Naval Division Command and the reduction in complement by an equal amount. In view of the fact that the major items of concern to the Command is the maintenance and repair of buildings, supervising civilian personnel employed therein and personnel administration of the Reserve the committee fails to see why no similar reduction in the establishment of COND commensurate with the reduction in the Reserve is to take place.

Apart entirely from the foregoing observation representations were made to the committee that while the establishment of COND had in the initial stages improved the organization and training of the Reserve it was felt that now the role and task of the Reserve had been more clearly defined that COND had perhaps reached a point where its continued establishment as a separate command was not justified for the functions it performs. This is apart from the operation of the Great Lakes Training Centre which will be commented on separately. In passing, it might be stated that no difficulty can be foreseen in establishing the G.L.T.C. from summer to summer if required in the same way as it is now, as many of the personnel are Reserves who are placed on Special Duty for the summer and the amount of administration during the Winter months of this activity is therefore at a minimum.

Another facet in relation to the administration of the Reserves by COND is that when COND was originally established the Reserves were entering on to a phase of specialized technical training that involved the supply of a great deal of complex and expensive equipment such as SONAR, Gunnery Control, etc. This programme has for the most part now been discarded and the Reserves train on more general lines which have less emphasis on technical training in recognition of the difficulty of matching regular Naval standards for

more complex technical trades in the time available to Reserves. Accordingly the requirement of many specialist officers no longer exists as the form of training which the Reserves are now required to take under the revised programmes within the scope of what might be called, non-specialist officers. This of course has an effect on the level of administration required. A further point that came up continually before the committee was the vast amount of paper work which Naval Divisions were called upon to handle. The committee, from its own experience, was able to state that this was very marked with the institution of COND and the divorcing of Reserve administration from Ottawa, under the Director of Naval Reserves.

Another point that was brought before the committee was the fact that COND undoubtedly is quite an expensive operation and in view of the fact that the Naval Reserve now seems to have very positive direction and knows what its function and tasks are consequent on the reorganizations that have been completed recently that perhaps COND as a separate command is no longer justified from expense operational and administrative points of view. As it was Page 19 succinctly put more than once to the committee perhaps "COND is a luxury we can no longer afford". Observing that according to the figures supplied to this committee by COND (Schedule 7) the maintenance operation and personnel costs of COND would appear to represent some $750,000 dollars per year there would seem to be some justification for this comment.

The committee is aware that in the Royal Navy and the United States Navy. Reserve administration continues to be centralized at the respective headquarters of those two services. Thus the RNR is administred by the Admiral Commanding Reserve who is an officer at the Admiralty on the staff of the Second Sea Lord and in the United States there is an Admiral as an assistant Chief of Naval Operations in charge of Reserve activities in the Navy Department, Washington. On the divorcing of DNR from headquarters in 1953 and the assumption of command of divisions by COND the direct administrative link to Headquarters and the direct link to the operational commands on the Coasts was lost. It must be remembered that the Naval Reserve is trained to form a pool of personnel for the use of the flag officers on either coast in the event of an emergency. The possibility of lack of co-opration or communication between the flag officers on each coast and the Reserve also exists as it seems an extra link in the chain has been inserted as presumably much of COND's administration which is basically personnel goes through Naval headquarters and repetition and duplication and overlap by reason of the separation physically of COND from Ottawa undoubtedly occurs. The committee of course had not had the opportunity by reason of time at its disposal to thoroughly investigate or obtain information in this regard but bearing in mind the basic nature of the growth of administrative operations it seems a valid conclusion.

The committee therefore agrees with the recommendations of the overwhelming opinions expressed to it that immediate consideration be given to returning the Naval Reserve administration to Ottawa where it would become part of the operation of the Chief of Naval Personnel similar to the old DNR arrangement and the resources of the various headquarters Departments for the preparation of syllabus, mobilization, planning and all other matters would be available.

The Committee was advised that the RCN pay and allowances of personnel in COND and attached to the various Divisions were not considered as a charge on the Reserve Force vote yet it must be considered in the overall Naval estimates as an indirect cost of the Reserve as the presumption is that were these people not employed at the Divisions they would not be required elsewhere unless the fleet is woefully undermanned. This comment is made in light of the fact there are employed, either in COND or across the 22 Naval Divisions, some 400 personnel both uniformed and civil service. Of course many of their duties are related to the establishment of the RCN itself in such functions such as Pay and Accounting for people on detached duties in various centres such as the RCAF College Toronto, Joint Services School at Rivers, Manitoba, Radio Stations, ROTP cadets at universities, etc.—all of whom require pay and other administrative services which, for convenience, are being handled through Naval Divisions. Thus in many cases the Pay and Accounting staffs of the Naval Divisions are employed to a greater extent on RCN matters than on Reserve matters as most Reserve units handle this function for their own people. However, notwithstanding this there are still a large number of permanent employees employed in the administration of the RCNR. This, of course, has a reflection on the greater importance the Committee feels the RCNR has and the difference in the approach to its administration from that of 1939 when the Reserve was reasonably self-administering with a maximum of two regular force instructors in even the largest Divisions of a 150 and a small staff on the Directorate of Naval Reserves in Ottawa, not exceeding two officers and a few clerks. At that time the Reserves numbered about 2000 compared with a presently projected figure of 2400 (excluding UNTD). Consequently it seems that if economies can be effected in the regular personnel administering the Reserve that these should be properly considered as savings in the indirect costs of the RCNR as otherwise these people would not be employed by the Department of National Defence. The Committee is also mindful that recently with the paying-off of a squadron of minesweepers the 500 or so persons thus released will constitute a reduction in the overall complement of the Navy and are not being
Page 20 absorbed in the existing establishment. On the same line, therefore, if personnel involved on a regular or full-time basis for Reserve administration can be eliminated this should be reflected in an overall reduction in the RCN figures for complement and therefore pay etc. and this should be credited to the Reserve from the point of view of calculating the costs of maintaining it.

It is against this background and the belief that the Reserve can be more effectively administered by return of the Reserve administration to Naval Headquarters, and more economically operated in terms of RCN staff within individual divisions that the Committee recommends:

(*a*) COND be discontinued as a separate command and all requirements for Headquarters administration of the Reserves be reviewed.

(*b*) The RCN complement within individual divisions be reduced to a scale commensurate with the needs of Reserve administration and training only. If there is a continuing requirement to operate Naval Divisions as Fleet Establishments for Regular force purposes, this

should not be treated as presently appears to be the case as part of the cost of the Reserve, but should be identifiable and charged to operating the Regular components.

It is estimated that the implementation of the foregoing could result in savings of at least $500,000. and possibly 150 personnel.

It was suggested to the Committee that COND also was considered to have a purpose to promote a separate Command organization in the event of emergency. However this does not relate to the provision of Reserves in relation to the present planning of a war of short duration—30 day concept. However if the continuance of COND as a separate organization is a requirement of RCN policy this does not, in the Committee's opinion have a major bearing on the peacetime Reserve establishment as Reserves should be brought out in accordance with the needs of the Atlantic and Pacific Commands which can be probably dealt with in a manner similar to 1939 by order of Headquarters.

The Committee is also aware through the members' association with the Conference of Defence Associations that consideration is being given to the re-establishment of the position of Advisor on Militia for the Army and it may be that the Committee established for the RCAF (Auxiliary) envisages a recommendation that a Senior Air Force officer be responsible at Air Force Headquarters for RCAF (Auxiliary) matters. The Committee therefore feels that if steps are taken by the other two services in this regard it would lead to a most desirable situation to have the officer responsible for the administration of the Reserve in the Ottawa area where consultation with the officers administering Reserve force matters in the Army and Air Force would be readily available and there would in fact be a tri-service approach to Reserve matters established at the top level. It is also the Committee's recommendation that the Director of the Reserve Force for the Navy be an associate member of the Naval Board although perhaps not a full member. Yet for the purposes of discussing and considering Reserve matters before the Naval Board it is essential that he has the right to participate in Board discussions affecting the RCNR.

(b)—*RCN Recruiting Organization*

Although the terms of reference of the Committee did not specifically include any examination or consideration of the recruiting organization of the RCN through the Area Recruiting Officers and now as implemented in many centres through Tri-Service Recruiting Staffs, many comments were received from various units with respect to this matter and the Committee feels bound to make certain observations in respect thereto. The comments which the Committee received were related to costs of the Navy's operation in particular areas and those submitting the comments were doing so in good faith in the hope that any unnecessary expenditures which may have resulted from the Tri-Service Recruiting organization might be eliminated. Specifically Divisions which had formerly housed the RCN Recruiting Staff by reason of the strategic location of the Division in its community could not see the rationale in moving the staff away to another building, sometimes to pay rent to a commercial organization, or perhaps have rent charged against the Navy vote by reason of occupancy of government quarters when

21310—6½

such move only entailed locating the recruiting office a few blocks away from the Naval Division. This is particularly true in Winnipeg for example. In other cases, such as Edmonton, it is believed the area recruiting staff will be housed in HMCS NONSUCH if the RCNR abandons it. In fact it was represented at Edmonton that the whole recruiting staff could be accommodated in the Division without impairing the operations of the Reserve unit and it would seem that if this step is contemplated a proper allocation of costs as between the recruiting activities and the Reserve Division should effect a basic budgetary saving to the Reserve appropriation. There was also criticism of the work load carried by recruiting staffs. For example in one province which produces about 1 recruit per month for the RCN, there exists a Chief Petty Officer as Recruiting Officer. The utilization of this man as Staff Officer for the Division was considered feasible. When recruiting was located in Naval Divisions a certain amount of assistance to the Division was available from the recruiting staffs as they were not fully occupied with their duties. There is a general feeling that the recruiting offices are overstaffed and if personnel is a problem certainly in those Divisions which indicated the desirability of returning the RCN recruiting staff to the Division assistance in the administration of the Reserve unit would be an economical utilization of personnel. As indicated, this entire matter was really outside the purview of the Committee and these comments are made only because they came up from time to time in submissions to the Committee but in the overall picture of endeavouring to reduce expenditures and achieve efficiency the Committee feels that it has a duty to present these views.

Inherent in this proposal would be the requirement for the RCN Recruiting Staff to come under the Command of local CO. This would represent no break in the direct link with CNP if the recommendation of the Committee respecting COND is implemented (Part VII (a).)

(c)—*Navy League of Canada and Sea Cadet Corps and Navy League Cadet Corps—Summer Camps*

The Navy League of Canada has as one of its objectives the promotion of an awareness of the importance of sea power and maritime affairs in respect to Canada and the Naval Defence of the Country. However the principal activity of the Navy League is the operation of Sea Cadet and Navy League Cadet Corps, the former in partnership with the Royal Canadian Navy and the latter fully supported by the Navy League itself from its own funds. Prior to 1939 the entire cost of the Sea Cadet movement was borne by the Navy League without assistance from the Department of National Defence. About the year 1942 a change was effected and the Navy became closer associated with the Sea Cadet Corps as it was presumably felt that the young men in the Cadet Corps would make potential recruits for the Navy. Also at this time a system of pay for officers attending drills was instituted as heretofore there had been no remuneration for them as Cadet officers. By reason of the close association between the Navy League and the Navy in respect to the Sea Cadet movement over the years considerable help has been given to Sea Cadets by the Department of National Defence and the committee understands that the current appropriation

for support of Sea Cadets is 1.35 million dollars, which is chargeable to the operation of the Naval Reserve.

We understand this is to be reduced $200,000, but there was some conflict on the information received on this point. Arising out of the interest and association of the Navy League with the Naval Service the Committee received briefs from many committees of the Navy League either provincial or local and did hear some oral presentation from the National President of the Navy League, during the hearings held on the HMCS STAR on the 26th of January.

In essence the principal point which was presented to the committee by the briefs from the Navy League was concern with the closing down of Naval Divisions which were providing accommodation to Sea Cadets and Navy League Cadets for their activities. This accommodation is provided without charge to the Navy League, notwithstanding that in centres where there is no Naval Division or other Government property available the Navy League Page 22 has the obligation of finding and providing appropriate quarters at its own cost. The Navy's responsibility is the provision of uniforms, pay for officers and cadets, maintenance of summer camps and capitation grants. Officers and Cadets are sent to camp by the Navy at the Navy's expense. During these periods, the Cadet officers are on Naval rates of pay. In some locations the degree of use to which Noval Division Buildings are put by the activities of the Cadet Corps is as great or perhaps in some respects greater than that of the Naval Reserve Division. This occurs when two substantially large Corps use the facilities of the Naval Division exclusively on certain evenings for their drill and training activities. Figures were cited to the committee that approximately 23% of recruits entering the Royal Canadian Navy are ex-Sea Cadets. Thus this is considered a very fertile ground for Navy Recruiting. However, in the case of the Reserve, the Naval Divisions were gravely disappointed with the very low percentage of recruits obtained by the RCNR from the Sea Cadets, notwithstanding the close association which existed in the activities of the Reserve and the Cadets by virtue of their sharing quarters. The committee members have all had opportunities through their Naval Reserve experience to observe and participate in Navy League activities and certainly are not unsympathetic to this Cadet movement which is doing an extremely salutary job of giving young men and young women (through the Wrenettes) a training in discipline and citizenship with a Naval background. The standard of training in the Sea Cadet Corps is certainly recognized by the Committee to be very high and this may partially explain why Naval Reserve units draw few Sea Cadets. Thus the senior Sea Cadet finds little challenge to his talents when he joins the Naval Reserve because he is already highly trained in the basic essentials of seamanship, discipline, Naval lore and other matters. At present qualified Sea Cadets may join the RCNR as AB(NQ). It is felt that this is not a sufficient recognition of the capabilities and qualifications of the Senior Cadets and to attract more into the Reserve a more generous rank should be given to qualified Cadets so as they would be encouraged to join. There are of course a number of Cadets who go to Universities and perhaps join the UNTD scheme and would not be expected to participate in the RCNR. However, the fact remains that a great many Cadets are terminating their association with the Naval service

when they leave the Cadet movement and this is an unfortunate loss of trained young men on whom the Navy has spent considerable monies. In addition to basic training, Senior Cadets have opportunities to take special courses of six or seven weeks in the summer. These courses are in fact of a standard close to certain trade training in the regular Navy and at present not required by the Naval Reserve due to the reorganization of the Naval Reserve training programme. This again is not to be construed as criticism but if the Cadets do not join the Naval Reserve nor the regular Navy the value of this type of training from a defence dollars and cents point of view is questionable. It should also be borne in mind that if the Cadet joins the regular Navy he will take much of this training over again on completion of his New Entry training and perhaps these higher specialized courses might be revised to have a more realistic value to the Cadet movement as such and possible utilization or application to the Naval Reserve. The committee is thinking, in this regard, of such things as Naval Aviation training which does not form part of the Sea Cadet curriculum and therefore does not make the young Cadet any more suitable as an instructor in his Corps nor is it applicable to the Naval Reserve especially if the two squadrons presently in existence are disbanded.

The Committee is fully sympathetic with the aims and objectives of the Sea Cadet movement but if the policy of the Department of National Defence is to spend its budget on defence activities then the Sea Cadet movement cannot be wholly considered as under this heading and is certainly at the present time not of great value to the Naval Reserve in its role and tasks for the reasons indicated above. Further it does seem reasonable to have the Sea Cadet vote charged against the Naval Reserve in these circumstances. On the understanding that there is to be only a minor adjustment of the Sea Cadet allotment in the current Defence budget then almost the entire cut in appropriations for Naval Reserve activities is falling on the active RCNR to the prejudice of its capabilities and establishment. Further the committee was advised that although the plan was to reduce the number of days reserve officers will be paid for their weekly drills from 30 to 20 no similar revision in Sea Cadet officers remuneration is contemplated. When one compares the Sea Cadet officer with say leaders of the Boy Scout organization, who receive no remuneration, this hardly seems reasonable as the Sea Cadet officer is not part of the Naval Reserve as far as liability for service is concerned nor is he anywhere nearly as highly qualified as the Naval Reserve officer who for the large part is a graduate of the UNTD. It is true that there are some Sea Cadet officers who are ex-wartime Naval Officers but these are becoming fewer and fewer and the techniques and qualifications of Sea Cadet officers are well below that required for officers in the RCNR. It would seem therefore that some re-adjustment of Sea Cadet officers pay, to that of Naval Reserve officers should be made if economies are being dictated. The committee would recommend that the number of days for Sea Cadet Officer's drill pay be reduced to the same figure at least of Naval Reserve officers i.e. 20 and as an after-thought perhaps complete revision of the approach of payment of Sea Cadet officers should be undertaken. In this regard many Navy League officials appearing before the committee expresed confidence that pay was not important to the average Sea Cadet officer and that for

Page 23

every one who might leave the Cadet movement if pay was cut or eliminated there would be no problem of replacement. On the basis of the figure of $361,000. per year being paid to Sea Cadet officers for drill pay, a cut to that of Naval Reserve officers would result in a saving in the next fiscal year of $120,000. The committee therefore expresses the following opinions regarding the Naval participation in the RCS Cadet program.

1. The RCSC cannot be categorized as an Active Reserve force.

2. As a corollary of the foregoing it then follows that the RCSC is not a legitimate charge on the defence dollar to the prejudice of the Active Naval Reserve.

SEA CADETS SUMMER CAMPS

At the present time sea cadets are given the opportunity to attend summer camps at the expense of the Crown at camps established on the East and West Coast. Formerly on the East the camp was located at Cape Breton and the camp on the West is established at Comox. Observing that by far the largest number of cadets in the country come from the central area around Ontario, the transportation cost of these cadets to either coast is a considerable factor. It would seem that if GLTC is adjusted to have a lower requirement of Reserve personnel as the Committee recommends then facilities could be established to train cadets at GLTC from the central Canadian area. This would achieve savings in transportation in both money and time.

(d)—*RCN support and activities in relation to naval divisions*

In other sections of this report references have been made to the degree to which Naval Divisions carry out functions of fleet establishments and perform tasks related to the existence of RCN commitments and personnel in various centres throughout Canada. Also inherent in this is the RCN staff personnel appointed to Divisions for assisting in the administration and the training of the RCNR.

Such RCN activities include:

(*a*) logistic support in connection with visits of ships to ports where divisions are located;

(*b*) assistance to personnel on leave and in compassionate cases;

(*c*) maintenance of pay and accounting records for RCN personnel temporarily on duty in the Divisions area;

(*d*) assistance to the RCN in filling instructional vacancies in Fleet Schools; Page 24

(*e*) acting as a base for operations involving RCN participation in such public relation activities as the Canadian National Exhibition, Pacific National Exhibition, Navy Week, etc.;

(*f*) provision of motor transport and facilities for transient personnel;

(*g*) acting as release centres for RCN personnel on completion of engagement;

(*h*) support for the Area Recruiting Officer in connection with documentation, transportation, message traffic, etc.;

(*i*) provision of Trans-Canada Teletype Communication link;

(*j*) apprehension of deserters;

(*k*) Support for isolated RCN establishments.

It is estimated that in some Divisions the foregoing and similarly related tasks which are not part of the RCNR training absorb the energies and time of RCN staff at Divisions to an average of about 50%. Again while the Committee has been told that RCN pay and allowances are not chargeable to the Reserves, in taking an accounting approach to the cost of maintenance of Reserve units, it is undoubtedly the case that RCN staffs are considered as an indirect cost of Divisions as similar personnel and facilities would be non-existent without an RCNR unit in the various centres. It is assumed in this context that if Divisions in five major centres are paid-off that the RCN staffs from these Divisions will become redundant with resulting overall saving in personnel and their functions will be in many cases transferred to nearby Divisions thus reducing further the availability of those staffs for Reserve support which is understood to be their prime purpose.

Thus the Committee feels that there should be a clearly defined division between the allocation of staffs for Reserve activity only and those for RCN support functions and this be reflected in the allocation of funds between the two components. Again this would be a most difficult calculation to arrive at but even an approximation would be an improvement as this does not appear to enter into present budgetary planning.

The Committee feels that it should also comment on the standard of personnel drafted to Divisions to fill complements. In many cases such personnel are sent for compassionate reasons and because of their preoccupation with their personal problems contribute little effective effort to the administration of the unit. Also the quality of the personnel sent frequently leaves much to be desired and certainly in the experience of the Committee is not representative of the competency existing in Regular Force personnel. The all too common practice of drafting personnel who are inefficient to the Division simply adds to the burden of the Reserve personnel who are given unreliable assistance and especially in the case of staff officers gives the Navy a poor image in the community as these persons are looked upon as representatives of the standards of the Service.

Understandably and with the best of intention, many RCN personnel approaching their time for pension are directed to Naval Divisions in areas in which they propose to finally retire. It will be obvious that their personal requirements in seeking future employment must cause a conflict with their naval duties in the Division to the detriment of efficiency.

Page 25

VIII—FACTORS RELATING TO DIRECT COSTS OF RCNR

(a)—*General Financial and Budgetary Considerations*

As preliminary to the Committee's work, a statement of the costs of operating the Naval Reserve Units, was obtained from

COND, which shows a total of 5.6 million dollars on this item for the current fiscal year (Schedule 7). This includes regular force pay and allowances of 1.8 million dollars although it was pointed out to the Committee that this figure should not be included in considering RCNR budgeting as this is a charge against the RCN. *However,* such a figure must of course be considered as an indirect cost of the Reserve on the assumption that if this expenditure is only required for the RCNR Divisions, then were there no such component of the Navy these personnel would in all probability not be required. It was further pointed out that there is a figure of 1.35 million dollars which is chargeable to the RCNR and is attributable to the costs of the support of the Sea Cadet movement which is operated jointly with the Navy League of Canada on the principal whereby the Navy League is responsible for providing quarters, certain administrative functions, scholarships and other matters, whereas the Navy provides drill pay for officers and pay for officers on summer camp training, uniforms, area officer supervision of training, summer camp operation and transportation. In view of the foregoing it seems reasonable that in considering the direct and indirect costs of the operation of the RCNR expenditures on Sea Cadets should be considered as to whether or not any economies or savings can be affected in this area, observing that it has a direct bearing on the RCNR budget appropriations.

The Committee understands that insofar as the Department of National Defence estimates as tabled in the House of Commons for the current fiscal year are concerned the actual appropriation for the RCNR was 2.8 million dollars. We were also advised that a reduction of 1.8 million in the Reserve budget had been directed for the fiscal year 1964-65 but only a small part of this reduction is to fall on the sea cadet appropriation. Also apart from the savings inherent in closing down 7 divisions and the release of the staffs therefrom there would be no reduction in RCN personnel administering the divisions and COND Command. Thus while ostensibly a 33% cut in Reserve appropriation is contemplated if this was taken on a cost of operating the Reserves of 5.5 million dollars for one year (including the sea cadet vote but excluding RCN pay) the 1.8 million figure would be representative. However, as sea cadets are to take only a small reduction, the 1.8 million, will fall on approximately $4,000,000.00 allocated for the current fiscal year for the RCNR pay and allowances, overhead and maintenance and civil service staffs at the various divisions and thus represents a cash appropriation reduction of approximately 45%. The Committee does not feel that this is a justifiable approach to this matter in the light of the responsibilities which the RCNR is called upon to assume and which become either responsibilities of the RCN regular force or are in a sense non-productive from the point of view of efficient utilization of Naval Division property.

In the absence of other figures the Committee used the breakdown already referred to as supplied by COND, in approaching the Various units with a view to ascertaining where economies in costs of operation might be effected. At this point it should be mentioned that many of the officers associated with Naval Divisions are responsible businessmen or senior civil servants in various levels of Government who are used to and capable of working towards large budgets and making the best use of the money given to them for

the operation of their respective businesses or departments. Many officers are qualified chartered accountants, comptrollers of businesses and in one outstanding case is a Deputy Minister of Revenue for a Provincial Government. None of these officers were aware of the budgetary breakdown of the costs of operating their division as
Page 26 charged to them and while they had informed ideas as to what the costs were by reason of being able to assess the pay and allowances, both for RCN and RCNR personnel and civil service in many cases they were completely unable to reconcile the cost analysis which had been provided to the Committee in relation to their own division. Because of the limited time and facilities at the disposal of the Committee more thorough analysis and costing of the monies purportedly being spent in support of the RCN has not been possible. However, the Committee is firmly of the opinion that this matter requires most thorough investigation and analysis with a view to clarifying several points such as:

1. How much of the monies being charged to RCN pay and allowances, which are in support presumably of the Reserve, is in fact a support of the administration of regular force activities in various areas, which have no relationship whatsoever to the maintenance of the RCNR. Under this are such things as pay, stores, provision of motor transport, accommodation for recruiting staffs, telephone and related services, which have grown upon the divisions and absorb a great deal of their effort without contributing to the efficiency of the Reserve. This is not to say that such services are not essential but they could probably and will have to be in some cases reallocated if divisions are to be closed down and a thorough examination of this type of operation should be made for the purpose of arriving at proper cost accounting of the expenditures related to the operation of divisions. On an average the RCN staff in a division appears to devote about 50% of its time to Regular Force matters.

2. Pay and allowances for special duty for Reserve personnel, who are called out in the summer months or at other times to discharge functions for the RCN are charged, as the Committee believes, to the Reserve operation. This of course is part of the concept of service and duty for which the Reserve is established and should be prepared to meet, but if a strict application of funds for the RCNR operation alone on a non-active service basis is being considered, these are not properly charged to the Reserve establishment as many of these persons are doing jobs such as instructors in schools where they may teach permanent force personnel, fill temporary billets in various commands where RCN personnel are either absent or there is an immediate need. Also with respect to civil service it was certainly represented that in many divisions a revision of such things are heating apparatus in the division would enable a reduction in firemen to be made with consequent savings probably both on fuel and personnel. The Committee has been told that representations of this kind have been made by individual divisions but nothing has resulted therefrom. On the basis that an unnecessary position is being maintained and being charged to the Reserve, in the interests of efficiency these matters certainly require investigation.

3. In the breakdown supplied by COND is an item of $440,000.00 of Headquarters expenses which are prorated and charged to the operation of the various Naval Divisions. An opinion was expressed

that this was an item which was certainly an estimate and it was also expressed to the Committee that it would be difficult to make any allocation of this money amongst Divisions for the purposes which have been represented to the Committee such as costs of publicity, shipping and other matters, which are borne by Naval Headquarters. An opinion was also expressed that even if the entire Naval Reserve was abolished this figure would not necessarily disappear as a cost item from the Navy budget. The propriety therefore of including this figure as a cost of operation of the Divisions should be examined. On the other hand it should be observed that the Divisions contribute to the Navy in free services by way of representation which is a part of advertising and public relations on the part of the RCNR officers and men and in other intangible ways for which no cost is borne by the Navy. Any estimate of the value of this in real dollars would be as speculative as the charge for $440,000.00. It is observed that no prorated cost of this nature is charged to COND.

4. In respect to utilization of buildings, which of course has a bearing on costs of operation, it is apparent that most Divisions could be utilized to a greater extent by what might be called revenue contributing activities. Most Divisions do report reasonably high utilization of their facilities by reason however, of youth group activities on behalf of Sea Cadets, Navy League Cadets and similar types of organizations. The Committee is fully appreciative of the value of these activities as part of the strengthening of the moral fibre of the nation and our comments in this regard are not intended in any way to suggest that these are not useful to the country as a whole but are only related to whether these are functions which should be charged to the Department of National Defence in view of the fact that no obligation for service or enlistment in the services arises out of such activity. Thus in some divisions the degree of utilization for evening drill and instruction by such organizations often outweighs that of the Naval Reserve Unit itself. On a five or six night weekly programme, two may be used by the divisions and the other two or three may be used by such youth activities. The Committee was also advised that in many cases when word of the closing down of divisions became known the local military authorities expressed interest in the use of the Naval Division building. While no final decision on this will be reached until the report of the Militia Commission is completed it is certainly obvious that the Militia are looking forward to the acquisition and use of the buildings which the Naval Divisions have been directed to surrender. In discussing this matter the Committee received assurances by various divisions, including not only those affected on the closing down, that the accommodation of Militia units in the buildings would be not only feasible but would be welcome so as to achieve a more close co-operation between the Reserve forces. It was pointed out, however, that in such event there might have to be some displacement of the youth training activities but it would seem that with a little ingenuity this could in most cases be held to a bare minimum and instead of an elaborate allocation of space to such activities presently existing in some buildings that are more than adequate for the Reserve unit there would not be any real disadvantage accrue. Thus all the divisions which are in new quarters such as Queen Charlotte, Prevost, Queen could accept militia units

Page 27

of various sizes as these divisions are operating defence forces below the capacity of their building. The same comments refer to HMCS NONSUCH in Edmonton although this building is not as new as the three mentioned. It would certainly be the Committee's strongest recommendation that the paying off of these divisions be postponed until after the Militia Commission has reported and the needs of the militia in the various areas can be more clearly defined to see what can be done in the light of the findings reported herein. The purpose of this suggestion is not only to try to achieve economies in the matter of the operation of the Naval Reserve but also possibly that of the militia as other quarters which have become unsuitable or perhaps are being rented and could be made redundant to the Militia could thereby be surrendered. Insofar as the RCNR aspect of the matter is concerned it is assumed that if the militia and other Department of National Defence activities such as recruiting staffs were located in Naval Divisions that a proper allocation of costs of overhead and maintenance could be made with a resulting reduction to the charges to the RCNR vote. As an example if the division had a strength of say 150 and a militia unit of equal size was put in and used the building then costs of maintenance of the building should be divided equally between the militia and the RCNR.

Page 28

Notwithstanding that the breakdown of costs provided to the Committee is not entirely satisfactory but using it as an indication of what is entailed in the operation of the RCNR the Committee have analyzed the approximate cost of maintaining a Naval Reservist for one year. This is predicated on the total strength of the RCNR as at the 24 January, 1964, a total of 4,130 all ranks (including UNTD). Neglecting the Sea Cadet appropriation and RCN Pay and Allowances and taking a cost therefore of about $4,000,000.00 for the Reserve, this would work out on an average of $970.00 per man (as a comparison the average for RCN personnel is about $13,600.00). Referring to the principle of economy which was applied in deciding Divisions to close, we find that in the case of HMCS SCOTIAN at Halifax and HMCS MALAHAT at Victoria their average cost per man for the strength of these two units which total 376 all ranks about 200 below this average. In the case of HMCS MALAHAT there is an expense for the Air Squadron which is, as already remarked upon, probably higher than the average for the Reserve but even including this the cost of supporting these two Divisions is respectively on a per man basis—HMCS SCOTIAN $782.00 per man and HMCS MALAHAT $697.00 per man. In the case of HMCS MALAHAT further reductions in civil service pay and overhead maintenance can be effected if the Division uses quarters in the Fleet Establishments at HMCS NADEN. Also, in the case of Halifax the Division occupies a building which the Committee was advised will continue to be used and maintained for a base for the Reserve Fleet and other purposes related to the Atlantic Command and therefore there will be practically no change in the cost in respect to these buildings insofar as the overall Navy picture is concerned. Accordingly these two Divisions can, apart from the RCN staff component, be supported almost entirely on the cost of RCNR pay and allowances only. This of course is a unique situation but certainly should not be disregarded and in the light of availability of the personnel should weigh very strongly in deciding as to the continued existence of these Divisions as they provide good

value and usefulness in emergency. These of course are the prime requirements related to the maintenance of a Reserve force. It should be noted that many of the functions carried on by HMCS SCOTIAN, and presumably by HMCS MALAHAT, which relate to RCN activities such as ROTP Cadets, Area Sea Cadets and Recruiting Officers, Pay and Administration and other factors which have been suggested above will have to be transferred to Fleet Establishments and this would make the economies of operation of these two units even more pronounced. Thus for civil service and overhead and maintenance of about $45,000.00 for these two Divisions a figure of probably $10,000.00 would be more than ample.

Another aspect related to costs over a longer period is the fact, as already mentioned, three of the Divisions being closed are in brand new quarters which are more than adequate for the operation of the present unit and presumably would continue to give good service without major repairs or alterations for many years. In contrast some Divisions such as HMCS BRUNSWICKER and HMCS HUNTER are in older buildings whose expected costs of maintenance would probably rise in the future. It is felt that a thorough analysis of the consequences of this aspect of the present plan should be examined before final implementation.

(b)—*Pay and Allowances* **Page 29**

The Committee has heard many representations across the country in respect of economies which might be effected in Reserve pay. The full gamut of opinion was run from the recommendations that divisions slated for paying-off be allowed to continue with no drill pay and receive pay only for summer training to the other extreme of recommending increase in the present arrangement of 1 day's pay for every two drills. Striking an average of opinion it appears that the present scale of remuneration to Reserves is acceptable. Philosophically it is the opinion of the Committee that, as it has been suggested in one instance, Reserves have expressed their patriotism in the devotion of time and other sacrifices to the Reserve and that, although patriotism cannot be assessed in dollar value, it, of all the virtues might seem to be deserving of reward.

One of the factors in administration of reserve pay and allowances is the preparation of income tax returns. Observing that probably large numbers of reserves have little or no income tax liability, it seems that much administrative effort is wasted in this direction. Also as recognition has been given that in the Regular Force income from sources from outside the Service is shown on a separate return thereby effecting some saving in tax, it would seem that the reserve might have their remuneration for service treated as a form of expense so that it would be tax exempt. The Committee has no figures on what preparation the 2 million RCNR pay and allowances is paid back in the way of taxes, but it must be a small figure in relation to the administrative work required in this connection. A step such as this would be a tangible recognition to the reserves of the appreciation for their services. It is also a fact that much of the reserve pay goes towards transportation to and from the division, taking part in divisional activities and discharging representational functions of the RCNR task. This certainly true in the case of officers which probably leaves them out-of-pocket at

the end of the year, taking into account their pay and allowances received for their RCNR duties.

Comments regarding pay administration are included in Part VIII (c).

The Committee has a duty to represent the feelings expressed for many Division across the country the treatment of Reserve pay as an expense item could also lead to a greater flexibility in their administration of pay and, in fact, might provide them with effective local discretion in the assessment of the value of services rendered by their personnel. Several Divisions suggested that a form of lump sum payment could well be made so far as to recommend that such payment be graduated in a simple approximation of current pay scales appropriate to each rank but be placed as a right only on the basis of 75% attendance with any gradation upwards from the basic minimum being dependent upon attendance at drills not below this percentage. To put it simply they recommended that there should be no remuneration for any officer or man who did not demonstrate his effectiveness to the Reserve by attending at least three drills out of four. The additional discretionary power to be vested in the CO by such a scheme also makes worthy of the fullest consideration.

(c)—*Administrative Procedures in Naval Divisions*

In this regard the Committee received over-whelming opinion that the administration of the Naval Reserve in the Divisions was far too complex and complicated. This was especially true with respect to the pay system which was described as being cumbersome and out of date with modern methods and should be thoroughly reviewed. Also the amount of paper work involved in returns and correspondence is excessive. There had been noticeable increase in this direction since the institution of the Commanding Officer Naval Divisions Command. This again is an area where the Committee's time just does not permit of concrete suggestions as to what forms should be eliminated or how correspondence could be streamlined or particular systems adopted and the Committee will have to content itself with recommending that this matter be thoroughly investigated and the following principles applied:

1. Reduce the number of forms to the bare essentials for the purposes of Reserve units observing that Reserve training, advancement and other matters progresses on a much slower pace than that of the RCN.

Page 30

2. That much of the documentation required for Regular personnel is not required by Reserves and this is especially the case insofar as Divisional forms and reports on officers are concerned.

3. While on-the-job training is useful and desirable, if it becomes the only activity in which the Reservist can participate and is on a very limited scale, such as concentration on Divisional work, pay records, etc., it prevents training in other directions to increase technical skills. A change in the Reserve pay system might carry with it the disadvantage that the Reservist is administering a different pay system from that which he will be

called upon to employ in Active service but the training in the Active service pay and accounting systems can be given as formal training tasks. The Committee received three proposal systems revising the RCNR pay system which are appendices numbered 12 and 13.

These are forwarded with the recommendations they be examined and adapted as appropriate. The possibilities of economies being effected should not be overlooked and in the case the proposal from the former Supply Officer of HMCS *DISCOVERY*, an annual saving for the entire RCNR of about $10,000 per year is indicated.

Utilization of Accommodation

In this report comment has been made that informal discussions have been entered into on the local level between Naval Divisions and Militia staffs with a view to ascertaining if some joint occupancy arrangement for the use of Defence Department buildings could not be arranged. The Committee is fully aware that the eventual establishment of the Militia and various components thereof will have to await the report of the commission set up under Brigadier Suttie before any final planning could be done on this aspect. It is the Committee's recommendation therefore that Militia units be authorized to enter into discussions on an official basis with Naval Divisions to work out schemes of accommodation sharing and to this end that the decision for final closing down of Divisions be postponed until after the report of the Suttie Commission is made. This does not relate to the reduction in establishement of the RCNR if this is still considered unavoidable for budgetary purposes and certain other economies whitch would not be affected by such a move, should be implemented without delay so as to achieve savings wherever possible. Conversely Naval Divisions which are presently planned for closing should be authorized to approach the local Militia authorities as to the possibility of housing the Naval Reserve unit in an armoury. This suggestion was raised in at least one Division, namely Regina, and in this case would result in the Division going back to a location which it previously occupied. It would seem, however, on balance wherever possible the Naval quarters should be utilized as in most cases they are newer buildings and therefore require less care and maintenance and also armouries may be located in the centre of urban areas where such problems as parking and traffic have been created and the property on which the armouries are located is probably of great commercial value. All units questioned on the matter of policy insofar as having Naval Reserve and Militia units in the same building agreed that this would be perfectly feasible where the space was available and was a proper approach to greater utilization of properties for defence purposes. However not all Divisions were able to state that they had any additional space and could accommodate Militia units and this is a matter which should be investigated in each individual centre. There is of course a collateral problem to this in that Naval Reserve buildings and Militia armouries are also made available to cadet units and some dislocation of these activities might be unavoidable. The Committee feels that while the cadet activity may not have a direct relationship to the defence

establishment insofar as providing personnel for mobilization every consideration should be given to permitting them to use defence quarters. However on the other side if the policy is to ensure that only military units in the broad sense of the word as defined in the National Defence Act, Section 2 (19), are to be considered then cadet usage becomes secondary after achieving maximum use by such military units.

Page 31

IX—ANALYSIS OF POSSIBLE ECONOMIES AND COMMENTS ON DIVISIONS SCHEDULED FOR CLOSING

In the report to this point are many recommendations respecting possible areas where economies can be effected in the operation of Naval Divisions related particularly to the operation of the RCNR. Also reference in what follows is made to a memorandum prepared in respect to "Naval Policy for Reductions in the RCNR"—NSS 2200-64 Pers (N) "M" of 28 November, 1963 (Schedule 10). It is observed that in paragraph 4 reductions be spread evenly between RCNR, UNTD and RSCS. However, in this regard the RCNR budget is being reduced from $3,440,000.00 (excluding Sea Cadets and UNTD) to $2,195,627.00 for a reduction of almost 40%. In contrast the Sea Cadet budget is being reduced from $1,350,000.00 to $1,150,000.00 or about 15%, and the UNTD budget from $859,382.00 to $622,373.00 or about 30%. This does not seem to bear out the observation quoted. In making the following estimates alternative methods of savings, a strength of 3700 RCNR personnel plus 600 UNTD cadets is used as a starting point. The Committee's suggestions respecting re-allocation of funds with the consequent savings in expenditures which seem feasible are as follows:—

	Possible Saving
1. Closing and/or reduction of COND and removal of RCN administration to Ottawa (Part VII(a)).	$ 500,000
2. Discontinuance of training bonus on completion of Naval Training	$ 45,000
3. Reduction in Sea Cadet budget of $200,000 per NSS 2200-64 Pers (N) "M", paragraph 6, of 28 November, 1963 (Schedule 10), and reduction in Sea Cadet Officer drill pay from 30 to 20 days, amounting to $120,000 per Part VII (c).	$ 320,000
4. Reduction of Active Reserve strength from 3700 to 3000 (as temporary expedient) being reduction of $\frac{1}{8}$ reflected in total pay and allowances of $2,000,000.00 less allowance for reduced training bonus for $3,000.00 saving for $210,000.00 for UNTD (Item 8), and drill pay reduction for officers from 30 to 20 days of $37,000.00 (Item 11).	$ 146,000
5. Diversion of Ontario and Quebec Sea Cadets to GLTC, Hamilton, on basis that these account	

	Possible Saving
for ⅓ of travel costs of $220,000.00 to Coasts at estimated cost $21,000.00 in lieu of $71,000.00. Part VII(c). ..... $	50,000
6. Estimated savings in Sea Cadet administration and training as per recommendations of Area Officer Pacific, excluding change in S.C. officers pay (covered in Item 3 above) and disregarding proposal re transportation due to unavailability of service facilities. (Appendix 15) .. $	10,000
7. Elimination of X-rays and Eye consultations—at least. (Part VI (f)). ..... $	6,000
8. Reduction in UNTD on principles contained in NSS 2200-64 PERS (N) "M" of 28 November 1963, Appendix "B" but accepting only a 25% reduction instead of 50% ..... $	218,000
9. Streamlining RCNR pay system as per proposal of CDR Richardson (Appendices 12 and 13) (Part VIII (c)) ..... $	10,000
10. Saving in expenditure for transportation by reason of directing RCNR personnel to nearest establishment e.g. NADEN for Western divisions GLTC for Central Division and CORNWALLIS for Maritime Divisions on basis of travelling costs of $310,000. for 1962-63. (Part VI (b)) ..... $	44,000
11. Reduction in drill pay for RCNR—746 officers from 25 to 30 days. (This does not take into account any reduction in total number of officers) ..... $	37,000
SUB TOTAL ..... $	1,423,000

Page 32

The foregoing are savings which may be considered as being achievable in the RCNR as a whole. Following are suggested methods of effecting economies in particular units as volunteered by the units.

Recommendations for specific Economics in Reserve Divisions

The following reductions is Expenditures in Specific Reserve Divisions are based for the most Part on:

(a) Briefs from Commanding Officer of Reserve Divisions

(b) Discussions at the hearing's

(c) Personal observations of operations of Reserve Divisions.

Several Divisions which were not visited, and did not present briefs, have been subjected to small reductions, based on the Committee's opinion.

The Details of these recommended reductions of Expenditures are as follows:

Division	*Expenditure Reduction Due to*	*Amount* $
Chatham	Paid off	67,680
Malahat	Base of operations moved to Naden and Consequent reduction in Administration and maintenance	24,000
Discovery	i) Reduction of RCN Staff (1 officer 3 men) 25,000	
	ii) Abolition of PNO Vancouver, (Reduction of 1 officer an 1 Cl) 15,000	
	iii) Elimination of Motor Transport to the Extent of (buses) 15,500	
	iv) Change of nature of Heating unit with savings fuel and wages of firemen 13,500	
Page 33	v) Eliminate wages of Commissionaires by building chain link fence 4,000	75,000
Nonsuch	i) Reduction of Civil Service Staff by 2 firemen and 1 MTS driver 12000	
	ii) Reduction of RCN Staff by bringing area recruiting officer and the 2 LS from his staff 18000	30,000
Tecumseh	i) Reduction of Civil Service Staff by 1 firemen Labourer and 1 MTS driver 9000	
	ii) Swimming pool to be operated by Non-Public funds 1000	10,000
Unican	i) Reduction of RCN Staff by 1 LS 5,000	
	ii) Reduction of Civil Service by 1 MTS driver 4000	9,000
Queen	i) Reduction in RCN Staff (3) 14000	
	ii) Reduction in Civil Service by 1 MTS driver and 2 Firemen Labourers 12000	
	iii) Savings in fuels by conversion to Natural Gas 500	
	iv) RCN recruiting move into Queen with savings in Rental 3,000	29,500
Chippewa	i) Reduction in Civil Service by 1 MTS driver and 1 Firemen Labourer 8000	
	ii) Reduce RCN expenses by having Supply Officer relieved by C2 and bringing area recruiting Officer and his staff into Chippewa thus allowing for the release of 2 LS/AB from Chippewa 12000	
	iii) Area Recruiting Officer occupying space in Chippewa at a rental savings of 3000	
	iv) Swimming pool to be operated by non-public funds 2000	25,000

Division	Expenditure Reduction Due To	Amount $
Griffon	i) Reduce RCN staff by removed of Area recruiting officer, Train present RCN staff in Griffon to do recruiting under supervision of ARO—Winnipeg 20,000	
	ii) Change heating unit from present coal-fired boiler to Natural Gas fired unit—savings by reducing Civil Service by 3 firemen 10000	30,000
Prevost	i) Reduce RCN by 1 P1 and 2 LS 14000	
	ii) Change coal fired boiler to gas fired unit thus reducing civil service by 2 firemen 8000	
	iii) Dispense with services of 1 MTS driver 4000	26,000
Hunter	i) Reduce RCN by 1 LS/AB 4500	
	ii) Reduce Civil service by 1 MTS driver 4500	9,000
Star	i) Reduce RCN by placing the area recruiting in Star, this would allow 1 officer to be transferred to other duties. 10,000	Page 34
	* ii) Conversion of oil-fired boiler to gas heating unit with reduction of Civil Service by 4 firemen. 16,000	26,000
York	Although no concrete recommendations for economy were received from this Division, it was considered that, in relation to other divisions, a savings by judicious reductions of RCN and Civil Service staff, a saving could be effected of	70,000
Cataraqui	i) Reduction of RCN by 1LS/AB 4500	
	ii) Reduction of Civil Service by 1 MTS driver and 1 cleaner 7500....	12,000
Carleton	i) Reduction of RCN staff by 1C2 and 1LS/AB 10,000	
	* ii) Change heating unit from coal-fired boiler to gas-fired unit with consequent reduction in Civil Service by 2 firemen-labourers 9,000	
	iii) Eliminate any Headquarters pro-rated charge to Carleton, observing the widespread and continuous use of Carleton by the Regular forces of the Navy, Army, Air Force, and other government departments 28,500....	47,500
Donnacona	The Commanding Officer Donnacona presented to the committee a proposal for reducing RCN staff and substituting civilian cleaning contracts for certain maintenance operations, a saving could be effected of	78,000

Division	*Expenditure Reduction Due To*	*Amount* $
Montcalm	Reduction of RCN Staff by 2LS/AB	9,000
Brunswicker	i) Reduction of RCN Staff by 3LS/AB 13,500	
	ii) Reduction of Civil Service by 1 MTS driver 4,000	17,500
Scotian	i) Reduction of RCN Staff by 2LS/AB 9,000	
	ii) Reduction of Civil Service by 1 MTS driver 4,000	13,000
Queen Charlotte *	i) Convert coal fired heating unit to oil fired unit with consequent reduction of Civil Service by 2 firemen 7,500	
Page 35	ii) Reduce Civil Service by 1 MTS driver 3,500	
	iii) Reduce RCN by 2 RCN Storesmen LS 9,000	
	iv) Combine duties of Staff Officers with Area Officers recruiting, reducing RCN by 1 officer and 1 P2 14,000	34,000
	Grand Total	642,180

It was not possible in the time available to obtain meaningful figures on the operation of Cabot and the Kitchener/Tender.

In addition to the above economies, it is anticipated that substantial savings to the Naval Service can accrue by sharing housing and facilities with the Militia. Details of sharing quarters are now being explored but estimated savings should not be included until the report of the Militia commission is available. The divisions which appear to be most favourably situated in this respect are Nonsuch, Queen, Unicorn, Griffon, Prevost, Star, Kitchener/Tender, Carleton, Cataraqui, Montcalm, Queen Charlotte and Brunswicker.

* The elimination of firemen-labourers is contingent upon meeting the requirements of the Federal Code. A copy of the pertinent regulation is attached.

It is to be understood that the above detailed economies are recommended on the basis that facts and figures supplied to the Committee are realistic. However, it must be noted that many of the authorities with whom financial details were discussed admitted that the accounting system was not completely understood by them.

If, as a result of this, our calculations in the fiscal area are not in accordance with facts that may be unearthed subsequent to this report, the Committee recommends that deficiencies in the RCNR financial requirements be made up from the sea cadet allotment. This recommendation is made in the light of the statements from the more senior and reliable officers of the Navy League of Canada associated with the Sea Cadets, that the RCNR should take priority over the RCSC with respect to the Defence dollar.

COMMENTS ON DIVISIONS SCHEDULED FOR CLOSING Page 36

The following is the Committee's observations and recommendations relating to the divisions which are scheduled to be closed down.

HMCS Malahat

This division is located in a coastal area where personnel are close to their war stations with a minimum of transportation and administrative arrangements. We believe the division can be housed in existing facilities at HMCS NADEN thereby reducing its cost of operation to a negligible amount. The division presently has on strength 48 officers and 141 men and 12 wrens. Because of high availability factors the personnel from MALAHAT are particularly important to the EDP of the Pacific Command. Considering therefore that the only cost of maintaining the division would probably be the reserve pay and allowances the overhead cost of operating the reserve in this division could probably be achieved for about $5000.00 per year which under the circumstances is considered more than reasonable. The committee would therefore recommend that MALAHAT be continued as a division housed in NADEN but its strength be limited to 40 officers (including VC 922), 100 men and no wrens. The air squadron is dealt with separately.

HMCS Chatham

No representations were made to the committee from this unit and it is observed for the numbers enrolled it is not an economical proposition to continue unless greater utilization of the building could be achieved. It would be the committee's suggestion that if the division is to be closed that provision be made to maintain a list of officers required for NCSO and NOIC duties in the area in emergency on the Retired List and funds be made available to ensure that they can take annual training and be called out for special duty from time to time to take part in Pacific Command exercises as appropriate. The saving in this regard including Headquarters' pro rata expense charge to the division seems to be in the neighbourhood of $50,000.00.

HMCS Nonsuch

This division does not adequately utilize its existing quarters and a sharing with a militia unit seems to be not only possible but has been suggested by the division as a way to reduce the reserve share of the cost of operation. It is also understood that the area recruiting staff may occupy this building. This could be done now without dislocation. As the division is situated in a provincial capital where the presence of a naval unit is considered most important, the Committee recommends that this division be retained if sharing arrangements can be made which would divide the cost of operation equally between three votes namely naval reserve, militia and area recruiting. The resulting savings to the naval reserve appropriation for the operation of a building would be in the neighbourhood of $30,000. As the division has not recruited its authorized complement, it is suggested that the reserve unit be 25 officers, 120 men and 10 wrens.

HMCS Queen

This division is also in a building which is not being utilized to its maximum capacity. If the building is acquired by the Army for militia use some sharing arrangement should be investigated but this will have to wait the report of the militia commission. The division is well established in this provincial capital and rather than see the Navy's presence withdrawn in the event of a practical arrangement not being achieved through the use of the building conjointly with the militia. As an alternative approach would be to have the division maintain the name QUEEN as a tender to HMCS UNICORN and carry out its activities in the armouries where it is understood space would be made available. This would be a return to a pre-existing situation. The complement would be established at 15 officers, 75 men and no wrens. If the existing building can be retained a complement of 10 wrens should be allowed.

Page 37

HMCS Prevost

This building is not being utilized anywhere near its capacity by the Reserve unit. It is believed that the Army have firm aspirations to acquire it. Discussions on the local level indicate that a sharing arrangement between the Army and Navy is acceptable to all concerned. If the building were occupied equally the cost of operation overhead would be therefore reduced by half as far as the reserve is concerned. Further economies can be effected by converting the heating plant to gas and dispensing with firemen-labourers. There would thereby be a substantial saving to the RCNR on this plan. The division is located in a new building designed specifically for its activities which will have low maintenance cost for many years and London is the centre of a prosperous and heavily populated area which makes the Navy's continued presence there of value especially from a recruiting standpoint. A strength of 20 officers and 100 men is suggested.

Kitchener Tender

This unit under the most adverse circumstances, has survived and shown an esprit de corps which is nothing short of astonishing. Its morale despite the many vicissitudes which have accompanied its existence has never suffered and it serves an outstanding example of what can be done with determination, interest and sincerity. As such qualities are not as prevalant as one would like and despite perhaps the tone of sentimentality which is inherent in this recommendation, it would be the Committee's recommendation that this tender be continued with an authorized strength of 12 officers and 60 men. It is believed that space sharing arrangements are feasible and overhead and maintenance costs therefore become negligible. The cost breakdown provided by COND shows RCN pay and allowances for this division $32,000. This figure is questioned as there is only one Leading Seaman on permanent staff and the division has operated on this basis as a tender to STAR. If a distinctive name could be given to this unit to enhance its separate identity it would serve a fitting tribute to it.

HMCS Scotian

The circumstances in SCOTIAN are similar to that of MALAHAT. Thus the division has a high degree of availability and the personnel are counted upon by the Atlantic Command for filling EDP requirements. It is understood the present building will be retained by the Navy for stores and reserve fleet anyway and therefore technically there is really no cost of supporting the building other than permanent staff, allocated to the division. Despite the overwhelming presence of the Atlantic Command in Halifax, the division enjoys an identity of its own and has an excellent spirit. Because of the importance of its personnel, few of whom would appear to be in reserved occupations, and therefore immediately available for call, its importance in emergency is self-evident. Under the Atlantic Command's requirements, it was expected that SCOTIAN would produce 70 communicators. This is greater than any other division except YORK. The loss of these men would seem to be most unfortunate when considering the factor of availability. Therefore, as the present quarters would be maintained in many event, it would seem the reserve could utilize the present space with no additional financial outlay and it is the Committee's recommendation that the division continue with a strength of 30 officers and 125 men. Because of the limitations of accommodation and location wrens should not be included.

HMCS Queen Charlotte

This division located in a provincial capital and on salt water would be expected to have naval facilities established in emergency. The division is admirably located overlooking the harbour with communication facilities. It is not, however, using its building anywhere near to maximum use for defence purposes, at present, about 75% of the use being to sea cadets and other youth training movements. It is believed the militia also wish to acquire this building and it would seem that some space sharing arrangement is feasible here as in other centres. This will, of course, have to await findings of the militia commission. As the division will not be closed until 1 December of this year, it would seem that there would be no problem in entering into consultation and making concrete proposals Page 38 at a later date, but it is certainly the Committee's recommendation that every effort be made to retain this division because of its particular situation although a complement probably not more than 15 officers, 50 men and 10 wrens is indicated and this should be borne in mind in determining the utilization and allocation of costs between the various users.

Air Squadrons VC 920—VC 922

It is appreciated that air squadrons, as already indicated are relatively expensive as a reserve activity but their importance as a back-up for the regular air squadrons seems to be established. This matter has been dealt with under Part VI (e) and arising therefrom the Committee would recommend the squadrons be retained.

The strength of the units in pilots should not exceed 15 pilots each.

SUMMARY

	Officers	*Men*	*Wrens*
Malahat (including VC 922)	40	100	
Nonsuch	20	120	10
Queen	10	75	10
Prevost	15	100	
Kitchener	10	60	
Scotian	25	100	
Queen Charlotte	8	50	10
VC 920	15		
	143	605	30

This is a total of 798 all ranks.

It is appreciated that the foregoing complements will result in a total of 3,168 (2,390 plus 798). Some divisions e.g. CABOT and BRUNSWICKER have indicated they foresee difficulty in reaching their new complements (and are not up to their old complements) any reductions in these areas will not be felt. On the basis that for the present a Reserve of only 3,000 is financially feasible there will have to be re-allocated personnel from other divisions to find say 31 officers, 107 men and 30 wrens. A suggested approach to achieve this is as follows:

Deduct from new complement of

Division	*Officers*	*Men*	*Wrens*
Chippawa	2	12	5
Discovery	2	12	5
Donnacona	2	12	3
York	2	11	3
Carleton	2	4	
Star	1	4	
Page 39 Griffon	3	10	
Tecumseh	3	12	
Hunter	2	3	
Montcalm	2		5
Cataraqui	1	2	
Unicorn	1	4	
Brunswicker	6	2	4
Cabot	2	20	5
	31	107	30

N.B. If no wrens at QUEEN (10) they could be re-allocated to PREVOST.

Page 40

X—SUMMARY OF FINDINGS

The Committee summarizes its principal findings as follows:

(1) The increased commitments which the RCN is faced with, dictate the need for a strong and efficient Reserve to back it up in all its elements.

(2) It is impossible to predict the exact nature which requirements for the use of Reserve will take and general areas for the role but tasks of the Reserve which have been outlined are generally satisfactory.

(3) The RCNR is being counted on by the Operational Commands of the RCN to meet Emergency manpower needs.

(4) The RCNR considers itself an integral part of the Naval Service and not "separate Navy", but for budgetary purposes it is useful to separate costs of the Regular and Reserve components.

(5) The RCNR at present cannot meet its commitments under the Emergency Defence Plan.

(6) The loss of trained personnel, amounting to 247 officers and perhaps 400 men of the rank of Leading Seamen and above in the seven Divisions being paid-off will accentuate finding (5).

(7) The implied aspect of providing the numbers of trained officers and senior non-commissioned personnel from the remaining naval divisions is not possible of realization. It has been represented that each naval division has an optimum level of recruiting which in most cases has been achieved and that may increase sufficient to "take up the slack" from divisions slated for paying off is impractical.

(8) The paying-off of some divisions appears to have been done without consultation with the Operational Commands who are most directly concerned with the availability of Reserves in emergency.

(9) The closing of coastal divisions presents a most serious problem to the operational commands on the East and West Coasts. While the representational aspect of these coastal divisions is minimal compared to the RCN establishments, the representational aspect seems to have been given too much consideration in the closure particularly of HMCS MALAHAT and HMCS SCOTIAN. The plain fact is that the Flag Officers concerned depend upon the trained reserve personnel available in these divisions for vital wartime purposes and that their immediate availability is such as to constitute a value to the defence of the country far outweighing their low representational value.

(10) On the other hand, insufficient consideration of representational Page 41
value and naval presence has been given to the following divisions which are scheduled to be closed—HMCS NONSUCH, HMCS QUEEN, HMCS PREVOST, HMCS QUEEN CHARLOTTE and the KITCHENER-WATERLOO tender. HMCS NONSUCH and HMCS QUEEN are located in provincial capitals with all the associated impact which naval presence creates upon provincial government authority. HMCS PREVOST is located in the very heart of south western Ontario's educational, population and industrial area. The KITCHENER-WATERLOO TENDER serves an important population segment. Other reasons for its retention are contained elsewhere. HMCS QUEEN CHARLOTTE is the sole naval representation in a province which historically is part of a Canadian Maritime tradition. It is recognized that no dollar value can be placed upon representation, but nonetheless this naval presence should not have a dollar tag placed upon it when at low cost it re-

minds the population of a largely inland oriented country of its responsibilities.

(11) Due regard has not been given in establishing the complement of the RCNR for its employment in emergency, to the fact that many men (about 30%) are under 18 and not trained or available because of age and Wrens are not suitable for appointment to many positions in outlying posts where NOIC's and NCSO's are to be established.

(12) By virtue of the characteristics of a Reserve force under Canada's Voluntary enlistment policy, large turnovers in personnel are to be expected (as is the case with the RCN) and therefore some over-complementing is required in the nature of perhaps 20% of requirements to ensure adequate numbers of trained personnel.

(13) The RCNR is basically well suited to and appears satisfied with the tasks allotted to it by Naval Board Minute of 9 November, 1960.

(14) The Sea Cadet training programme, heavily subsidized by the Department of National Defence, parallels to a great extent the training of junior men of the RCNR, so that the RCNR gets little benefit from the Sea Cadet movement by way of recruits, due to lack of challenge and regard for the ability of the Senior Sea Cadet.

(15) Sea Cadet Officers, serving as leaders of what is essentially a youth movement similar in many ways in its aims to the scout movement, are serving in a particular status unlike their counterparts in these other youth movement. These officers of the Royal Canadian Sea Cadets will, notwithstanding the proposed economies, be eligible to receive 30 days pay per year as opposed to the 20 days proposed for the more highly trained officers of the RCNR. We further find that Sea Cadet Officers could be expected, without significant loss in numbers, to accept a reduction to at least the level of allowable pay as their counterparts in the Naval Reserve of which they are a component. (QRCN Art. 2.03(i)(d)).

Page 42

(16) The revised training programmes for the RCNR have not been in force for a sufficiently long period to be able to rectify the disabilities resulting from several years of attempting to train the RCNR to unrealistic technical standards.

(17) Greater utilization of many Naval Divisions for Defence purposes is practicable and feasible by sharing facilities with Militia units. This might result in some dislocation to Cadet units, but as these are not elements of the Defence establishment and have no obligation thereunder, other factors must govern.

(18) Consequent on (17) costs of Operation and Maintenance of Divisions where arrangements for joint use are entered into and a resulting pro rating between user is arrived at by the units concerned, no increase in total defence costs should result but a more economical allocation of the RCNR's share would be achieved.

(19) The proposed cut in the RCNR budget of $1.8 million is not resulting in 33⅓% cut but closer to a 40% cut, as no comparable

cut is being made in Sea Cadet costs which are considered as part of the RCNR budget.

(20) The Training bonus payable to RCNR personnel on completion of Naval Training does not constitute a measurable incentive to recruitment or attendance at training.

(21) Economies in transportation of RCNR personnel for Naval Training could be effected by sending Western personnel to Esquimalt and dividing Eastern personnel between GLTC at Hamilton and East Coast establishments.

(22) The Fleet Establishments at Halifax, Cornwallis and Esquimalt are physically capable of accommodating RCNR personnel on Naval Training and can deal with the instructional staff requirements by having RCNR personnel on Special Duty as is now being done at Great Lakes Training Centre.

(23) The UNTD plan of officer training for Reserve Officers is valuable and should be continued but directly related to the needs of the RCNR for Active Officers.

(24) The UNTD programme trains many cadets who are unlikely to serve as officers on the Active List of the RCNR because of the location of the campus, the courses being taken and the places where the Cadets come from. Small UNTD units absorb an undue amount of personnel and administrative effort for the numbers produced.

(25) The morale of the RCNR has been shaken by the method by which the planned reductions were effected.

(26) The present low age limit for recruits leads to considerable turnover in personnel.

(27) Substantial economies to the RCNR vote can be effected by:

(*a*) Sharing accommodations with other military units;

(*b*) Converting heating plants to fuel requiring less supervision;

(*c*) Streamlining pay administration procedures and policy respecting issuance of kit; Page 43

(*d*) Reduction in RCN and Civil Service staffs at Divisions;

(*e*) By reviewing the needs for motor transport. Many Divisions indicated Staff Cars were not essential.

(28) A projection for an adequate complement for the RCNR is impossible under the conditions of change existing in the RCN. Such changes will probably reflect a greater need for the RCNR whose complement, even now, is inadequate.

(29) Cost figures related to the operation of the RCNR require greater analysis, exhaustive and comprehensive study in order to arrive at a true figure of the cost of the RCNR establishment and to provide maximum information to assist the decision making process in respect thereto.

(30) In many cases the operation of a tri-service recruiting unit in centres which have Naval Divisions, is expensive in money and manpower insofar as the Naval Service is concerned. Having regard to the fact that Naval Divisions across the country (particularly inland) constitute the naval presence in the area, and remain the focal point of interest for recruiting enquiries.

(31) Full advantage is not being taken of the Conference of Commanding Officers of Naval Divisions as a consultive group of responsible and interested persons qualified, apart from their Naval Association, to discuss planning and policy for an effective Reserve. In extension of this finding it would appear that full advantage is not being taken of the wealth of technical, professional and business skills existing in the RCNR.

(32) The establishment of COND originally assisted the organization and improved the stature of the RCNR but it has become expensive and over-centralizing in its operation without commensurate continuing advantage.

(33) There appears insufficient communication as to the requirements of the Reserves for Emergency purposes between operational Commands and Naval Headquarters and COND.

(34) The personnel and facilities which constitute the establishment HMCS PATRIOT, Headquarters of Commanding Officer Naval Divisions, are excessive. In view of the currently constituted role of the Reserves based on the revised training requirements, the necessity to provide in terms of personnel alone an establishment in which one full time person serves every twenty-seven reserve personnel is questionable.

(35) The calibre of personnel sent to the RCN staff of Naval Divisions often leaves much to be desired. This has an adverse effect on the operation of the units and is poor public relations for the Navy.

Page 44

(36) New Entry training of RCNR personnel would produce better results if carried out in the Fleet Establishments on the Coasts, an advantage which can compensate for the failure which sometimes occurs in providing sea billets.

(37) According to the figures available, there is a lack of proper costing of the Naval Reserve, and included in the direct and indirect costs of the RCNR are many hidden factors which, if extracted, would reduce the apparent reserve budget by a considerable figure. A great proportion of these hidden expenses in the reserve vote are directly attributable to RCN commitments which involve support of such as RCN recruiting, Sea Cadet and Navy League Cadet movement, support of Regular Force Training Plans in Universities, support of RCN special commitments, e.g. RCN officers attached to Universities for courses, and support of RCN bases, e.g. HMCS NONSUCH for the RCN Base at Inuvik and many other support functions too numerous for detailed mention.

(38) The RCNR pay system, closely tied to the RCN, is time-wasting and expensive. The arguments for its retention based on "on-the-job training" are not valid in terms of the current drive for economy. If training in the RCN system is essential it can be done through theoretical practice.

(39) The motivation of the average naval reserve is not concerned primarily with pay, but the patriotism and service of naval reserves should not be expected gratuitously.

(40) The Royal Canadian Sea Cadets are a vital part of a youth training program in this country and a valuable recruiting ground for the Royal Canadian Navy but this excellent move-

ment, attached to, administered by, and paid from a vote which is closely allied to the naval reserve vote, is not productive of results in reserve recruiting.

(41) The separation of the reserve personnel administration from both Flag Commands and Headquarters, the setting up of a new Command with its own administrative procedures seems to have resulted in a reduction in the capability to assess, with immediacy, accuracy and understanding, the potentialities which exist in the Reserve as a whole and in its personnel individually.

(42) The full possibilities of savings through greater utilization of buildings by Naval Divisions cannot be assessed until the report of the Militia Commission is compiled, but it would seem it could be in the neighbourhood of $100,000 if joint Navy, Militia and RCAF (Auxiliary) occupancy is entered into.

XI—SUMMARY OF RECOMMENDATIONS

Page 45

The following is a summary of the principal recommendations contained in this report:

(1) Every effort be made to avoid any further reduction in the RCNR and any economies which can be effected in its operation should be translated into the restoring its complement at least to that figure originally projected for the current fiscal year.

(2) The closing out of seven Divisions and Air Squadrons be reconsidered so as to avoid the loss of the trained personnel borne.

(3) The present plan for reducing the RCNR be held in abeyance until the report of the Militia Commission is brought in, so that joint plans for greater utilization of DND buildings can be achieved with their accompanying economies.

(4) Reductions in allowance for drill pay for Sea Cadet Officers to the same level as being planned for Reserve Officers be made with the consequent savings applied to the RCNR establishment.

(5) Consideration be given that in appropriate cases, RCN recruiting offices be re-established in Naval Divisions where economies are clearly indicated as being obtainable.

(6) The requirement of trained personnel to meet the commitments of the EDP, makes it mandatory to maintain the Divisions now planned for closing.

(7) The RCNR pay system be revised to a view to simplifying it so that it can be handled by modern business machine accounting systems.

(8) Personnel administration especially in respect to multiplication of reports, returns and other documentation be revised and the principle of the administration of the RCNVR prior to 1939 be borne in mind with a view to simplifying procedures in this regard.

(9) The age limit for RCNR recruits be raised to 17.

(10) Training of Reserves be decentralized so as to direct personnel to the nearest of the following three locations: Esquimalt, Hamilton and Cornwallis or Halifax with resultant savings and transportation costs.

(11) Provide facilities at GLTC Hamilton for summer camp training of Sea Cadets from the central Canada area, and transportation costs saved thereby applied to the RCNR budget.

(12) Establish a closer liaison and a more definite and rewarding system of progression from the Sea Cadet training programme to the RCNR training programme, especially to take into consideration the possibility of higher rank being granted to senior Sea Cadets on enlisting into the RCNR.

(13) Eliminate the training bonus paid to RCNR personnel on completion of naval training.

Page 46

(14) The UNTD programme be reviewed to eliminate units which make little or no contribution to the production of officers for the Active List of the RCNR.

(15) In any complement plan provision be made to permit a short fall in complement in one Division to be taken up by other Divisions on a pool system so as to ensure that the Reserve will train to the maximum allowable.

(16) Proper pre-planning of the movements of Reserve and Sea Cadet personnel to be correlated with similar planning in the movements of service transportation of all kinds to effect economies in proceeding on training.

(17) Availability of vessels for periodical use by Divisions for local training programmes be continued and expanded whenever possible due to the advantage gained from such training and the generation of interest and esprit de corps in the units.

(18) The UNTD programme to be continued and emphasis placed on its purpose of providing officers for the active RCNR. Enrolment in the UNTD to be conditional on acceptance of an obligation to serve as an active Reserve officer on commissioning for at least three years.

(19) Any consequent reductions in full time staffs in Divisions as a result of recommendations herein to be regarded as saving in cost of administration of the RCNR and be applied thereto.

(20) Greater attention be given to the calibre and qualities of RCN staffs appointed to Divisions observing that in many cases their responsibilities are considerable and without continuous supervision and also that such personnel embody the Navy's reputation to the public in centres throughout Canada.

(21) Medical procedures for entry be reviewed and simplified by qualified reserve medical officers with a view, interalia, to eliminating the necessity for X-ray examination and clinical eye consultations.

(22) The training process to be reviewed with the object of injecting a more lively and professional approach to the instruction schedule. In this review a study of the most rewarding ratio of classroom and practical instruction in a given period of time should be emphasized.

(23) The present Reserve administration centered under the Commanding Officer Naval Divisions be abolished and reserve administration be returned to Naval Headquarters as a Directorate of Reserves. The Officer-in-Charge of the directorate to be an associate member of the Naval Board and otherwise responsible to CNP. It is estimated that not more than ⅓ of the present operating cost at COND would be required for Reserve administration on the adoption of this step.

(24) Kit on entry of RCNR Ordinary Seaman be restricted to basic uniform. Balance to be issued on completion of satisfactory service prior to Naval Training at CO's discretion.

(25) Greater advantage be taken of the experience of officers Commanding Divisions in consulting on reserve policy matters and consideration be given to establishing a permanent Ad Hoc Committee of suitable personnel in this regard working through the Navy's participation in the Conference of Defence Associations as represented in its component, the Naval Reserve Consulting Group. In this connection, it is pointed out that the CDA is constituted of representatives from all three Services. Page 47

(26) A review and reassignment of the plans and policy outlined in NSS 2200-64 Pers(N) "M" of 28 November, 1963 (Schedule 10) be forthwith undertaken in the light of the findings and recommendations herein.

(27) In light of the economies indicated herein, and as a corroboration of the purpose for the establishment of the Committee as outlined in the letter of the Honourable the Associate Minister of National Defence dated 17 January, 1964, prompt and immediate steps be taken to implement any action which is indicated insofar as a change in the present plans for paying-off Divisions concerned. Inherent in this, is the need to avoid unnecessary disposal of property and equipment which will be required for units which can be retained.

SCHEDULE 1

CONFERENCE OF DEFENCE ASSOCIATIONS

Suite 300,
590 Jarvis Street,
Toronto 5, Ontario.

January 21, 1964.

Chairman, Divisional Group,
Naval Reserve Consulting Group,
c/o Commanding Officer,

Ministerial Committee on the Organization of the RCNR

At the Annual Meeting of the Conference of Defence Associations held in Ottawa during the 16th-18th January, 1964, discussions were entered into with respect to the recent announced reorganizations of the Reserve Forces of all three Services. Arising out of these discussions representations were made to the Minister of National Defence, who readily agreed to the establishment of committees of Reserve Officers of the Navy and RCAF to hold hearings and report back to him by the 15th February, 1964, their findings in respect to the organization of the Reserve components of these two Services. For the Navy these representations resulted from the participation of the Naval Reserve Consulting Group in the Conference of Defence Associations. A copy of the resolution passed in respect to the Navy and RCAF is enclosed as Enclosure 1 to this letter. Also enclosed, as Enclosure 2, is a press release summarizing the deliberations of the Conference generally and particularly comments of the Minister of National Defence with respect to the role of the Reserve Forces.

The Executive of the Conference of Defence Associations decided that the Committees would be most suitably headed by the representatives of their respective Services on the Executive. The following is the Committee which has been struck for the RCNR:

Chairman: Commodore R. I. Hendy, RCNR (Ret'd)

Members: Captain L. B. McIlhagga
Captain W. R. Inman
Captain A. W. Ross

It will be appreciated that by reason of the short time in which the Committee will have to work before its report is to be submitted to the Minister that considerable urgency is required on the part of all those who wish to have their views placed before the Committee, either by written brief or oral presentation, at the hearings of the Committee when held in various centres in Canada as will be referred to hereafter.

As a background to the Committee's work, reference should be made to the press release which is enclosed and the summary of the Minister of Defence's remarks to the Conference. Insofar as the report of the Committee is concerned its establishment is not to be interpreted as an assurance that any change will be made in the plans already announced. Also it should be appreciated that the changes are not dictated by any failure to appreciate the need for Forces on a stand-by or Reserve basis to back up the regular components. However, as has been announced on other occasions and

emphasized to the Conference, the problem is one of the best utilization of the funds made available to the Department of National Defence to discharge its duties. It is therefore essential to ensure that the most effective fighting forces are produced for the share of the national budget which is available to the Defence Department. Canada's international commitments are of course of prime importance and the fulfilment of these makes far and away the greater demands for money. While, therefore, there is a well defined role for the RCNR in the National Defence picture it, like any other component of the Services, will only justify itself in accordance with the need for it in relation to the priority it can command in respect to the money being spent on defence. The immediate matter which is the concern of the Committee will therefore be to assess the form of the RCNR, within the financial ceiling imposed on the monies planned for allocation for the purposes of the RCNR. In this regard the statement by the Minister of National Defence, Enclosure 2, regarding the importance of Reserve Forces in the defence establishment should serve to encourage those who are devoting so much time and energy to the creation of effective Reserve Forces.

The foregoing is the background for the form and approach which it is expected will provide the basis for briefs and oral representations to be made before the Committee and the survey which it will be conducting.

You will note from the Minister's release the emphasis on Forces in being. This, of course, implies personnel ready and available on a moment's notice to take part in some activity which becomes the duty of the Department of National Defence to provide, whether in war or in an emergency as a preliminary to war or arising out of some other circumstances such as national disaster.

While the Committee therefore is not in a position to direct the form which submissions and briefs to it will take, because of the particular circumstances arising out of the formation of the Committee and also due to the time element involved, those wishing to make presentations might be assisted if some indication of the approach to this matter was indicated. Accordingly it is suggested that in preparing material for the Committee regard should be had to such items as the following:

1. Ways and means by which expenditures may be reduced and economies effected so as to produce a better reserve for the money being spent in (*a*) all phases of the RCNR's activities, (*b*) in particular areas. In this regard certain economies in such matters as occupation of barracks which could be considered especially from the approach of greater utilization of Department of National Defence property and certain economies may suggest themselves by investigation of the possibility of units of different Services sharing accommodation. This would seem to be a very worthwhile area in which money could be saved which might lead toward the operation of units at nc additional cost and a greater utilization of facilities, as well as leading to greater liaison between the Services at the Reserve unit level.

2. Recommendations with respect to retention of units which are presently planned to be closed can only be entertained if economies can be effected sufficiently to justify their preservation.

3. The role of the Reserves in war or emergency—and ability to discharge functions which can economically be performed by Reserves as forces-in-being, notwithstanding their stand-by position.

It should be emphasized that in the establishment of the Committee the greatest co-operation from the Minister and Associate Minister of National Defence, their staffs and the Navy has been forthcoming. The members are confident that as a result of the Committee's investigation constructive suggestions for the improvement and efficiency of the RCNR will evolve.

It is appreciated, because of the shortness of time, that it would be impossible or difficult to get adequate representation to the Committee entirely by brief. As a result, therefore, while briefs will be most welcome—and the more that can be sent in in advance of the hearings being held the better—a schedule of hearings has been set up for various centres across Canada which is as follows:

Prevost	1030/25th January
Star	1000/26th January
York	1500/26th January
Discovery	0900/29th January
Malahat	1400/30th January
Nonsuch	0900/31st January
Queen	0900/1st February
Chippawa	1000/2nd February
Donnacona	1000/6th February
Scotian	1000/8th and 9th February
Carleton	0900/12th February

Further, it has become impossible to evolve an itinerary to cover the twenty-two localities where Naval Reserve Units are located in the time available and be able to compile all the material into a report to be placed before the Minister of Defence by the 15th February. Therefore in drawing up the foregoing programme it is hoped that for those places where hearings will not be held they will appear before the Committee if they so desire at the nearest centre to which the Committee will be sitting. As a suggested list the following is set forth, showing the place of hearing on the left hand column and the centres who might utilize the existence of the Committee hearing in that centre to attend and present their views:

York	Kingston, Kitchener
Prevost	Windsor, Kitchener
Carleton	Kingston
Scotian	St. John, Charlottetown, St. Johns,
Donnacona	Quebec, Kingston
Star	Kitchener
Discovery	Prince Rupert
Nonsuch	Calgary, Saskatoon
Queen	Calgary, Saskatoon
Chippawa	Port Arthur

It is intended that hearings will be held in the respective Naval Divisions in the centres concerned and for this purpose a room will be required and suitable stenographic assistance made available to record the proceedings and take minutes thereof. Further administrative requirements or advice will be made available as the Committee's deliberations proceed.

Finally, it has been agreed that representations in respect to the Committee's work will be welcome from other interested organizations such as The Navy League of Canada and The Naval Officers Association of Canada and any whom feel they can contribute to the work of the Committee and the preparation of an effective and useful report.

ROBERT I. HENDY
Commodore, RCNR (Ret'd), Chairman,
Ministerial Committee on the Organization of the RCNR.

RESOLUTION

WHEREAS the reserve components of all three armed services have recently been examined and certain plans have been announced in respect thereto; and

WHEREAS a commission has been established to deal with the Militia aspects implicit in such examinations, no comparable steps have been announced for reserve components of the Navy and Air Force; and

WHEREAS the conference recommends that a similar approach is desirable in respect to the RCNR and RCAF (Aux.);

NOW THEREFORE BE IT RESOLVED that the Minister of National Defence be requested to authorize appropriate committees of the conference to be established and empowered to inquire into and bring forth recommendations directed to the structure, operational capability and establishment of the RCNR and RCAF Auxiliary and that pending the reports of such Committees, plans already announced in respect to the RCNR and RCAF Auxiliary be held in abeyance.

Press Release Re Conference of Defence Association—1964

Lt.-Col. William R. Learmonth of Toronto today was elected Chairman of the Conference of Defence Associations for the ensuing year. He succeeds Lt.-Col. LeSueur Brodie of Toronto. Lt.-Col. B. J. Legge of Toronto was named Vice-Chairman.

The Conference is comprised of member associations from all three branches of the armed forces. Its object is to consider defence problems and "to assist the government in placing these problems before the people of Canada".

A resolution was passed expressing pleasure that the Department of National Defence continues to recognize the significance and importance of the Conference and the wealth of experience embodied in its membership. The Conference also endorsed the principle of the plan of the Ministers of National Defence to continue to seek the advice of the Conference while matters relative to the reserve forces are under study.

Defence Minister Paul Hellyer outlined the background of defence problems related to changes in Canadian foreign policy since the Second World War. He answered questions during an open discussion period.

Mr. Hellyer stated that Canada's acceptance of the UN Charter and association with NATO, together with continued co-operation in continental defence, resulted in widespread commitments to maintain forces in peacetime.

Strategic situations in the world today place emphasis on forces-in-being to deter major war and engage in peacekeeping activities. Roles of the reserve forces were being restated in relation to the existing strategic situation.

Mr. Hellyer said that the reserve forces have a continuing important part to play in varied roles—national disaster, civil survival and as a potential mobilization base if it should be required. The level of resources available for these roles, however, had to be weighed against other commitments.

After consultation with the Conference Executive, Brig. E. R. Suttie of Montreal was named as Chairman of the Commission on the Reorganization of the Canadian Army (Militia). The formation of this commission has a precedent in the Board of Officers set up in 1953 under Maj.-Gen. Howard Kennedy of Ottawa. Parameters of the defence department's requirements, and roles to be filled by the Militia will be set by the department for the Commission's reference.

The Commission will report direct to the Ministers but will have the full co-operation of the Regular Army in its work. Mr. Hellyer also announced that he had received advice from the Conference on their appointment of RCN and RCAF committees to discuss reorganization in the Reserves of both Services with him. The RCN reserve committee will be headed by Commodore R. I. Hendy of Toronto, the RCAF (Auxiliary) Committee by Group Captain W. J. Draper, of Toronto.

Mr. Hellyer said that the reorganized reserve should be more effective and should have clearly stated aims and responsibilities, thus enhancing morale of personnel in the units.

Talks between the Ministers and the Conference were most useful and helpful. The exchange of views placed mutual problems in perspective.

APPENDIX "C"

NOTE: *Original pagination of this Report is indicated in margin.*

REPORT OF THE MINISTERIAL COMMITTEE ON THE ROYAL CANADIAN AIR FORCE AUXILIARY

Chairman: G/C JWP Draper, DFC, CD
CO 14 Wing HQ (Aux) Toronto

Vice-Chairman: G/C DC Cameron, CD
CO 19 Wing HQ (Aux) Vancouver

Members: G/C HJ Everard, DFC, CD
CO 11 Wing HQ (Aux) Toronto

G/C DM Gray, CD
CO 17 Wing HQ (Aux) Winnipeg

Secretary: F/L PB Sutherland, CD
AFHQ/AMP/CPERS/DPC/PC4-2

Introduction Page 3

This Committee report was prepared in keeping with the following terms of reference:

(*a*) to advise the Minister of National Defence regarding the future of the RCAF (Auxiliary).

(*b*) to recommend the best role, size, composition and program for the RCAF (Auxiliary) in the immediate future consistent with financial savings involved in the reductions recently announced.

Hearings were held with representatives of all eight RCAF Auxiliary Wings at Winnipeg on 1 and 2 February to consolidate the findings of the Wing submissions. The Committee met in Ottawa on 8 and 9 February to finalize the elements of this submission.

In the limited time available the Committee has attempted to develop a broad concept for the RCAF Auxiliary rather than a detailed study and suggests that the findings, if acceptable, form the basis for a further detailed study by a committee of Regular Force personnel in concert with selected Auxiliary personnel.

The Committee has been guided in its deliberations by the belief that no military formation should exist unless there is a need for it and conversely that a unit should not be disbanded because it costs money but rather because it makes no worthwhile contribution. It is the opinion of the Committee that there is a need for Reserve Forces in Canada and that they make a contribution to the defence posture of the country that fully justifies the money expended on them.

Summary Page 4

The findings of this Committee are that:

(*a*) the RCAF Auxiliary should be organized and equipped to provide an Army Air Support capability in the field of mobility, tactical and logistic support.

(*b*) the RCAF Auxiliary should be part of a Tactical Air Group providing the services required by a closely integrated defence establishment.

(*c*) consideration should be given to the amalgamation of DND buildings and facilities for the Reserve components of all three Services.

(*d*) Auxiliary flying squadrons can operate effectively from non-RCAF bases by leasing accommodation and purchasing depot maintenance.

(*e*) with the implementation of the above a significant reduction of Regular Force Support Personnel can be realized.

(*f*) more Auxiliary flying squadrons could be supported within the budgetary limitations using the above noted plans.

(*g*) the present flying units slated for disbandment should be de-activated but not disbanded until a closer study of the feasibility of these proposals is made.

(*h*) there is no financial justification for the retention of Medical Units and Technical Training Units.

Page 5

(*i*) the Terms of Service of an Auxiliary Officer or Airman should be changed to ensure his availability when required.

(*j*) there are aircraft in the RCAF inventory which would permit more effective utilization of the RCAF Auxiliary.

(*k*) A Senior Staff Advisor for Auxiliary Policy matters is a definite requirement. This position could be filled by an Auxiliary Air Commodore acting in an advisory capacity as required. It might also be filled by the addition of another Regular Force Group Captain appointed to the staff of Air Transport Command Headquarters whose sole responsibility would be the supervision of all Auxiliary matters.

Primary Role

It is the Committee's firm belief that the most effective role for the RCAF Auxiliary is that of Army Air Support. This would provide mobility, and tactical and logistic support to the Canadian Army Units or Militia Brigades in a training function in Canada during peace time, or in full military service anywhere in the world as required by the Minister.

These categories encompass the following activities, but exclude long range transportation as provided by Air Transport Command, and those air observation functions presently provided by the Canadian Army.

Mobility:

The ability to move small fighting or specialist parties into, within, and out of a localized operational area using STOL Aircraft such as the Otter.

Page 6

Tactics:

(*a*) Close support with an air to ground attack capability utilizing training type aircraft for the most effective ordnance delivery.

(b) Photo reconnaissance in support of ground forces using present equipment and with infra-red and electronic equipment a possibility in the future.

(c) Air to air and air to ground communications capability.

Logistics:

The capability of moving the necessary men, materiel and equipment to support the operation within the forward area.

Secondary Role

In addition to the Primary Role proposed for the RCAF Auxiliary, the flying squadrons are capable of continuing to perform the following secondary tasks without any change in existing equipment.

(a) Short range transport in support of Air Transport Command.

(b) Search Operations.

(c) Aid to the Civil Authorities in the event of a regional emergency or disaster.

(d) Rescue and Mercy Flights.

The ability to perform these peace time tasks, in the future, as in the past, enables the RCAF Auxiliary to provide useful return for a portion of the money expended on traniing it for its war time role.

Page 7

Terms of Service

In order that the maximum benefit may be attained from having Reserve Forces, this committee recommends minor changes in the National Defence Act, to permit the call-up of Auxiliary Units at the discretion of the Government of Canada, for Service anywhere in the world for periods in excess of three months, for commitments less than a national emergency.

Equipment

Both primary and secondary roles can be performed now using present equipment. It is, however, recommended that long range planning be initiated with a view to equipping the Auxiliary with more suitable aircraft, as the role develops and the real needs become more apparent.

The Otter aircraft on strength are ideally suited to the proposed tasks, and would require only the eventual installation of adequate air to ground communication equipment. The C-45 Expeditor aircraft can be used in the initial training phase. However, it has little logistic support capability and therefore it is recommended that the Auxiliary be equipped with C-47 Dakota aircraft now being declared surplus until new equipment can be procured.

Location of Units

Auxiliary flying squadrons should be located in those areas in which they could be most effectively used in the fulfilment of their primary role, and in which there is a concentration of population sufficient to support them.

As their primary role would be Army Support, the number of squadrons required, and their location, will depend on the final configuration and location of the Army Units.

Page 8

The Committee considers that it is entirely feasible to operate squadrons in cities in which there are no RCAF bases. This could be accomplished by renting hangar facilities and combining with the Army and Navy units for Mess accommodation. Supply, accounting, and other services could be obtained as required from the nearest permanent RCAF base.

Operating Costs

It is felt that substantial savings could be realized in the following areas:

(*a*) reduction of Regular Force Support Units by

(i) centralized maintenance on conveniently located RCAF bases.

(ii) maintenance by civilian contractors for units located on non-RCAF bases.

(*b*) closing of some existing RCAF Auxiliary Urban Headquarters and locating them in other DND facilities; or alternatively leasing these requirements.

(*c*) reduction of some Auxiliary Wing or Squadron positions.

(*d*) disbandment of all Auxiliary Bands.

Search operations in our peace time role consume a great portion of our Auxiliary Budget and the cost is uncontrollable. It is felt that the allocation of the cost of these operations should be investigated.

Page 9

Recommendations

The relatively short time allotted to prepare this submission has precluded a definitive study. It is suggested that if the broad principles outlined are found to fit within the over-all Defence Policy of the Government, a detailed study should be undertaken to determine how best these principles can be implemented. This study should be undertaken by the RCAF Regular in concert with selected Auxiliary personnel, whose knowledge and experience of the limitations and capabilities of Reserve personnel should be utilized.

The Committee agrees with the disbandment of the Medical Units and the Technical Training Units but suggests that the economies outlined in our submission are such as to permit the retention of further flying units at locations as required. Therefore, we suggest that the flying units affected by the recent announcement be de-activated but not disbanded and that their facilities remain on Air Force inventory until such time as the detailed report be submitted.

APPENDIX "D"

SUMMARY OF MILITIA EFFECTIVE STRENGTHS

BY AREAS/MILITIA GROUPS AS OF 31 MAY 64

	Location	Effective Str Offrs	ORs	Total
NEWFOUNDLAND AREA (NFLD AREA)				
No 1 MILITIA GROUP				
1 Militia Group HQ	St John's, Nfld.	12	10	22
56 Field Squadron	"	8	40	48
The Royal Newfoundland Regt	"	32	469	501
Transport Platoon No 111 Coy RCASC	"	1	11	12
Food Service Pl No 111 Coy RCASC	"	—	—	—
1 Medical Coy	"	14	38	52
112 Manning Depot	"	12	24	36
Total Nfld Area		79	592	671
NOVA SCOTIA AND PRINCE EDWARD ISLAND AREA (NS/PEI)				
No 2 MILITIA GROUP				
2 Militia Group HQ	Charlottetown, PEI	13	8	21
The Prince Edward Island Regt	"	26	266	292
5th Signal Regt	"	20	163	183
Transport Platoon No 110 Coy RCASC	"	—	—	—
Food Service Pl No 110 Coy RCASC	"	1	9	10
5 Medical Coy	"	11	40	51
2 Secs, 5 Pro Coy	"	1	17	18
No 3 MILITIA GROUP				
3 Militia Group HQ	Sydney, NS	13	7	20
6 Indep Field Artillery Bty	"	9	167	176
45 Field Squadron	"	6	98	104
2nd Bn Nova Scotia Highlanders	"	33	306	339
111 Coy RCASC	"	11	57	68
6 Medical Coy	"	19	32	51
No 4 MILITIA GROUP				
4 Militia Group HQ	Halifax, NS	9	5	14
The Halifax Rifles	"	16	182	198
1st Field Artillery Regt	"	25	98	123
5th Field Engineer Regt	"	15	64	79
6 Signal Regt	"	10	59	69
No 1 Column RCASC	"	17	115	132
2 Medical Coy	"	11	20	31
Eastern Command Med Advisory Staff	"	—	—	—
50 Dental Unit	"	21	5	
Eastern Command Dental Advisory Staff	"	1	—	1
A Coy, 1 Ordnance Bn	"	14	40	54
20 Technical Sqn	"	8	50	58
Eastern Command Chaplain Unit	"	32	—	32
5 Provost Coy	"	3	51	54
3 Intelligence Training Coy	"	8	14	22
Eastern Command Personnel Selection Unit	"	9	3	12
101 Manning Depot	"	22	32	54
UNDER COMMAND NS/PEI AREA HQ				
14th Field Artillery Regt	Yarmouth, NS	35	299	334
1 Nova Scotia Highlanders	Amherst, NS	40	495	535
The Princess Louise Fusiliers	Halifax, NS	17	98	115
The West Nova Scotia Regt	Aldershot, NS	39	468	507
Total NS/PEI Area		515	3,268	3,783

	Location	Effective Str Offrs	ORs	Total
NEW BRUNSWICK AREA (NB AREA)				
No 5 MILITIA GROUP				
No 5 Militia Group HQ	Moncton, NB	14	36	50
8 Canadian Hussars	Sussex, NB	38	272	310
4th Independent Signal Sqn	Moncton, NB	5	31	36
2nd Bn, The Royal New Brunswick Regt	Bathurst, NB	38	487	525
113 Coy RCASC	Moncton, NB	7	88	95
3 Medical Coy	"	8	20	28
21 Technical Sqn	"	7	107	114
16 Provost Coy	"	4	58	62
No 6 MILITIA GROUP				
6 Militia Group HQ	Saint John, NB	12	15	27
3rd Field Artillery Regt	"	28	211	239
12 Field Regt	Fredericton, NB	28	206	234
1st Field Sqn	Saint John, NB	2	58	60
5th Independent Signal Sqn	"	5	63	68
6th Independent Signal Sqn	Fredericton, NB	6	48	54
1st Bn, The Royal New Brunswick Regt	"	39	460	499
112 Coy RCASC	Saint John, NB	11	79	90
4 Medical Coy	"	10	31	41
51 Dental Unit	"	11	11	22
102 Janning Depot	"	32	86	118
Total NB Area		305	2,367	2,672
EASTERN QUEBEC AREA (EQA)				
No 7 MILITIA GROUP				
7 Militia Group HQ	Quebec, Que	19	9	28
57 Locating Artillery Bty	"	3	19	22
10 Field Sqn	"	8	76	84
3rd Independent Signal Sqn	"	8	65	73
The Royal Rifles of Canada	"	19	110	129
Les Voltigeurs de Québec	"	26	139	165
The Regiment du Saguenay	Chicoutimi, Que	39	262	301
2 Column RCASC	Quebec, Que	22	175	197
7 Medical Coy	Ste-Foy, Que	32	77	109
2 Ordnance Bn, A Coy	Beauport, Que	13	37	50
25 Technical Sqn	Arvida, Que	9	111	120
42 Technical Sqn	Quebec, Que	7	62	69
4 Provost Coy	Beauport, Que	5	47	52
103 Manning Depot	Quebec, Que	29	45	74
No 8 MILITIA GROUP				
8 Militia Group HQ	Levis, Que	9	8	17
6 Field Artillery Regt	Quebec, Que	41	299	340
15 Field Sqn	Thetford Mines, Que	3	91	94
Les Fusiliers du St-Laurent	Rimouski, Que	43	431	474
Le Régiment de la Chaudière	Levis, Que	38	420	845
Total Eastern Quebec Area		373	2,483	2,856
QUEBEC COMMAND (Less EQA)				
No 9 MILITIA GROUP				
9 Militia Group HQ	Sherbrooke, Que	13	6	19
The Sherbrooke Regt	"	20	133	153
7/11 Hussars	Richmond, Que	22	138	160
27 Field Artillery Ret	Cowansville, Que	28	222	250
46 Field Artillery Regt	Drummondville, Que	28	266	294
57 Field Sqn	St-Hilaire, Que	3	13	16
14 Independent Signal Sqn	Sherbrooke, Que	9	42	51
6 Bn, Royal 22e Regiment	St-Hyacinthe, Que	31	225	256
Les Fusiliers de Sherbrooke	Sherbrooke, Que	36	251	287
125 Company, RCASC	"	—	—	—
8 Medical Coy	"	20	43	63
24 Technical Sqn	"	7	72	79
101 Provost Pl	Drummondville, Que	—	—	—
No 10 MILITIA GROUP				
10 Militia Group HQ	Montreal, Que	25	21	46
The Royal Canadian Hussars	"	42	110	152
34 Field Artillery Regt	"	21	50	71
37 Field Artillery Regt	"	28	102	130
2 Medium Artillery Regt	"	32	167	199
3 Locating Artillery Bty	"	3	20	23

	Location	Effective Str Offrs	ORs	Total
3 Field Engineer Regt	Westmount, Que	26	176	202
11 Signal Regiment	"	30	118	148
The Canadian Grenadier Guards	Montreal, Que	16	134	140
Victoria Rifles of Canada	"	21	118	139
3rd Bn, Black Watch of Canada	"	27	242	269
4 Bn, Royal 22e Regiment	"	35	309	344
Les Fusiliers Mont Royal	"	31	185	216
Le Régiment de Maisonneuve	"	32	133	165
The Royal Montreal Regt	"	23	173	196
3 Column RCASC	"	30	252	282
1 Medical Bn	"	64	63	127
53 Dent Unit	"	15	22	37
3 Ordnance Bn	"	34	137	171
2 Technical Regt	"	23	135	158
3 Provost Coy	"	5	90	95
1 Intelligence Training Coy	"	24	29	53
No 11 Militia Group				
11 Militia Group HQ	Trois-Rivières, Que	14	7	21
Le Régiment de Trois-Rivières	"	32	176	208
Le Régiment de Hull	Hull, Que	32	100	132
62 Field Artillery Regt	Shawinigan, Que	29	180	209
9 Field Sqn	Noranda, Que	2	74	76
15 Independent Signal Sqn	Trois-Rivières, Que	9	33	42
Le Régiment de Joliette	Joliette, Que	26	214	250
126 Coy RCASC	Trois-Rivières, Que	4	33	37
22 Technical Sqn	Cap de la Madeleine, Que	4	120	124
8 Ordnance Coy	Ste-Thérèse, Que	10	78	88
102 Provost Pl	Trois-Rivières, Que	1	35	36
Under HQ Quebec Command				
Quebec Command Personnel Selection Unit	Montreal, Que	52	7	59
Quebec Command Chaplain Unit	"	43	—	43
104 Manning Depot	"	16	40	56
Total HQ Quebec Command		1,078	5,294	6,372
Eastern Ontario Area (E Ont Area)				
No 12 Militia Group				
12 Militia Group HQ	Ottawa, Ont	12	9	21
4 Princess Louise Dragoon Guards	"	29	141	160
30 Field Artillery Regt	"	34	174	208
3 Field Sqn	"	5	44	49
3 Signal Regt	"	30	166	196
Govenor General's Foot Guards	"	27	255	282
The Lanark and Renfrew Scottish Regt	Pembroke, Ont	34	243	277
Stormont, Dundas and Glengary Highlanders	Cornwall, Ont	24	186	210
The Cameron Highlanders of Ottawa	Ottawa, Ont	26	157	183
130 Company, RCASC	"	11	94	105
9 Medical Coy	Cornwall, Ont	8	32	40
10 Medical Coy	Ottawa, Ont	10	22	32
54 Dental Unit	"	11	14	25
3 Ordnance Coy	"	11	151	162
113 Manning Depot	"	35	99	134
No 13 Militia Group				
13 Militia Group HQ	Peterborough, Ont	12	6	18
50 Field Artillery Regt	"	32	125	157
33 Medium Artillery Regt	Cobourg, Ont	16	103	119
3 Independent Med Bty	Gananoque, Ont	4	21	25
55 Field Sqn	Kingston, Ont	5	44	49
The Princess of Wales' Own Regt	"	34	179	203
The Hastings and Prince Edward Regt	Belleville, Ont	42	335	347
The Brockville Rifles	Brockville, Ont	27	151	178
Transport Platoon, 130 Coy RCASC	Kingston, Ont	1	8	9
11 Medical Coy	"	9	23	32
28 Technical Sqn	Peterborough, Ont	9	73	82
Total E Ont Area		498	2,855	3,353

	Location	Effective Str Offrs	ORs	Total
CENTRAL ONTARIO AREA (CENT ONT AREA)				
No 14 MILITIA GROUP				
No 14 Militia Group HQ	Toronto, Ont	11	3	14
The Queen's York Rangers	"	36	117	153
2 Field Engineer Regt (less 2 Sqns)	"	17	89	106
2 Signal Regiment	"	14	122	136
The Royal Regiment of Canada	"	40	323	363
The Irish Regiment of Canada	"	30	154	184
The Toronto Scottish Regt	"	27	174	201
26 Medical Coy	"	25	42	67
4 Technical Regt	"	32	155	187
2 Provost Coy	"	5	90	95
No 15 MILITIA GROUP				
15 Militia Group HQ	Toronto, Ont	15	3	18
The Governor General's Horse Guards	"	36	144	180
The Ontario Regt	Oshawa, Ont	28	120	148
29 Field Artillery Regt	Toronto, Ont	38	100	138
42 Medium Regt	"	20	111	131
1 Locating Regt	"	17	81	98
8 Signal Regt	"	21	77	98
3 Bn, Queen's Own Rifles	"	31	81	112
48 Highlanders of Canada	"	31	254	285
5 Column RCASC	"	27	219	246
56 Dental Unit	Toronto, Ont	15	5	20
4 Ordnance Bn	"	22	84	106
2 Intellignece Training Coy	"	21	22	43
No 16 MILITIA GROUP				
16 Militia Group HQ	Toronto, Ont	13	7	20
The Grey and Simcoe Forresters	Owen Sound, Ont	39	247	286
The Algonquin Regt	North Bay, Ont	37	303	340
49 Field Artillery Regt	Sault St Marie, Ont	39	291	330
58 Field Artillery Regt	Sudbury, Ont	28	245	273
8 Field Sqn (2 Field Engineer Regt)	North Bay, Ont	6	94	100
13 Medical Coy	Owen Sound, Ont	27	54	81
33 Technical Sqn	Sudbury, Ont	8	122	130
34 Technical Sqn	Sault St Marie, Ont	8	98	106
No 17 MILITIA GROUP				
17 Militia Group HQ	Dundas, Ont	11	5	16
8 Field Artillery Regt	Hamilton, Ont	32	237	269
44 Field Artillery Regt	St Catharine's Ont	22	91	113
57 Field Artillery Regt	Welland, Ont	27	239	266
18 Field Sqn (2 Field Engineer Regt)	Hamilton, Ont	3	36	39
1 Independent Signal Sqn	"	8	42	50
The Royal Hamilton Light Infantry	"	31	274	305
The Lincoln and Welland Regt.	St Catharine's, Ont	35	224	259
The Lorne Scots	Brampton, Ont	40	331	371
The Argyle and Sutherland Highlanders	Hamilton, Ont	38	196	234
133 Company RCASC	"	11	129	140
16 Medical Coy	"	15	28	43
4 Ordnance Coy	"	8	82	90
5 Technical Regt	"	15	64	79
30 Technical Sqn	St Catharine's, Ont	4	67	71
UNDER COMMAND CENT ONT AREA				
40 Medium Regt	Kenora, Ont	30	212	242
The Lake Superior Scottish Regt	Port Arthur, Ont	28	130	148
138 Coy, RCASC	"	5	57	62
17 Medical Coy	"	9	19	28
35 Technical Sqn	"	3	51	54
Central Command Chaplain Unit	Toronto, Ont	73	—	73
Personnel Selection Unit	"	73	17	90
106 Manning Unit Depot	"	31	92	123
115 Manning Unit Depot	Port Arthur, Ont	16	28	44
Toronto Artillery Militia Band	Toronto, Ont	1	45	46
Total Cent Ont Area		1,333	6,727	8,060

	Location	Effective Str Offrs	ORs	Total
WESTERN ONTARIO AREA (WEST ONT AREA)				
No 18 MILITIA GROUP				
18 Militia Group HQ	London, Ont	15	3	18
1 Hussars	"	22	117	139
11 Field Artillery Regt	Guelph, Ont	23	178	201
21 Field Artillery Regt	Wingham, Ont	29	187	216
56 Field Artillery Regt	Brantford, Ont	37	108	145
11 Field Engineer Regt	London, Ont	22	219	241
9 Signal Regt	"	18	73	91
3 Bn, The Royal Canadian Regt	"	36	233	269
The Perth Regt	Stratford, Ont	22	94	116
The Highland Light Infantry of Canada	Galt, Ont	30	102	132
The Scots Fusiliers of Canada	Kitchener, Ont	29	120	149
4 Column, RCASC	London, Ont	31	140	171
12 Medical Coy	Kitchener, Ont	17	56	73
15 Medical Coy	London, Ont	23	50	73
55 Dental Unit	"	16	3	19
5 Ordnance Bn	"	20	43	63
6 Provost Coy	"	4	66	70
107 Manning Depot	"	35	50	85
Total West Ont Area (Including 26 Militia Group)		623	3,006	3,629
MANITOBA AREA (MAN AREA)				
No 19 MILITIA GROUP				
19 Militia Group HQ	Winnipeg, Man	13	5	18
The Fort Garry Horse	"	20	106	126
12 Manitoba Dragoons	Virden, Man	19	157	176
26 Field Artillery Regt	Brandon, Man	32	279	311
39 Field Artillery Regt	Winnipeg, Man	27	108	135
6 Field Engineer Regt	"	17	157	174
10 Independent Signal Sqn	"	7	95	102
The Royal Winnipeg Rifles	"	22	127	149
The Winnipeg Grenadiers	"	23	107	130
The Queen's Own Cameron Highlanders of Canada	"	25	145	170
6 Column, RCASC	"	23	177	200
18 Medical Coy	"	20	46	66
57 Dental Unit	"	12	28	40
6 Ordnance Bn	"	10	11	21
7 Technical Regt	"	9	78	87
13 Provost Coy	"	5	55	60
5 Intelligence Training Coy	"	6	22	28
108 Manning Depot	"	12	61	73
Total Man Area		302	1,764	2,066
SASKATCHEWAN AREA (SASK AREA)				
HQ 20 MILITIA GROUP				
20 Militia Group HQ	Regina, Sask	10	11	21
The Saskatchewan Dragoons	Moose Jaw, Sask	14	143	157
14 Canadian Hussars	Swift Current, Sask	11	157	168
53 Field Artillery Regt	Yorkton, Sask	17	180	197
10 Field Artillery Regt	Regina Sask	23	84	107
14 Field Sqn	"	5	48	53
2 Independent Signal Sqn	"	3	28	31
The Regina Rifle Regt	"	26	187	213
The South Saskatchewan Regt	Estovan, Sask	10	91	101
142 Company RCASC	Regina, Sask	10	112	122
19 Medical Coy	"	22	60	82
58 Dental Unit	"	5	6	11
5 Ordnance Coy	"	4	37	41
109 Manning Depot	"	22	40	62
21 MILITIA GROUP				
21 Militia Group HQ	Saskatoon, Sask	11	7	18
21 Medium Artillery Bty	"	7	44	51
44 Medium Artillery Bty	Prince Albert, Sask	6	95	101
Operating Troop, 2 Sig Sqn	Saskatoon, Sask	1	12	13
1 Bn, North Saskatchewan Regt	Prince Albert, Sask	27	319	346
2 Bn, North Saskatchewan Regt	Saskatoon, Sask	30	245	275
20 Medical Coy	"	9	33	42
37 Technical Sqn	"	3	40	43
Total Sask Area		276	1,979	2,255

	Location	Effective Str Offrs	ORs	Total
Alberta Area (Alta Area)				
22 Militia Group				
22 Militia Group HQ	Calgary, Alta	18	9	27
The South Alberta Light Horse	Medicine Hat, Alta	23	199	222
The King's Own Calgary Regt.	Calgary, Alta	31	314	345
18 Field Artillery Regt	Lethbridge, Alta	31	176	207
19 Medium Artillery Regt	Calgary, Alta	25	157	182
8 Field Engineer Regt	Lethbridge, Alta	35	402	437
7 Independent Signal Sqn	Calgary, Alta	8	64	72
The Calgary Highlanders	"	22	252	274
7 Column RCASC	"	24	230	254
21 Medical Unit	"	23	39	62
59 Dental Unit	"	11	18	29
6 Ordnance Coy	"	6	26	32
A Sqn, 9 Technical Regt	"	4	54	58
31 Technical Sqn	Blairmore, Alta	1	63	64
32 Technical Sqn	Lethbridge, Alta	5	71	76
14 Provost Coy	Calgary, Alta	3	29	32
110 Manning Depot	"	26	47	73
23 Militia Group				
23 Militia Group HQ	Edmonton, Alta	15	9	24
19 Alberta Dragoons	"	23	156	179
20 Medium Artillery Regt	"	27	153	180
25 Field Sqn	"	8	69	77
8 Independent Signal Sqn	"	8	69	77
The Loyal Edmonton Regt	"	37	302	339
154 Company RCASC	"	8	95	103
22 Medical Coy	Ponoka, Alta	1	19	20
23 Medical Coy	Edmonton, Alta	16	75	91
Western Command Medical Advisory Staff	"	2	1	3
60 Dental Unit	"	15	56	71
Company, 7 Ordnance Bn	"	6	21	27
38 Technical Sqn	"	6	59	65
15 Provost Coy	"	4	12	16
6 Intelligence Training Coy	"	14	21	35
Personnel Selection Unit	"	50	2	52
116 Manning Depot	"	23	43	66
Chaplain Unit	"	57	—	57
Total Alta Area		616	3,312	3,928
British Columbia Area (BC Area)				
24 Militia Group				
24 Militia Group HQ	Vancouver, BC	15	10	25
The British Columbia Regt	"	30	140	170
15 Field Artillery Regt	"	30	260	290
7 Field Engineer Regt	"	21	136	157
West Coast Signal Regt	"	15	102	117
The Seaforth Highlanders of Canada	"	27	199	226
The Westminster Regt	New Westminster, BC	22	238	260
The Irish Fusiliers of Canada	Vancouver, BC	29	223	252
152 Coy RCASC	Abbotsford, BC	5	49	54
156 Coy RCASC	Vancouver, BC	8	53	61
24 Medical Coy	"	24	76	100
61 Dental Unit	"	10	38	48
8 Ordnance Bn	"	8	37	45
8 Technical Regt	"	12	117	129
8 Provost Coy	"	3	38	41
4 Intelligence Training Coy	"	8	20	28
111 Manning Depot	"	31	43	74
25 Militia Group				
25 Militia Group HQ	Victoria, BC	12	14	26
C Sqn, British Columbia Regt	Nanaimo, BC	4	40	44
5 Independent Medium Bty	Victoria, BC	14	121	135
5 Area Signal Sqn	"	2	26	38
The Canadian Scottish Regt	"	34	273	307
155 Coy RCASC	"	10	106	116
40 Technical Sqn	"	4	87	91
Army Photo Interpretation Section (4 Int Trg Coy)	"	6	12	18
Total BC Area (Including 27 Militia Group)		455	3,108	3,563

	Location	Effective Str Offrs	ORs	Total
WESTERN ONTARIO AREA (WEST ONT AREA)				
26 MILITIA GROUP				
26 Militia Group HQ	Windsor, Ont	13	7	20
The Elgin Regt	St Thomas, Ont	36	289	325
The Windsor Regt	Windsor, Ont	39	218	257
7 Field Artillery Regt	Sarnia, Ont	33	164	197
1 Bn, Essex and Kent Scottish	Windsor, Ont	31	219	250
2 Bn, Essex and Kent Scottish	Chatham, Ont	29	169	198
14 Medical Coy	Windsor, Ont	Nil Str		
39 Technical Coy	"	13	98	111
BRITISH COLUMBIA AREA (BC AREA)				
27 MILITIA GROUP				
27 Militia Group HQ	Vernon, BC	8	8	16
The British Columbia Dragoons	Kelowna, BC	13	141	154
24 Field Artillery Regt	Trail, BC	20	170	190
44 Field Sqn	"	2	77	79
The Rocky Mountain Rangers	Kamloops, BC	28	254	282
UNDER COMMAND HEADQUARTERS WESTERN COMMAND				
The Yukon Regt (restricted to one Coy)		6	38	44

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

PROCEEDINGS

No. 17

THURSDAY, SEPTEMBER 24, 1964

FRIDAY, SEPTEMBER 25, 1964

TUESDAY, SEPTEMBER 29, 1964

INCLUDING THE FOURTH REPORT TO THE HOUSE

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21312—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),	Langlois,	Matheson,
Béchard,	Laniel,	McMillan,
Brewin,	Lessard (*Lac-Saint-Jean*),	McNulty,
Deachman,	Lloyd,	Pilon,
Fane,	MacInnis,	Smith,
Gross,	MacLean,	Temple,
Harkness,	MacRae,	Winch—(24).
	Martineau,	

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, September 24, 1964.

The Special Committee on Defence, having been duly called to meet at 10:00 a.m. this day, the following members were present: Messrs. Béchard, Groos, Hahn, Lambert, Lloyd, MacLean, McMillan and McNulty—(8).

There being no quorum, at 10:30 a.m., the chairman adjourned the meeting until 4:00 p.m. this day.

AFTERNOON SITTING

(27)

The Special Committee on Defence met *in camera* at 4.10 p.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Béchard, Brewin, Deachman, Groos, Hahn, Lambert, Laniel, Lessard (*Lac-Saint-Jean*), Lloyd, MacInnis, Matheson, McMillan, McNulty, Pilon, Temple, Winch—(16).

On behalf of the Steering Subcommittee the Chairman submitted a "Draft Report to the House".

The Committee considered a number of paragraphs of the said Report. These paragraphs were adopted as amended.

At 5.00 p.m. the Committee adjourned until 8.00 p.m. this day.

EVENING SITTING

(28)

The Special Committee on Defence resumed *in camera* at 8.20 p.m. this day, the Chairman, Mr. David G. Hahn, presiding.

Members present: Messrs. Béchard, Brewin, Groos, Hahn, Lambert, Laniel, Lloyd, MacInnis, McMillan, McNulty, Pilon, Temple, Winch—(13).

The Committee resumed its consideration of a "Draft Report to the House". A number of paragraphs were amended and adopted as amended.

At 10.00 p.m. the Committee adjourned until 9.30 a.m. Friday, September 25, 1964.

FRIDAY, September 25, 1964.

(29)

The Special Committee on Defence met *in camera* at 9.40 a.m. this day. The Chairman, Mr. D. G. Hahn, presided.

Members present: Messrs. Béchard, Brewin, Deachman, Groos, Hahn, Lambert, Laniel, Lloyd, MacInnis, MacLean, McMillan, McNulty, Pilon, Winch—(14).

21312—1½

The Committee continued its consideration of a "Draft Report to the House". Paragraphs of that Report were considered, amended and adopted, as amended.

At 11.00 a.m. the Committee adjourned until 3.30 p.m. Tuesday, September 29, 1964.

TUESDAY, September 29, 1964.
(30)

The Special Committee on Defence met *in camera* at 4.00 p.m. this day. The Chairman, Mr. D. G. Hahn, presided.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Deachman, Fane, Groos, Hahn, Lambert, Lessard (*Lac-Saint-Jean*), Lloyd, MacInnis, MacLean, MacRae, Matheson, McMillan, McNulty, Pilon, Smith, Temple and Winch—(19).

The Committee continued its consideration of the Draft Report to the House. Various paragraphs were amended, and adopted, as amended.

During the meeting, the division bells having rung, the Committee recessed briefly to permit members to attend a vote in the House.

During the meeting, the division bells having rung, the Committee recessed briefly to permit members to attend a vote in the House.

At 6.00 p.m. the Committee adjourned until 8.00 p.m. this evening.

EVENING SITTING

(31)

The Special Committee on Defence resumed *in camera* at 8.15 p.m., the Chairman, Mr. D. G. Hahn, presiding.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Deachman, Groos, Hahn, Lambert, Lloyd, MacInnis, MacLean, MacRae, McMillan, McNulty, Pilon and Smith—(14).

The Committee continued its consideration of a "Draft Report to the House". Having considered the various paragraphs in the Report, the said report was adopted, as amended, and the Chairman was instructed to present it to the House.

Members of the Committee expressed their appreciation for the manner in which the Chairman and members of the Steering Committee had prepared the above-mentioned report. In turn the Chairman thanked the Committee members for their assistance and co-operation.

At 9.50 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

(*Report follows*).

REPORT TO THE HOUSE

THURSDAY, October 1, 1964

The Special Committee on Defence has the honour to present its

FOURTH REPORT

CHAPTER 1—SPECIAL COMMITTEE ON DEFENCE

1. On May 8, 1964, the House of Commons appointed the Special Committee on Defence by adopting the following resolution:

> *Resolved,*—That a Special Committee be appointed to continue the consideration of matters relating to Defence begun by the Special Committee at the past Session and to report from time to time its observations and opinions thereon;
>
> That the Committee have power to send for persons, papers and records and to examine witnesses;
>
> That it be empowered to adjourn from place to place;
>
> That the minutes of proceedings and evidence taken by the Special Committee at the past Session be referred to the said Committee and made a part of the records thereof; and
>
> That the Committee consist of 24 members to be designated by the House at a later date, and that Standing Order 67(1) be suspended in relation thereto.

2. On May 14, 1964, the House designated twenty-four members to serve on the Committee as follows:

> *Ordered,*—That the Special Committee on Defence, appointed May 8, 1964, be composed of Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Brewin, Deachman, Fane, Granger, Groos, Hahn, Harkness, Lambert, Langlois, Laniel, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, (*Queens*), MacRae, Martineau, Matheson, McMillan, Nielsen, Pilon, Smith, Temple and Winch.

Subsequently, Messrs. MacInnis and McNulty were appointed and presently serve on the Committee.

A Steering Subcommittee comprised of Messrs. Hahn (Chairman), Lambert (Vice-Chairman), Langlois, Lessard (*Lac-Saint-Jean*), MacLean, Temple and Winch, was appointed to arrange and plan the work of the Committee.

3. Your Committee held 30 meetings to receive information and opinions on, and to consider matters relating to Defence. Included in this number is four days spent on a visit to Maritime Command, Atlantic, the viewing of a fleet exercise and a visit to SACLANT Headquarters at Norfolk, Virginia. In addition the Committee visited the Canadian Army at Camp Gagetown, New Brunswick, and the Royal Military College at Kingston, Ontario.

4. On May 12, the House of Commons referred to this Committee for consideration and report, Bill C-90, An Act to amend the National Defence Act. Consideration of this Bill was the first order of business for the Committee.

Witnesses heard from the Department of National Defence were: Honourable Paul T. Hellyer, Minister; Honourable Lucien Cardin, Associate Minister; Mr. Elgin B. Armstrong, Deputy Minister; Brigadier W. J. Lawson, Judge Advocate General; and Dr. Jack Hodgson, Assistant Deputy Minister of National Defence (Finance).

Evidence was also heard from the following persons from outside the public service: Brigadier Richard S. Malone, Winnipeg, Manitoba; Air Marshal W. A. Curtis and Major General W. H. S. Macklin, both of Toronto, Ontario.

In its Second Report to the House, dated June 10, 1964, the Committee reported Bill C-90 to the House, without amendment.

5. During consideration of Bill C-90, your Committee heard evidence respecting the impact of the proposed service reorganization on the manpower requirements of the Services. Particular attention was drawn to the problem of personnel who will be involuntarily retired. In this connection, your Committee made certain observations and recommendations in its Third Report to the House, dated June 17, 1964.

6. The Committee spent three days during the last week of July visiting our Maritime Forces on the east coast. One day was spent at SACLANT Headquarters at Norfolk, Virginia. Briefings were conducted by the following:

Rear Admiral J. V. Brock, Maritime Commander; Air Commodore F. S. Carpenter, Deputy Maritime Commander; Commodore E. N. Clarke, Commodore Superintendent Atlantic Coast; Commodore R. L. Hennessy, Commodore Personnel Atlantic; Lt. Cdr. W. T. Marchant; Lt. Cdr. S. S. R. Conway; Captain R. W. Timbrell; Cdr. W. S. Blandy; Captain G. C. Edwards; Lt. Cdr. S. H. Rowell; Lt. Cdr. D. H. Tate; Captain T. C. Pullen; S/L Robert McNair; Mr. W. B. Bailey; Mr. R. Dexter; Lt. Cdr. H. J. Bird; Lt. Cdr. W. A. Byatt; Lt. Cdr. R. F. Strouts; Commodore J. C. Pratt; Cdr. C. G. Pratt; Captain D. L. Macknight; Commander D. H. P. Ryan; Commander A. E. Fox; Commander B. C. Thillaye; Admiral H. P. Smith, U.S. Navy, Supreme Allied Commander Atlantic; Vice-Admiral Charles E. Weakley, U.S. Navy, Commander Anti-Submarine Warfare Force Atlantic; assisted by Vice-Admiral R. D. Hogle, Chief of Staff, SACLANT Headquarters; Cdr. J. B. Carling; Major J. D. Dillon; Cdr. S. Bruland; Cdr. J. J. Doak; Cdr. J. L. Davis; and Captain R. J. Davis.

7. During the Committee's consideration of the Civil Emergency Planning Programme, evidence was received from Honourable Charles M. Drury, Minister of Defence Production, and from Mr. Paul Faguy, Director of Emergency Measures Organization.

8. The operation of the Regular Officer Training Plan was reviewed by the Committee. During this review the Committee received evidence from the Associate Minister of National Defence, Honourable Lucien Cardin, and from the Deputy Minister of Nation Defence, Mr. Elgin B. Armstrong. Detailed information respecting the various plans was supplied by Commodore H. V. W. Groos, Director of ROTP; Colonel W. R. Sawyer, Vice-Commandant and Director of Studies of Royal Military College; and Commander G. Clark.

The Committee visited Royal Military College, Kingston, Ontario, and received briefings there from Air Commodore L. G. Birchall, Commandant of Royal Military College; Dr. G. F. G. Stanley, Head of the History Department; and, Colonel G. F. Stevenson, Chairman of Army Central Command Interview Board.

9. Your Committee considered the role and functions of the Reserve Forces. Evidence was heard on this subject from the Honourable Lucien Cardin, Associate Minister of National Defence, and from Col. C. P. MacPherson, Director of Militia and Cadets.

Lt. Col. W. R. Learmonth, Chairman of the Conference on Defence Associations and three other members of that body appeared before the Committee and gave evidence respecting Reserve Forces. The Committee also heard testimony from the following:

Brigadier E. R. Suttie, Chairman of the Commission on the Reorganization of the Canadian Army (Militia);
Commodore R. I. Hendy, Chairman of the Ministerial Committee on the Role and Organization of the Royal Canadian Navy; and Group Captain J. W. P. Draper, Chairman of the Ministerial Committee on the Royal Canadian Air Force Auxiliary.

10. The Committee is submitting this Report at this time so that its recommendations will be available to the House of Commons before the Government makes a final decision on certain policy matters that have been studied by the Committee.

11. The Committee has received a series of papers on Defence topics that were ordered last Session. It is the intention of the Committee to study these papers and other matters in the latter months of this Session.

12. It is the intention of the Committee to submit another interim report to cover its full sessional activities just before the end of this Session of Parliament.

CHAPTER II—THE SERVICES

NAVY

13. Your Committee was impressed with the efficiency of our Maritime Forces and with the calibre of the officers and men serving in these forces.

14. Your Committee observed demonstrations of the operation of the HSS-2 Helicopter from a Destroyer Escort. This significant Canadian development which includes the "Bear-Trap" landing system is most impressive. The Committee was pleased to learn of the widespread interest, in this operation, by other countries.

15. The operations of HMCS *Provider* were explained. This ship represents a significant development with its capability of high speed simultaneous replenishment of solid and liquid stores. There have been mechanical and contractual problems with this ship. In the opinion of the Committee, these do not detract from the over-all concept; they should, however, be investigated by the Committee when it studies "procurement practices".

16. During Anti-Aircraft exercises off Bermuda, several failures were experienced with the 3″ 70 guns. It was noted that the capability of these weapons against supersonic aircraft was very limited. Considerable doubt was expressed as to the serviceability of this complex weapon.

17. The Committee concludes that, as presently constituted, our Navy and the Maritime Command of the R.C.A.F., constitute a highly developed, specialized Anti-Submarine Warfare (ASW) Force. The R.C.A.F., with its specialized aircraft, is a well trained, well equipped force for this purpose.

18. As older ships with other than ASW capabilities are retired, our Navy will effectively be limited to the specialist ASW role. It will not then be

efficiently equipped to ward off air attacks or fight surface actions. It is noted that at present the Navy has only very limited ability to transport troops and equipment.

19. In the event of a nuclear war, the operation of convoys is unlikely. Nevertheless, the ability to detect and keep under surveillance modern foreign submarine forces in time of peace is a definite deterrent and is therefore a valid task for Canada's Naval Forces.

20. A conventional war or major United Nations action could require convoys of men and material to support it. The use of submarines is not limited to major powers, and we can expect additional countries to acquire them. An ASW Navy is therefore necessary to carry out these roles.

21. The significance of a submarine threat gives rise to deep concern on the costs involved to provide an acceptable level of Anti-Submarine Warfare (ASW) capability, with the present type of equipment. As new and better foreign submarines, particularly nuclear powered and armed, become more general, intensive research and development of more effective ASW forces and tactics are essential and must be undertaken without delay. Your Committee believes that if the Canadian Hydro-Foil Programme is successful it may prove to be a partial answer to this problem.

22. Your Committee is in agreement that Canada must continue an ASW role in concert with her allies.

23. Your Committee welcomes an indication, in the "White Paper", of a trend in our forces to provide land and air forces that would be mobile and complementary to each other, thereby increasing Canada's capabilities in peace-keeping operations. Consideration should be given to broadening the Navy's limited role, so that it can complement the other two forces in this area.

24. A number of ships have been, or soon will be, retired from the fleet. Decisions must be taken on their replacements. The options are to add ships of the ASW type and/or to acquire ships that will provide for a wider variety of tasks. In the opinion of the Committee, Canada cannot afford the high cost of an over-all naval force, capable in all functions, but must continue to specialize.

The Committee supports the recently announced intention of modernizing a number of our ASW vessels. The next priority should be given to the acquisition of shipping to provide logistic support and to meet naval transport requirements of our ground forces. An intensive study should be made, to this end, in conjunction with the Department of Transport. The use of *Bonaventure* for this purpose is costly, less efficient, and removes this important ASW unit from its allocated task. Beyond this, further replacements should augment the ASW forces.

The Committee noted with concern the limited anti-aircraft capability of our existing fleet, and considers that this problem must be thoroughly examined to determine whether, within budget limitations, better anti-aircraft protection may be provided than currently exists.

25. Observing the action of other countries who are entering the nuclear propulsion field, your Committee feels that there could well be great advantage to Canadian industry and to Canadian defence if Canada did likewise. In view of the great costs involved, however, the Committee is of the opinion that at this time action should be limited to joint desirability and feasibility studies by the Department of National Defence, the Department of Industry, and

the Department of Transport and that the Canadian Government should encourage private industry which is interested in the field of nuclear propulsion, by lending support to pilot or experimental programmes studies.

26. Your Committee is aware that naval duties, involving long absences at sea, create particular family problems for naval personnel. While in Halifax, the Committee noted that these morale problems were aggravated by the grossly inadequate housing available to naval personnel in the Port of Halifax region. Your Committee received reports of lower cost and better housing accommodation on the Pacific coast which accentuates the morale and cost-of-living problems on the Atlantic coast.

ARMY

27. Committee members visited Camp Gagetown to observe the summer concentration exercises of the Army and demonstrations of new tactical formations. Briefings were given by Major General R. Rowley, General Officer Commanding, Field Force, Camp Gagetown; Colonel C. D. Simpson, Camp Commandant, Camp Gagetown; Brigadier Norman Wilson-Smith; Lt. Col. John Clarkson; and, Lt. Col. Gordon Sellars. The Committee was impressed with the good appearance and the morale of the forces at Camp Gagetown.

28. The Special Committee on Defence, in its interim report presented during the last session, raised the problem of the lack of tactical mobility of our army. Provision of approximately 480 armoured personnel carriers, in the near future, should ease this problem, but continued efforts must be made to increase airborne tactical mobility.

RECOMMENDATIONS

29. Your Committee recommends:

(*a*) that the Hydro-Foil Development Programme be continued in collaboration with our allies and subject to a continuing close scrutiny of the progress and of the economic implications of the programme;

(*b*) that an early decision be made on the ship replacement programme, giving priority to the acquisition of logistic support shipping for the Army;

(*c*) that consideration be given to the problem of anti-aircraft protection for our fleet;

(*d*) that Naval and Department of National Defence officials, together with officials from Central Mortgage and Housing Corporation, continue to meet with the officials of the Halifax-Dartmouth area to arrive at solutions to the Naval housing problem in that area; and

(*e*) that joint desirability and feasibility studies on nuclear propulsion, as referred to in paragraph 25, be carried out.

CHAPTER III—CIVIL EMERGENCY PLANNING

30. The prime task of Civil Emergency Planning is to plan now so that appropriate action could be taken in the event of a nuclear attack or major civil disaster. This planning should ensure—

(*a*) the continuity of civilian government at all levels;

(*b*) the identification and allocation of resources remaining after an attack so that they may be effectively used for the survival of the population and the maintenance of any required military action; and

(c) that the civilian population is informed and able to make use of any existing protective facilities.

31. In the event of an emergency, it is vital that information on all aspects of the situation be quickly gathered. This information must be rapidly transmitted to those responsible for taking action. A fundamental task therefore of Civil Emergency Planning is to ensure the availability of an effective communication system across the country in the event of an emergency.

32. In an emergency civilian government at all levels would remain responsible for its respective functions. The Emergency Measures Organization (EMO) structure would provide communications, specialist knowledge, and a co-ordinating function, to act in a staff capacity to the various civilian governments. It is noted that EMO organizations are now in operation in all provinces, and that 2,100 out of a total of 4,000 municipalities (approximately 80% of the population) are covered. Efforts should be continued to provide coverage for the remainder of our municipalities.

33. The responsibilities and the authorities of the various levels of government would, of necessity, change with the nature of the emergency. The situation could vary from a local civil disaster to a major nuclear attack involving large portions of the country. It is important that the responsibilities and the authorities of each level of government be defined under these varying conditions. There is an indication that this allocation of responsibility is vaguely defined. There has not been a meeting of the Federal-Provincial Conference on Emergency Measures since December, 1962, and no meeting is currently scheduled. There has been no national exercise for a number of years. The Committee is concerned that this lack of continuing liaison and exercise with the provinces has seriously impaired the validity of the planning. Gaps in levels of responsibility have not been effectively resolved.

34. No attempt is being made to provide blast protection for the population. The short warning time would make evacuation of major population centres a dubious proposition. The cost of an adequate blast shelter programme is so high as to be unjustified. The Committee concurs that the resources that would be required for blast protection of the population are better employed in military defence where they can contribute to the deterrent to war.

It is possible that an effective and economic Anti-ICBM system might be developed. This would require a re-appraisal of the decision not to provide civilian blast protection. It is considered unlikely, however, that the economics either of the Anti-Missile system or of a blast shelter programme will make such programmes possible in the near future.

35. Nuclear fallout could be a major hazard to undamaged parts of the country after a nuclear attack. Provision is being made to detect, and to forecast, such fallout. Reasonable warning time would generally be available in the event of fallout.

Programmes involving mortgage loans, bank loans, and information, have been provided to induce home owners to provide their own fallout protection. These have been failures. Much of the publicity falls on deaf ears. Most of the pamphlets wind up in the waste basket. The public is generally disinterested in times of relative peace. These facts must be recognized.

36. A survey of public buildings is being carried out in Alberta to determine their suitability as fallout shelters. This is being conducted as a pilot study. No facts are available as to the cost of such a survey nor as to the cost of modify-

ing existing buildings to meet shelter requirements. It is possible that the Alberta study will show that fallout protection can be provided at reasonable cost in existing public buildings.

37. The Federal Government has spent an average of 26.7 million dollars per annum on Civil Emergency Planning over the last six years. This has grown from a low of 4.1 million dollars in 1957-58 to a peak of nearly 70 million dollars in 1961-62. For the current fiscal year our expenditure is 19 million dollars. The United Kingdom will spend less per capita at 38.5 million dollars. The United States will spend more per capita at 358 million dollars.

Expenditures on the basic elements of a communication system, a warning system, a central planning function, field co-ordinating agencies, and limited fallout shelter research, would be relatively modest and are necessary to provide a basic security and survival capability. Vast additional expenditures could be made for blast and fallout shelters, massive public education programmes, and other useful activities. The Committee feels that in the scale of priorities, expenditures on Civil Emergency Planning should be limited to those funds required for the basic elements enumerated above.

38. There was a recent accidental triggering of the siren alarm system in Ottawa, Ontario. This false alarm brought out several weaknesses in EMO procedures and administration that must be rectified. A major weakness was that large numbers of people did not know that they should have turned on their radios for further information.

39. Your Committee therefore recommends:

(*a*) that a federal-provincial meeting on Emergency Planning be held before the year end. Future meetings should be held at least annually in order to ensure continuing liaison between the two levels of government. Joint planning must be developed, that recognizes clearly the responsibilities of the various governmental levels;

(*b*) that EMO national exercises be resumed and conducted on a regular basis;

(*c*) that expenditures of funds for the current home shelter programme be discontinued;

(*d*) that research be carried forward so that techniques of providing home protection quickly, with materials at hand, may be developed;

(*e*) that the study of public fallout shelters in Alberta be completed. An analysis should then be done, based on the data it reveals, as to the cost of providing public fallout shelters across the country and the percentage of population that may be so protected;

(*f*) that a decision be made concerning fallout protection. The public will not build shelters. It is financially impossible for the Federal Government to provide fallout shelters for the entire population. Therefore the government must decide, based on the costs revealed by the Alberta survey, whether or not it will provide protection for a portion of the population;

(*g*) that public information programmes be instituted to provide basic information. They should be on a periodic basis on television, radio and in the press; and

(*h*) that consideration be given to the regular testing of the alarm system in all communities across the country.

CHAPTER IV—REGULAR OFFICER TRAINING PLAN

40. The Services will require approximately 1,500 new officers per year. Evidence given indicates that, in order to maintain a reasonable ratio of university graduate officers, about 450 officers are required each year at this educational level. These figures are being reviewed, but until the study is complete they represent current requirements.

41. The Services must compete with industry and other career options for university graduates. Incentive educational programmes are the only way to meet this competition. The Committee agrees that there is a need for the Regular Officer Training Plan (ROTP) type programme. Evidence indicates that other methods of attracting university graduates into permanent commissions have not been successful.

42. The Department of National Defence has supplied two useful tables which show the attrition rate caused by academic failures at the Canadian Service Colleges (CANSERVCOLS) and the Universities. They also show the attrition rate after graduation, tabulated by Service College, by the University Section, by Academic Discipline, and by Services.

ROTP AND OFFICER PRODUCTION STATISTICS

(Based on Intake and Wastage During Past Five Years)

TABLE 1
11 Aug 64

(a) Category		(b) Prep Yr. Jr. Matric Entrants	(c) 1st Yr. Sr. Matric Entrants	(d) 2nd Yr.	(e) 3rd Yr.	(f) 4th Yr.	(g) Graduates	(h) Year in Service 1st	(h) Year in Service 2nd	(h) Year in Service 3rd	(j) Do not Opt Out after 3 yrs. (4th year of Service)
CMR	Repeaters	1	2	2	4	1					
	New entry	175	125	92	71	59					
	Total entry	176	127	94	75	60					
	Drop-outs	51	35	23	16	2					
	Passes	125	92	71	59	58	58	58	58	57	29
RMC	Repeaters	—	4	5	1	1					
	New entry	—	63	53	46	44					
	Total entry	—	67	58	47	45					
	Drop-outs	—	14	12	3	1					
	Passes	—	53	46	44	44	44	44	44	43	37
RR	Repeaters	—	1	—	6	1					
	New entry	—	129	88	82	72					
	Total entry	—	130	88	88	73					
	Drop-outs	—	42	6	16	3					
	Passes	—	88	82	72	70	70	70	70	69	51
TOTAL CANSERVCOLS	Repeaters	1	7	7	11	3					
	New entry	175	317	233	199	175					
	Total entry	176	324	240	210	178					
	Drop-outs	51	91	41	35	6					
	Passes	125	233	199	175	172	172	172	172	169	117
UNIVERSITY SECTION ROTP—AVERAGE STRENGTH		71	228	199	182	151	151	149	147	145	78

NOTE 1—The figures noted in this section represent the average annual strength of the university section by academic year. The university section is administered by the individual Services. Much of the recruiting is done on the campus during the academic year and every effort is made to enroll students who have successfully completed one or more academic years. The Services endeavour to maintain their university quotas at full strength. Since students are enrolled in their 2nd, 3rd, 4th or 5th years, it is not practical to provide a chart showing failures and drop-outs, similar to that for the Canservcols.

TOTAL ROTP STRENGTH	247	552	439	392	329	323	321	319	314	195
COMMISSIONED FROM RANKS— (a) Without Degrees	—	—	—	—	—	—	197	196	196	195

NOTE 2—An officer promoted from the ranks (without a degree) is usually well qualified in one particular area. Subsequent employment in commissioned rank is normally restricted to his particular corps or specialty. Such officers do NOT have the right to "opt" out; hence the figures shown in the last column (j) reflect only normal wastage.

(b) With Degrees	1	22	19	20	17	17	17	17	17	17

NOTE 3—The Services' efforts to select men from the ranks for university training and commissioning have been severely restricted by the very small number of men who have the required academic background and/or scholastic potential to gain admission to university.

TABLE 2

Numbers Exercising Release Option up to 31 Aug./63

Comparison by Academic Discipline and Aircrew vs Non-Flying List

Academic Discipline	Category	Eligible				Exercised Option				Percentage			
		Navy	Army	Air Force	Total	Navy	Army	Air Force	Total	Navy	Army	Air Force	Total
										%	%	%	%
ENGINEERING	Canservcol Aircrew	—	—	83	—	—	—	23	—	—	—	28	
	Non-Flying	—	—	59	—	—	—	18	—	—	—	31	
	Total	55	122	142	319	24	21	41	86	44	17	29	27
	University Aircrew	—	—	69	—	—	—	27	—	—	—	39	
	Non-Flying	—	—	177	—	—	—	94	—	—	—	53	
	Total	24	77	246	347	18	42	121	181	75	55	49	52
	Total, ROTP	79	199	388	666	42	63	162	267	53	32	42	40
ARTS, SCIENCE AND OTHERS	Canservcol Aircrew	—	—	69	—	—	—	11	—	—	—	16	—
	Non-Flying	—	—	25	—	—	—	6	—	—	—	24	
	Total	27	140	94	261	12	40	17	69	44	29	18	26
	University Aircrew	—	—	37	—	—	—	7	—	—	—	19	
	Non-Flying	—	—	48	—	—	—	18	—	—	—	38	—
	Total	21	217	85	323	7	96	25	128	33	44	29	40
	Total, ROTP	48	357	179	584	19	136	42	197	40	38	24	34
TOTAL	Canservcol Aircrew	—	—	152	—	—	—	34	—	—	—	22	
	Non-Flying	—	—	84	—	—	—	24	—	—	—	29	
	Total	82	262	236	580	36	61	58	155	44	23	25	27
	University Aircrew	—	—	106	—	—	—	34	—	—	—	32	
	Non-Flying	—	—	225	—	—	—	112	—	—	—	50	
	Total	45	294	331	670	25	138	146	309	56	47	44	46
	Total, ROTP	127	556	567	1,250	61	199	204	464	48	36	36	37

43. Your Committee feels that the results achieved at Royal Military College have been very good, being equal to or better than those of comparable institutions in the United States and Britain and compare most favourably with the results achieved in civilian Canadian universities. However, it notes a high rate of drop-out at both Collège Militaire Royal, and at Royal Roads, for which there are various reasons. At C.M.R., initial entry is at junior matriculation level, from all parts of Canada. At this level the drop-out rate is high everywhere. The bilingual nature of studies at C.M.R. also contributes to this higher rate of drop-out, but is only a reflection of the special requirements for bilingualism.

44. Your Committee examined selection procedures in detail, and while generally satisfied with the methods used, it urges more intensive selection of entrants in order to diminish, at both C.M.R. and Royal Roads, the initial rate of drop-out for reasons of academic failure or inability to accept military discipline.

Moreover, there has been insufficient experience with the 'complete degree plan' at R.M.C. since its inception in 1956 to properly evaluate the military career production potential of this plan. Several more years of experience will be necessary.

45. It is recognized that civilian universities have higher service attrition rates. It is considered normal that cadets who attend civilian universities are more likely to leave the service after their mandatory service period. The Committee is concerned about the lower retention rates of Naval Officers, particularly engineering graduates, who have studied at civilian universities.

46. Various cost data respecting the ROTP programme, were presented by witnesses. It is clear that an exact comparison of the costs of CANSERVCOLS and civilian universities was not possible. It is a matter of opinion as to whether CANSERVCOLS are cheaper than civilian universities, for the production of officers, but from the evidence adduced the Committee feels that the difference in cost either way is not significant. The intangible advantage of the CANSERVCOLS then become relatively more important.

47. Your Committee cannot agree with the Glassco Commission view that the academic staff at the CANSERVCOLS should be reduced as to their qualifications and their number. In fact your Committee urges the maintenance of the highest possible standards of this academic staff.

Your Committee noted, with concern, many of the antiquated facilities in use at R.M.C., and cannot agree that the best results are obtainable from laboratories and lecture rooms installed in converted boiler rooms, stables, haylofts, etc. This Committee also feels that the equipment scale is not adequate. While the Committee is pleased to note the recent announcement, concerning the new dormitory at R.M.C., it urges that the remaining deficiencies be remedied.

48. The Committee was generally impressed with the high academic standards, and the high standards of discipline and physical fitness that prevail at the CANSERVCOLS. There is little doubt in the Committee's mind that these educational institutions produce well trained, well motivated, young men as junior officers for our Services.

49. The Committee agrees with the decision to extend mandatory service to four years. Some concern is expressed about the effects of the Student Loan Programme on ROTP enrolment. It is agreed that while both the above factors may make recruiting more difficult, those cadets who are recruited will be more likely to remain in the Service.

50. The Committee also notes that while ROTP graduates who retire after their mandatory service period are a loss to the Service, they, as private citizens, are undoubtedly an asset to the country as a whole.

51. The Committee commends the introduction of the compulsory study and use of French in "non-language subjects" in the curriculum at R.M.C., with a view to developing general bilingualism to working levels in the armed services.

The Committee examined the question of raising C.M.R. to the status of a degree granting institution. It has concluded that, in order to do so, a much greater number of graduates from CANSERVCOLS, would have to be accepted.

RECOMMENDATIONS

52. The Committee therefore recommends:

(*a*) that the survey referred to in the evidence be completed so that accurate forecasts can be made of the number of officers who will be required with university degrees;

(*b*) that an early determination be made of the long-run proportion of ROTP cadets that are to be trained in CANSERVCOLS, as opposed to Civilian Universities. The Committee feels that the highest proportion possible should be trained in CANSERVCOLS;

(*c*) an immediate replacement of antiquated buildings at R.M.C., and that equipment requirements be met;

(*d*) a survey be made of the facilities of C.M.R., and Royal Roads to determine any deficiencies with a view to taking remedial action; and

(*e*) a more intensive selection of entrants in order to diminish, at both C.M.R. and Royal Roads, the initial rate of drop-out.

CHAPTER V—RESERVE FORCES

53. Prior to the rise of the threat of nuclear warfare in the 1950's, the basis of Canada's peacetime military strength lay in its reserve forces and small regular forces. The chief function of the latter was to supply a training cadre and framework for the reserves.

The threat of nuclear war eliminated the time for mobilization and the necessity arose for large "forces-in-being". Canada established regular forces of 120,000, and to these the reserves become secondary to the point where grave doubts existed as to any valid role for them. In the army, corps training was reduced and survival training, in case of a nuclear attack, was emphasized.

Nuclear warfare is deemed to be less likely because of the nuclear stalemate, and conversely the risk of conventional "brush-fire" war is relatively higher. The regular forces which form Canada's "forces-in-being" will continue but require the manpower support of our reserves. The essential role of the reserves will be to supply that support.

54. In time of crises our expanded forces would require more weapons, materiel and men. The men could be trained during the period of supply of weapons and materiel. To train them would be one of the principal tasks of the experienced officers and other qualified personnel of the reserves.

55. Considerable numbers of additional experienced, well trained personnel are available, from the "out-flow" of permanent force personnel, who are returning to civilian life. Such a pool of experienced military personnel, here-

tofore, has not existed. Unfortunately the potential of this group is greatly diminished because no regular record of their whereabouts, is kept. A form of supplementary reserve list must be kept as it would materially affect the reserve requirements.

56. Emergency Measures Organization plans are based on the use of reserve and regular forces. The survival role is easily learned and is not of itself sufficiently complex to preclude its being taught to all reserve troops in addition to other training. It would be a very costly proposition to provide Reserve Forces solely for survival. The Committee therefore agrees that Reserve Forces should not be maintained solely for survival, but that survival operations should be taught to all troops so that they can, if required, work in that role.

57. The cost of maintaining reserves prior to any reorganization was nearly 55 million dollars per year. Taking into account the low percentage of the defence budget available for equipment for the regular forces, and taking into account the diminished importance of reserve forces while relatively large regular forces are maintained, the Committee feels that every effort should be made to maintain efficient reserve units consistent with budgetary allocations but recognizing that moneys saved by the reduction of personnel and by unit consolidation may be wisely spent for better training and equipment. Cuts totalling 5¼ million dollars have been made in the R.C.N.R. and R.C.A.F. Auxiliary budgets. There is no indication of the total savings that may be possible in the militia budget.

58. The role of the Reserves is to provide trained personnel in an emergency. Evidence given by representatives of the three services indicated that many reservists, because of family, business, age, or physical fitness, would not be able to go on Active Service. This negates the main purpose of the Reserves. Consideration must be given to amending the Defence Act so that reservists are committed to limited call-outs. Standards of age and fitness must be such that most reservists are fit for active service. The suggestion was raised that compulsory call-out might affect enlistment in the Reserves, but there seems to be little use in maintaining large forces that are not available for service when needed.

59. The R.C.N.R. and militia obtain their officers largely from the University Naval Training Division (U.N.T.D.) and Canadian Officer Training Corps (C.O.T.C.) programmes. There is evidence that for a variety of reasons many U.N.T.D. and C.O.T.C. graduates fail to join active Reserve units on graduation. This is a wasteful situation and the Committee welcomes the steps that have been taken to provide this training only in those universities that are so located as to make enlistment after graduation likely. Care must be taken in the future to re-assess the location of U.N.T.D. and C.O.T.C. units so that, as reserve units change, they can be assured of an adequate supply of university trained officers.

There should be some obligation on the part of the U.N.T.D. and C.O.T.C. graduates to serve in the Reserves for a stipulated period of time.

60. The Suttie Commission and the Draper Committee presented arguments in favour of an officer at National Defence Headquarters to oversee the operation of their respective branches of the Reserve. The Hendy Committee indicated that the structure of the Commanding Officers' Naval Division (C.O.N.D.) is both unnecessarily costly and organizationally not desirable. There is obviously a need for proper supervision of reserve activities. Your Committee

believes that one senior officer should be appointed at Defence Headquarters, with the sole task of supervising all aspects of the operation of our reserve forces.

61. No steps should be taken to integrate the Reserves prior to Active Force integration. On the other hand, every effort must be made to locate units in common facilities, in order to produce the lowest possible costs of operation. Consideration should be given to savings that might be realized by placing some Active Force recruiting offices in the same quarters as Reserve units.

62. There is ample evidence that administrative procedures for the Reserves are antiquated, cumbersome, restrictive, petty and generally hamper efficient operation. Recommendations in the Hendy and Suttie Reports dealing with such procedures including attestation, pay, stores, accounting, use of military buildings by civilians, and other matters, must be given serious study and the conditions underlying these recommendations must be corrected.

63. There is a common complaint in all three branches of the Reserves about the quality of regular force personnel assigned to Reserve units. While undoubtedly some excellent regular force people are so assigned, the standard must be universally high.

R.C.N.R.

64. There are four major tasks assigned to the R.C.N.R. These consist of provision of personnel for specified functions in time of emergency, the provision of a mobilization base, survival operations, and maintenance of a naval presence in peace time. The Hendy Committee accepted these roles, and this Committee concurs in their validity.

65. The Hendy Committee was concerned about the strength of the R.C.N.R. They reported that while the proposed cut from 4,000 to 2,400 all ranks would meet mobilization plans, these plans did not take into account manning government ships of the Department of Transport and R.C.M.P., nor did they take into account the Reserve fleet. The Hendy Committee, however, did not consider the possible pool of former regular navy personnel who might be available for these purposes. Considering the budgetary limitations that are necessary, this Committee accepts the reduced strength.

It was suggested by the Hendy Committee that savings proposed by them could result in an increased strength of the R.C.N.R. within the budgetary limitations. The Committee concurs that this is desirable if the cost savings are attainable.

66. Evidence indicates an average annual turnover in the R.C.N.R. of 30 percent. In addition it was brought out that a large percentage of R.C.N.R. personnel are under age for Active Service. Your Committee agrees with the Hendy recommendation calling for an increase in the minimum age of the R.C.N.R. There is also agreement that training must be improved to reduce the turnover.

67. The Hendy Report made a number of valid recommendations for the improvement of the administrative efficiency of the R.C.N.R. These should be implemented.

68. The evidence indicates that cost limitations forced the closing down of the R.C.N.R. Air Divisions. The Committee agrees that the cost of providing operational aircraft for the R.C.N.R. is not warranted. It therefore agrees that

the R.C.N.R. Air Divisions should not be reactivated. However, the Committee suggests that arrangements might be made to enable R.C.N.R. personnel to maintain their capability by flying with the existing R.C.N. shore based squadrons.

MILITIA

69. The Government has assigned five main tasks to the militia. These include providing reinforcement of field forces, the formation of logistic and special units that are not provided in peace time, the provision of a training force to support the field force, the manning of certain security guard stations in an emergency, and the survival role. The Committee is of the opinion that the foregoing are the major valid roles for a militia establishment.

70. There was considerable discussion in the Committee concerning the numbers required to fulfill these roles. The Government has indicated a requirement of 30,000 effective militiamen as follows:

(*a*) Reinforcement of Field Forces	7,000-8,000	—officers and men
Special Units for NATO commitments	1,000	—officers and men
(*b*) Training Force to support the Field Force	18,000	—officers and men
(*c*) Internal Security	2,500	—officers and men
(*d*) National Survival Installations	1,500	—officers and men
	(approximately) 30,000	—officers and men

Your Committee cannot confirm or refute this estimate except to note that the potential requirement for internal security appears to be seriously underestimated. Your Committee also recognizes the fact that those requirements will change in the future, and that regular periodic reviews should be made.

71. Evidence given on the current status of the militia indicated an unsatisfactory situation which demands early corrective action. The average annual turnover is over fifty percent. There are indications that because of age, physical fitness, and minimum of attendance at parades, the average efficiency of the militia is fifty percent. The average ratio of other ranks to officers is only six to one. These are average figures, and include headquarters. While there are some excellent units in the militia, whose record is much better than this average, there are others which are correspondingly much worse.

The Committee recognizes that sentiment and tradition are involved in the maintenance of the militia, but because of the importance of the militia, and an expenditure of about 38 million dollars per year, a low level of efficiency cannot be tolerated.

72. The Government has announced that the present strength of the militia is to be cut, for budgetary reasons, from approximately 45,000 all ranks to approximately 30,000. To achieve the requirement of 30,000 referred to in paragraph 70, this would mean an approximately one hundred percent efficiency rate. Your Committee considers this to be unrealistic and would agree with the contention of the Conference of Defence Associations, that in order to achieve the 30,000 effectives, the militia enrolment, even taking into account an increased efficiency, would have to be considerably higher. It must therefore be recognized that, after the militia is cut to 30,000 all ranks, it will be unable to fulfill its proposed roles.

73. It is evident that there will have to be a reduction in the number of militia units. This reduction should be governed principally by unit efficiency performance, geographical distribution, relationship to existing regular forces, and degree of competition for potential militia personnel.

74. The Suttie Commission produced a number of recommendations. Those dealing with administration, provision of adequate equipment, training, age, fitness requirements, and public relations, are of prime importance. Implementation of these could do a great deal to reduce turnover and bring the militia to the required level of efficiency.

75. Cost savings should result from the reduction in strength and improvements in efficiency of the militia. The Suttie Commission indicated that in order to make the militia effective, some of these savings must be spent on equipment and training. The Committee agrees that this must be done. Little will be gained by cutting costs if the resulting militia is not more effective than at present.

76. Your Committee recognizes that the Department of National Defence has the sole responsibility for effecting changes in the reserve forces. Your Committee further suggests that the Conference of Defence Associations be encouraged to continue in an active advisory capacity to the Minister of National Defence.

R.C.A.F. AUXILIARY

77. The Draper Committee has recommended army air support as a specific role for the Air Force Auxiliary. The aircraft available to the Auxiliary have only a limited capability for an army air support role. The Auxiliary is therefore not able to provide full support for the army over a variety of tasks.

78. The cost of equipping the Auxiliary with up-to-date service aircraft, either for airlift or for tactical support, would be very high. The Committee believes that the priority for this type of equipment must rest with the regular force.

79. The major task therefore of the Auxiliary should be to maintain the flying skills, attained at great cost, of regular force aircrew who have retired from service, but whose age and physical fitness would still qualify them for service. This will ensure the availability of these skills in time of emergency.

80. Secondary tasks for the Auxiliary are its survival role for EMO, its search and rescue operations and its participation, with the army, in training exercises.

81. The Draper Committee suggested that economies of operation could allow more units to fly within the budgetary limitations. No concrete cost figures were given to support this contention. If this suggestion is valid, it would be logical to implement it. Further, consideration might be given to maintaining flying skills by allowing reservists to train with existing R.C.A.F. units, where suitable facilities and equipment exist.

RECOMMENDATIONS

82. Your Committee therefore recommends:

(*a*) that a supplementary reserve list be established for Regular and Reserve Force Officers and senior non-commissioned personnel who leave the forces while still young enough to be of service in an emergency. It is suggested that personnel be retained on such a list for a maximum period of ten years;

(*b*) that the National Defence Act be amended to provide for the call-out of reserves with provision for protection of employment;

(*c*) that fitness standards and age limits for Reserve personnel be prescribed so as to be more closely related to Regular Service requirements;

(*d*) that C.O.T.C. and U.N.T.D. programmes carry with them an obligation, on entry, that graduates actively serve in a Reserve unit for three years after graduation, where this is possible.

(*e*) that a senior officer be appointed at National Defence Headquarters, whose sole function will be the supervision of the operations of the Reserve Forces;

(*f*) that the administrative procedures of the Reserve be reviewed and simplified;

(*g*) that only personnel of high calibre be assigned, from the regular forces, to Reserve units;

(*h*) that the recommendations of the Hendy Committee dealing with training, administration, and age limits, be implemented;

(*i*) that the cost savings indicated by the Hendy Committee be checked. If these savings can be achieved, the strength of the R.C.N.R. be increased;

(*j*) that the Naval Reserve Air Squadrons not be put back into operation, but that the Department of National Defence investigate the feasibility of permitting Naval Reserve Air personnel, in Halifax and Esquimalt, to train with the Regular Force Naval Air Squadrons;

(*k*) that the number of units in the militia be established in accordance with factors outlined in Paragraph 73 in order to provide a more realistic organization;

(*l*) that those recommendations of the Suttie Commission, referred to in Paragraph 74, be implemented as quickly as possible;

(*m*) that sufficient funds be provided to equip and train the militia properly; and

(*n*) that a detailed cost study be conducted to ascertain the number of R.C.A.F. Auxiliary flying wings that can be provided within the budget available. The maximum number possible should be kept in operation.

83. In order to follow up the fifth chapter, further time is required to study the function and cost of the cadet programmes.

CHAPTER VI—GENERAL

84. A number of topics for further consideration were referred to in the Interim Report of the Special Committee on Defence at the end of the 1963 session. As some of these still remain to be considered, your Committee intends to study them at future meetings.

A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 1 to 17*), is appended.

Respectfully submitted,

DAVID G. HAHN,
Chairman.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 18

TUESDAY, NOVEMBER 3, 1964

RESERVE FORCES

WITNESSES:

Honourable Paul T. Hellyer, Minister of National Defence; and Colonel C. P. McPherson, Director of Militia and Cadets.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21314—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),	Langlois,	Martineau,
Béchard,	Laniel,	Matheson,
Brewin,	Lessard (*Lac-Saint-Jean*),	McMillan,
Deachman,	Lloyd,	McNulty,
Fane,	MacInnis,	Pilon,
Groos,	MacLean,	Smith,
Harkness,	MacRae,	Temple,
		Winch—(24).

(Quorum 13)

E. W. Innes,

Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, November 3, 1964.
(32)

The Special Committee on Defence met at 11:35 a.m. this day. The Vice Chairman, Honourable Marcel Lambert, presided.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Brewin, Deachman, Fane, Groos, Harkness, Lambert, Laniel, Lloyd, MacLean, MacRae, Martineau, Matheson, McMillan, McNulty Pilon, Smith, Temple and Winch—(20).

In attendance: Honourable Paul T. Hellyer, Minister of National Defence; Honourable Lucien Cardin, Associate Minister of National Defence; and Colonel C. P. McPherson, Director of Militia and Cadets.

The Vice Chairman, Mr. Lambert, tabled an informative paper prepared by the Department of National Defence for the information of the Committee. That paper, entitled *A Comparison of Defence Expenditures in Canada and Certain Other Countries,* was identified as *Exhibit No. 10.*

The Minister of National Defence, Mr. Hellyer, presented a statement respecting the *Reserve Forces.*

Mr. Hellyer tabled the following documents:

(*a*) Part II of the Report of the Commission on the Reorganization of the Canadian Army (Militia);

(*b*) Department of National Defence Position on the Recommendations of the Commission on the Reorganization of the Canadian Army (Militia);

(*c*) Reorganization of the Canadian Army (Militia).

On motion of Mr. Groos seconded by Mr. Temple.

Ordered,—That the abovementioned documents be printed as *Appendices A, B* and *C,* respectively, to this day's Proceedings.

The witness, assisted by Colonel McPherson, answered questions respecting his statement and related matters.

At 12:35 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

21314—1½

EVIDENCE

TUESDAY, November 3, 1964.

The VICE-CHAIRMAN: The meeting will come to order please. There is now a quorum. Will all the Committee members please sit at the table. I must apologize for the rather sudden notice which you received for attendance at this meeting, and also tender you the apologies of the Chairman who is unavoidably absent today.

Since our last meeting, another of the series of papers which were prepared for this committee has been received and distributed to you. At this time I would like to identify as Exhibit No. 10 the paper entitled "A Comparison of Defence Expenditures in Canada with Certain Other Countries." This was prepared by the Department of National Defence. It has already been distributed and will ultimately appear in booklet form, as the Clerk informs me. Is it agreed that it be identified as Exhibit No. 10?

Mr. LLOYD: I so move.

Mr. SMITH: I second the motion.

Motion agreed to.

The VICE-CHAIRMAN: The Minister of National Defence, Mr. Paul Hellyer, is present with us this morning. Gentlemen, you have had distributed to you Part II of the report of the Commission on the Reorganization of the Militia as well as the accompanying documents which have reference to the militia, and which indicates, if I have the proper conclusion, the decision of the Department of National Defence in regard to the commission's report. The Minister is now seated, and I call upon him to give you his statement.

Hon. PAUL. HELLYER (*Minister of National Defence*): Thank you very much.

The VICE-CHAIRMAN: Before the Minister begins perhaps I should say we have copies of the Minister's statement which are being distributed to the members of the committee. These will go to all committee members whether or not they are present today, and will also be available through the Distribution Office, to the members of the house.

Mr. HELLYER: Thank you very much, Mr. Chairman, and gentlemen, I would like to make the following statement on behalf of the Associate Minister and myself.

In presenting the estimates of the Department of National Defence on December 5th last, I stated that each element of the defence programme would be carefully studied with the object of establishing a more satisfactory ratio between maintenance and capital costs. This ratio has long been a matter of concern and has been the object of intensive study with the Department of National Defence during the past year. Our aim has been to discover ways and means of reducing overhead in order to redirect the money thus saved into more productive channels. During the course of our investigations in this area, the structure of the reserve forces came under close examination and it was apparent almost at once that the reserves could be reduced from the present levels. It was also apparent that a redefinition of the militia's role was needed in order to make it compatible with the forces-in-being defence concept, and this change would in turn require major organizational changes in the militia.

To this end a commission on the reorganization of the Canadian army militia was established under the chairmanship of Brigadier E. R. Suttie and

given the task of recommending the best means of fulfilling the militia requirements of Canadian defence policy and the changes which should be made in organization to permit the militia to carry out its revised roles more efficiently and realistically.

The commission was given the following terms of reference for guidance:

"In its primary role, there is a military requirement for the militia in support of the regular army. The emergency defence plan calls for the withdrawal of regular army personnel from the defence of Canada force and static installations to bring the field force up to war establishment. The militia will be required to form the framework for logistic and special units which are not provided in peace time. It is foreseen that approximately 9,000 militiamen would be needed for these two tasks within this role.

The second role for the militia is to provide a training force which will be required in time of emergency to support the field force. In this role, the militia must provide for the immediate and effective mobilization of three training brigade groups to replace the regular brigade groups despatched overseas and to provide the source of trained reinforcements for these forces overseas. In the initial stages this training force will be organized along lines similar to the field force but with only training scales of equipment. It will be built up in stages in accordance with the situation existing at the time and it must also be available for the defence of Canada and other tasks. Preliminary investigation reflects a requirement of approximately 18,000 officers and men.

The opportunity of training, equipping and committing militia units overseas is unlikely in the early stages of a future conflict except for special units.

In its third role, internal security, the militia will be required to provide trained officers and men for the guarding of key points, internment camps and like duties. It is estimated that there could be a requirement for at least 2,500 militiamen to be immediately available for these tasks in time of emergency.

Its fourth role will be to assist in fulfilling the army's national survival responsibilities. There is a need for special militia units to be available and trained to augment the regular army staff, on a 24-hour basis, at various national survival installations. For this requirement it is estimated that a total of 1,500 officers, men and women of the militia will be needed.

Notwithstanding, it must be recognized that in the event of an all-out nuclear war all military forces would be employed on survival operations. Therefore, the militia with all available regulars would be required to provide a framework for the conduct of survival operations using large numbers of civilians.

Based on studies of the continued requirement for the militia, it is concluded that a strength in the order of 30,000 officers and men is required to fulfill the above roles."

The commission first met early in February, and concluded its work in June. During the course of its deliberations it visited all commands and areas and had discussions with individual members of the army council, general officers commanding commands, area commanders, militia group commanders, and some militia commanding officers. In addition it invited and received correspondence from commanding officers unable to appear before the commission in person, and examined numerous briefs, papers and letters from interested members of the public at large. The result has been a thorough examination of all aspects of the organization, administration and operation of the militia in Canada and has resulted in recommendations covering the entire range of the subjects examined. Many of these are of fundamental significance and will, when implemented, alter the basic structure of the Militia organization.

The report has been carefully studied at defence headquarters and work has already begun on implementation of those recommendations considered to be of immediate importance.

Prior to describing generally the changes it is proposed to introduce, I should like to publicly thank Brigadier Suttie, the gentlemen of his commission, and the many others who helped the commission in the course of its study. They have made a significant and valuable contribution to the new defence concept and are worthy of high praise for their efforts.

Organization

As a direct result of recommendations contained in the report, several major changes in organization are contemplated. Some of these will be effected in the immediate future and should result in a smaller more efficient, fit militia.

The eventual result will be a militia having a numerical strength of the order of 30,000 all ranks based on an establishment of 41,748. It will consist of units located and organized to be available and capable of performing assigned missions within the concept of Canada's emergency defence plan. In some instances this will mean amalgamation and in almost all cases it will mean unit reorganization.

While some units must, of necessity, be placed on the inactive list, it is considered desirable to preserve their names in view of the contribution they have made in the past and against the possibility that changed circumstances might require reactivation. To facilitate this a supplementary order of battle will be created. All units not assigned a specific defence mission will be placed in the supplementary order of battle. These famous units names will not disappear.

Of the remaining units, those most affected will be what might be termed major units, that is to say units of the fighting arms normally commanded by a lieutenant colonel. In the past these have been organized on the basis of a war establishment approximating that of their regular force counterparts. In practice it was found that units were seldom able to obtain much more than one third of the personnel needed to fill the establishment with consequent ill-effects on all aspects of operational preparedness and unit efficiency. Under the present plan these will be reorganized on the basis of an establishment of 300 all ranks. Experience has shown that this figure is well within the reach of most major units.

Logistics and service units will also feel the effects of streamlining. In certain cities all units whose primary role is the provision of logistic support and services for the fighting arms, will be grouped together under a single headquarters to form a service battalion. This will bring the militia into line with the current regular force concept and will better fit it for its role.

It is envisaged that there will be a direct channel of communication between militia units and the area headquarters under whose command these are placed. As a result and in order to provide advice on militia matters each general officer commanding and area commander will appoint senior militia officers within his command or area whose primary purpose it will be to advise on all except medical and dental matters—the latter being referred to regular force officers. This will mean that militia group headquarters and medical and dental advisory staffs will no longer be needed.

There will no longer be a need for manning depots, and personnel selection units. These were originally created in order to effect a rapid build-up in the event of general mobilization. Under the new "forces-in-being" concept they will no longer have a part to play. Regular Force units will provide the essential services required in an emergency.

One recommendation of the commission might, at some time in the future, result in the creation of a new type unit. It has been recommended that consideration be given to the creation of special force units. The suggestion is an

interesting and topical one and will be examined when the basic reorganization phase has been completed, and the militia has embarked on its new training programme.

Equipment

Reorganization of the militia should result in a more favourable unit/equipment ratio than exists at present. In the past it has been difficult to maintain a high level of interest and enthusiasm in those units not having access to equipment on which to train.

It is hoped to improve the equipment situation but the process must, of necessity, be a gradual one.

There will be some alleviation of the situation when organizational adjustments have been completed in the regular force, but it is still too early to say what equipment resources will become available. It should be possible to provide standard military pattern vehicles as the regular army vehicle fleet is gradually replaced with new vehicles.

Radio equipment has been in chronically short supply and will continue to be so for a year or two, however, by 1968 the militia should be adequately provided with standard military pattern radio equipment.

A recommendation has been made that commercial pattern equipment be purchased for interim use by the militia. The suggestion is an interesting one and has been carefully examined to see whether the acquisition of commercial pattern vehicles and equipment would, on balance, be in the public interest.

In this regard the training advantages to be realized have been considered in the light of other factors such as non-recoverable capital expenditure, maintenance of non-standard items, and all that this implies, cost-effectiveness of commercial as opposed to military equipment, and the additional load such an expedient would place on regular army stores and repair facilities. On balance it has been decided that the advantages to be realized are of short term value and are more than outweighed by long term disadvantages.

Personnel

As a result of reorganization the militia's strength, now approximately 45,000, will be reduced. Where possible, physically fit, effective militiamen and women of units reduced in strength, deactivated or amalgamated with other units, will be absorbed with the establishments of reorganized units in their area. Where this is not possible, provision will be made for those possessing special qualifications, experience or skill, to be placed on a special list so as to be immediately available for recall to service when vacancies occur or a need arises. This will ensure that the reservoir of special skills and abilities now found in the militia group headquarters, manning depots and other units to be deactivated, will not be lost to the Canadian forces.

While dental units and personnel selection units as such are to be deactivated, dental officers and personnel officers will continue to serve in the militia. In addition to its medical officer, each major unit will have its own dental officer and his assistant as an integral part of the unit establishment. A personnel officer pool, similar to the pool of chaplains, will be established. In all, fifty personnel officers will be located at various centres across the country to be conviently available to unit commanding officers.

Another category of persons will be affected by reorganization. These are the call-outs, and permanently employed orderly room and quartermaster stores assistants. Under the present plan greater reliance is to be placed on support and assistance from regular army sources. Accordingly call-outs and permanently employed assistants will be phased out of the militia. The process of adjustment in this area is likely to take several months and every

effort will be made to minimize the disruptive effect on the lives of those involved. In all cases those concerned will be served with at least ninety days notice including one month's terminal leave on full pay and allowances.

Accommodation

Every effort is being made to reduce accommodation costs. Immediate savings will be realized by closing down unneeded armouries and releasing buildings held by lease or rental agreement. Following completion of the current phase of reorganization the whole accommodation situation will be re-examined to see where further savings can be made and where additional facilities are needed.

The commission has recommended that where economies in space so require, units should combine stores, orderly rooms and messes. The recommendation is both timely and appropriate. Recent experience has shown that two or more units occupying the same armouries can successfully operate from common-user facilities.

Administration

The commission was critical of, and closely scrutinized, administrative practices used in the militia. It has reported that many procedures are antiquated, cumbersome and unnecessarily restrictive and in consequence tend to stifle enthusiasm and sap the vitality of the militia. As a result reforms have been recommended in certain fields and these will be implemented to the extent practicable and desirable, in the immediate future. Everything possible will be done to lighten the administrative load. In this regard studies are currently in progress at Canadian forces headquarters aimed at eliminating non-essential paperwork and simplifying administrative procedures.

Similarly, the procedures used in accounting for public stores and equipment were examined. The commission has reported that the present system imposes an almost impossible burden on the personnel of the unit. They further state that in their opinion it is unrealistic to continuously list inventory at full original cost and have recommended that consideration be given to following the normal business practice of listing inventory at depreciated value.

This has been and will continue to be a problem area and is not capable of easy or quick solution. The present system of manual accounting was devised to conform with departmental controls and the Financial Administration Act. The department has long been aware of the problem and some time ago authorized the local introduction on a trial basis of a new system of accounting based on automatic data processing. Under this system stores accounts will no longer be kept at units but will be maintained at a central automatic data processing centre. This new method of accounting, once taken into general use, will relieve the unit of many of the problems now encountered.

Conversion to the new system will take some time, however, and in the meantime, every effort will be made to reduce the accounting load within the limitations imposed by legislation.

Accounting for stores at full original cost is a requirement of the Financial Administration Act. The object is twofold: first, to simplify the process of periodically evaluating items held on inventory and, second, to simplify the problem of determining who is competent to authorize write-off. Authorization to approve write-off varies according to total value calculated on the basis of replacement cost. Introduction of a new system based on depreciated value would create additional work and introduce new accounting complexities, both of which we seek to avoid.

The frequency and burdensome nature of ordnance inspection is another problem commented upon unfavourably by the Commission. At present regulations require that a complete inspection be performed at least once every two years. The object of the inspection is not to catch someone out but rather to ensure that the unit being inspected has an adequate accounting base for the next accounting period, and second, to advise the unit personnel in charge of stores and accounting in the proper care, control preservation and housing of stores. I am sure that you will all agree that to this extent at least, inspections are necessary and in the public interest.

The commission's inquiry also reached into the field of pay and allowances and has resulted in some interesting and useful recommendations. The first two of these refer to the system of pay itself.

It has been recommended that militiamen be paid on the basis of their training effectiveness, rather than on a per diem basis as at present. Under the proposed system a member of the militia would not qualify for pay unless he had attended 75% of the total number of parades comprising each training period. The militia training year would consist of four such periods, three to be carried out locally and one at summer camp. In addition, a member who had qualified for pay during all training periods of the year would be paid a completion bonus.

The proposal has a great deal of merit and will be studied in relation to the whole of the defence reserves. Studies are now being made at Canadian forces headquarters to determine its application on an integrated basis.

The second aspect is of more immediate concern, and relates to the administration of pay at unit level. It has been our practice in the past to vest control of funds made available to cover the cost of local training, at the highest practical level. This practice has resulted in cumbersome administrative procedures and a great deal of paperwork—all having the net effect of somewhat curtailing the militia commanding officer's authority and initiative.

Under the new regulations, soon to be published, the commanding officer will be given greater responsibility for the organization and administration of funds, within a total annual allotment and the administration connected with pay matters will be streamlined.

It was also recommended that the method of determining a unit's entitlement to contingency allowance be changed in order to directly relate the amount payable to the recipient unit's efficiency. The allowance is provided for the purpose of improving unit efficiency and is used to defray the costs of additional clerical assistance and expenses incurred through the upkeep of arms, clothing and equipment. A revised method has been devised and will soon be promulgated.

Transportation

It has been suggested that the provision of public transportation to and from his place-of-parade would help maintain the militiamen's interest and result in better attendance at local training. The commission's recommendation to this effect has been studied and will, in the near future, be embodied in a Canadian army order. The order will provide that where no other reasonable facilities are available, general officers commanding and area commanders may, within their allocation of militia funds, authorize the provision of scheduled transportation by the most economic means available, provided that the provision of such transportation is both necessary and advantageous.

Enrolment and career progression

If the militia is to make an effective contribution to national security under the forces-in-being concept, its personnel must be keen, vigorous and physically

fit. The commission has expressed concern about the operational readiness of the militia and has made several recommendations aimed at correcting what is considered to be an undesirable situation. Two primary recommendations have been made and will be implemented at the earliest possible opportunity.

The first is that all members of the militia must be physically fit to perform their intended operational tasks and the second is that officers and non-commissioned officers must be qualified for, and promoted to, successive ranks at a sufficiently early age to ensure vigorous and productive leadership.

With respect to the latter, it is intended to introduce regulations respecting age limits for promotion within the arms, i.e., armoured corps, artillery and infantry. Under the regulations an age limit would be established for every commissioned and non-commissioned rank, and would be the latest age by which a person could qualify for and be promoted to that rank. The age limit for lieutenant colonels would be 40, for majors 36, for captains 30, and for lieutenants 26. Similarly for warrant officers class one, it would be 40, for warrant officers class two 37, for senior NCO's 32 and for corporals 26. The effect would be to create a dynamic as opposed to a static rank structure such as is found today.

I might say in passing, that immediate application of the policy I have described would have a disruptive effect on the militia and, consequently, we will implement it with care, but nevertheless without undue delay.

The commission has also made recommendations concerning qualification prerequisites for promotion, and these will be incorporated in training instructions soon to be published.

With respect to enrolment procedures; the commission's recommendation that these be simplified and shortened are concurred in and early action will be taken to empower commanding officers to effect enrolments at unit level.

Of necessity, engagements must continue to be for a fixed period of time and it is considered that the present arrangement is satisfactory.

Canadian Officers' Training Corps

The commission has expressed concern over the relatively low percentage of COTC graduates who enrol in the militia following graduation. As a result, changes in policy will soon be promulgated which should have the effect of improving the enrolment of COTC graduates in the militia. The aim will be to establish a rapport between the militia and COTC applicants at the outset and to foster continuing interest through instruction and close association during all theoretical phases of training.

Student militia training

It has also been recommended that student militia training be vigorously pursued in the future, not only because of its obvious value as a prime source of well trained militiamen, but also in view of its great value to those enrolled in the programme.

The program was begun on local initiative in 1956 and has since escalated to national proportions. Its primary purpose is to train male high school students of 16 years of age and over so as to have a ready source of potential non-commissioned officers and officers available to the militia. Training is phased over three years and provides concentrated instruction in basic and selected specialist training subjects as well as leadership techniques.

It is intended to continue this program and, where possible, to relate it more closely to normal Militia training.

Training

No matter how well provided with personnel it may be, the militia cannot be an effective component of the Canadian forces until it is trained in those skills which are necessary for the execution of its assigned role. To this end, training objectives have been changed so as to more effectively utilize the limited training time available. The aim is to have a fully qualified officer and non-commissioned officer corps in being and to accomplish the training of enlisted personnel during the course of a two year training cycle.

Having regard to over-all priorities and fiscal and equipment considerations everything possible will be done to ensure that the militia is given a realistic and interesting training program. To the extent possible, commanding officers are to be given a greater degree of authority in the planning and execution of unit training. This will undoubtedly stimulate interest and vivify what otherwise might be a dull and unimaginative routine. To assist them in achieving realistic training we will endeavour to obtain additional training devices and simulators now used very successfully by individual units. As an example units at Winnipeg obtain realistic fire-correction procedures training by using a scaled landscape model and puffs of smoke to indicate the position of shell bursts. Similarly, at Edmonton, infantry mortarmen are able to train realistically using a pneumatically-propelled sub-calibre mortar bomb.

Greater emphasis is to be placed on physical fitness. All ranks will be expected to attain the appropriate level for their age, on the 5BX or 10BX physical fitness scales. Units have already been instructed to include physical conditioning periods in unit training programs.

Present policies respecting summer camps, attendance on courses conducted at corps schools, and attachment of selected individuals to regular army units, will continue to apply. Applicable regular army training manuals and subsequent amendments will be issued to the militia on a pre-established scale.

Greater use will be made of regular army personnel and training resources. Where militia units are located within reach of regular army units or camps, these will be called upon to lend facilities or provide training assistance to the extent that they are able. In addition a more direct form of support is envisaged. It is intended to support each militia unit with one or two regular army non-commissioned officers for continuous employment, and to create instructional cadres of skilled officers and warrant officer instructors based on regular units, depots and schools whose job it would be to organize training and conduct courses on an area basis.

Further, it is intended to provide Areas with one or two officers skilled in administrative procedures, whose full time job will be to help the militia units in their area. Their job will be to see that units are properly organized at the outset and that they are established on a sound and efficient administrative basis. They will be continuously available to the militia and will actively assist —not in the role of inspectors or advisers—but as helpers.

Authority of commanding officers

As mentioned before, much will be done to ensure that militia commanding officers are given adequate opportunity to exercise the authority implicit in their rank and position. The expenditure of training funds and the organization of training has already been mentioned as being one area in which they will be permitted to exercise greater authority. In addition, the system for controlling the use of armouries and other departmental buildings by non-departmental applicants is currently under review in order to determine to what extent and in what way militia commanding officers should be permitted more latitude. Similarly the regulations respecting powers of write-off are being studied with a view to determining the feasibility and practicability of extending this to commanding officers.

Dress

The commission's recommendations respecting dress and recognition badges have received careful consideration at Canadian forces headquarters. While there is no difference in the style or quality of dress issued to the militia, the provision of funds and relative priorities has resulted and will continue to result, in the militia obtaining new items of clothing later than the regular army. In addition, it is neither practical nor desirable to issue members of the militia with the full scale of items used by the regular army. Current regulations provide that militiamen can be issued with additional items from the regular force scales when their employment so requires.

A recommendation was made to the effect that officers, warrant officers and certain non-commissioned officers who incur expenses because of the requirement to outfit themselves, should be permitted to claim these as income tax deductions. The matter has received careful consideration by the appropriate authorities and it has been decided that a concession of this nature cannot be extended to a special group alone.

Public relations

The commission has recommended that a positive public relations program in support of the militia should be coordinated by the department in order to present to the public the contribution made by the militia to the community and the nation as a whole. The department agrees that a positive public relations program is necessary and that it should be centrally organized and coordinated. However, it does not feel that a national agency is necessary or advisable. The department's director of information services will be charged with the over-all responsibility for developing such a program with the militia itself. As recommended by the commission this program will be coordinated in the field at area level and one regimental officer per unit will be detailed to assist the commanding officer in this function. Area co-ordination will be provided by the appointment within the militia of two public relations advisers per area whose task it will be to advise on and co-ordinate public relations activities.

The conference of defence associations

The commission has made reference to the conference of defence associations and has suggested that the name and character of the association be changed. The suggestion has been considered and the objects of the association examined in view of its probable future contribution to Canadian defence matters. In the light of these considerations the commission's recommendation is being referred to the conference of defence associations for comment.

Financial implications

At the outset I stated that one of the main reasons for reorganizing the reserves was to effect economies and to redirect the money saved into more productive channels. A preliminary estimate of savings to be realized has been made and indications are that it should amount to approximately $8,750,000 annually.

Concluding remarks

I would like to make it clear that the aim of the reorganization is two-fold:

First, to make organizational adjustments consistent with the militia's assigned roles and a realistic appraisal of its capabilities; and

Second, thereby to obtain greater value for each dollar spent.

It is my hope that the basic features of the reorganization will be achieved by March 31, 1965. I am confident that all the conditions necessary for a successful transition are present and that the process, while intricate and difficult, will be an orderly one. I have no doubt that the end result will be a younger, fitter, more eager, vigorously led militia, capable of taking its place beside the regular army with pride, dedication and a real sense of purpose.

I should once again like to thank Brigadier Suttie and the gentlemen of his committee, for their most thorough and helpful study of the militia and for the many constructive recommendations they have made. Theirs has been a difficult task and a notable achievement and we are all most grateful to them.

I also have a statement on the Royal Canadian Naval Reserve and Royal Canadian Air Force Auxiliary.

Statement on the Royal Canadian Naval Reserve and Royal Canadian Air Force Auxiliary

You will recall that in February of this year the ministerial committee on the role and organization of the Royal Canadian naval reserve, chaired by Commodore R. I. Hendy, tabled their report. As a result of recommendations contained in the committee's report an increase in the complement of the R.C.N.R. was authorized, two R.C.N.R. divisions scheduled for closure were retained. The question of the remaining divisions scheduled for closure following the announced reductions in the R.C.N.R. made in December 1963, were to be studied further.

As a result of these studies it has been decided that the R.C.N.R. complement is sufficient for their allotted tasks, and it will not be necessary, therefore, to retain the R.C.N.R. divisions scheduled for closure, or to increase the R.C.N.R. complement to its previous level. Accordingly the R.C.N.R. complement has been established at 2,925 officers, men and wrens The R.C.N.R. divisions H.M.C.S. *Prevost* (London), *Queen* (Regina), *Nonsuch* (Edmonton), *Queen Charlotte* (Charlottetown) and *Kitchener Tender* to H.M.C.S. *Star* (Kitchener) are being closed as originally planned.

It is expected that the reductions will yield savings in the order of $1.8 million annually. A total of 1,675 R.C.N.R. personnel have been affected by these reductions, and approximately 80 regular force personnel have been made available for other duties.

At the same time as Commodore Hendy was conducting his investigation into the Royal Canadian naval reserve, a ministerial committee was convened under the chairmanship of Group Captain J. W. P. Draper. The committee was instructed to advise on the role and organization of the R.C.A.F. auxiliary. After careful study of the committee's report is was concluded that no change in the previously announced reductions could be recommended.

Prior to this, the R.C.A.F. auxiliary had been extensively reorganized since it had become apparent during the comprehensive review of defence activities conducted during late 1963 that, in competition with other defence functions for the resources available, auxiliary squadrons could not be retained except at those bases which would be kept operating in any case for regular force purposes. As a result the R.C.A.F. have retained two auxiliary squadrons at Montreal, two at Toronto, and one each at Winnipeg and Edmonton. It was necessary to close out those at Hamilton, Saskatoon, Calgary and two in Vancouver.

Additionally, there is no longer sufficient military requirement to justify the continued operation of the auxiliary technical training units and medical units. Therefore these units, a total of 20 in number, have been disbanded.

The reductions will yield annual financial savings of approximately $6.4 million in the field of operating and maintenance costs. Additionally,

40 light transport aircraft become available for disposal from the R.C.A.F. inventory. A total of 2,490 auxiliary personnel have been affected by the reduction. In addition, 576 positions for regular force personnel, formerly required to support the disbanded auxiliary units, have been made available for re-assignment.

The six squadrons being retained operate in the roles of short range transport, aid to civil authorities and support of the Canadian army during exercises.

The CHAIRMAN: Gentlemen, three other documents have been distributed to you which are not going to be read. The first is headed the "Commission on the Reorganization of the Canadian Army (Militia) Part II". Then, there is the Reorganization of the Canadian Army (Militia). The third document is the Department of National Defence paper on the Recommendations of the Commission on the Reorganization of the Canadian Army (Militia). These documents have been tabled and I now would entertain a motion that these documents be printed as Appendices to today's Minutes of Proceedings and Evidence.

Moved by Mr. Groos, seconded by Mr. Temple.

Motion agreed to.

The CHAIRMAN: The Chair is in the hands of the committee. The minister has indicated he is available until 12.30 for any questions of a clarifying nature.

Mr. SMITH: I have a question in respect of page 9. The minister mentions transportation. In some cases units are left in being but certain squadrons and platoons are withdrawn or moved to the regional headquarters. In this case is provision being made for those people who are fit and eligible in towns such as Orillia and Collingwood to continue in service and be reimbursed for transportation in any way?

Mr. HELLYER: I think it will be left to the discretion of the general officer commanding within the limitations set out in the statement.

Mr. SMITH: He will have some discretion in these matters?

Mr. HELLYER: Yes.

Mr. GROOS: I notice in the case of regiments in the Victoria area there are some companies in outlying towns which are remaining in the order of battle but the parent unit is being relocated at Victoria, and Victoria is 80 miles away. How is this done?

Mr. HELLYER: This would be quite impracticable so to all intents and purposes the unit in the outlying district would be disbanded. The transfer is in name only to the parent unit. This is for purpose of tidying up the record.

Mr. GROOS: It is virtually the same as being transferred to the supplementary order?

Mr. HELLYER: Yes, but the distinction is that when a parent unit is not being transferred to the supplementary order of battle, its subunits are collected with the parent unit.

Mr. GROOS: Are there any spare copies of the statement available to us? I would like to have a number of them.

The CHAIRMAN: Copies for distribution to members will be available through the distribution office. I am advised there are not enough copies for handing out to members now so that they can send them for immediate distribution to the affected areas.

Mr. HARKNESS: What is the meaning of this sentence on page 3:

> The eventual result will be a militia having a numerical strength of the order of 30,000 all ranks based on an establishment of 41,748.

Mr. HELLYER: I had hoped that sentence was self-explanatory.

Mr. HARKNESS: I do not think it is. As you know, we had a considerable amount of discussion on this point. Units will be allowed only to enlist up to 30,000?

Mr. HELLYER: No. The 30,000 is our estimate of what this establishment will produce. The establishments have been set at 300 for major units and 100 for minor units, but in some cases units will not be able to recruit their full establishment and 30,000 is an estimate of what the strength will be based on this establishment.

Mr. HARKNESS: But in actual fact any particular unit can recruit up to this establishment which, in the case of a larger unit, is 300?

Mr. HELLYER: Yes.

Mr. HARKNESS: Therefore, the possibility exists that you might have 40,000 people on strength in the militia.

Mr. HELLYER: This is a mathematical possibility. If it happened I think we would have to take another look at it, but it is so unlikely to happen I think our statement is about what will in fact be the result. As you know, there are many units even now that only have a strength of something in the order of 250 and minor units that have 50 or 60 with an establishment of 100. Therefore, we would be very much surprised if all of these were able to go up to maximum establishment.

Mr. HARKNESS: I would be very surprised, too, but I wanted to get at the actual meaning of this.

Mr. HELLYER: You are quite right that individual units will be permitted to do this if they are able to do it. It will provide a considerable amount of flexibility.

Mr. HARKNESS: In your reduced establisment of 300 for a major unit, what is the situation in respect of strength of officers and senior N.C.O.'s?

Colonel C. P. MCPHERSON (*Director of Militia and Cadets*): May I quote a comparison first and use an armoured regiment as an example? In its past establishment it had a total of 39 officers; it will now have 32. It had 88 warrant officers and senior N.C.O.'s; it will now have 52. It had 522 private soldiers and now will have 216.

Mr. HARKNESS: In effect, the strength of officers, in particular, and N.C.O.'s only to a lesser extent, has not been cut down proportionately. This is the very point we had before I made a pretty strong recommendation that the reduction in strength of officers and senior N.C.O.'s not be put in on the same proportion as privates, and so on. I am glad to see that the officers and senior N.C.O. strength has been caught up relatively to a greater extent.

Mr. MCPHERSON: I might give you a particular instance of the ratio in your own corps, the Royal Canadian Artillery. Prior to the reorganization, the ratio was one officer to 15.3 men on the establishment. Following the reorganization, the ratio will be one officer to 8.4 men. It is interesting to note that the present ratio between officers and men with regard to the effective strength is one to 7.3.

Mr. HARKNESS: What were the general principles of the amalgamation or transfer to the supplementary order of battle; what are the general principles upon which units will be done away with or put in this category, and so on?

Mr. HELLYER: As you know, there were a number of factors. These, of course, had to be taken together in order to reach a judgment. These factors included the requirement, the rules set out in the terms of reference, the cost effectiveness of units, training facilities available, relation to regular army training facilities for the particular corps required, accommodation available, training activity, the number of similar units in a locality, recruiting potential, national balance of arms and service in the militia. These factors all were taken into consideration.

Mr. HARKNESS: On the last point, balance of arms, how many of the major combatant units, armoured, artillery and infantry, in particular, in each case are being deactivated?

Mr. MCPHERSON: As an example, we had 26 armoured units in the country. We will now have 20. In the Royal Canadian Artillery we had 36 major units and eight minor units. That figure now will be 22 major units and four minor units. In the other major corps, the infantry, we had 60 and now will have 51 major units and two minor units.

Mr. HARKNESS: What is the reason the chief reduction seems to have taken place in the artillery?

Mr. HELLYER: Guns.

Mr. HARKNESS: What do you mean by guns?

Mr. MCPHERSON: Requirements.

Mr. HELLYER: I think if you look at the over-all situation you will see that there is not a requirement proportionately for the number of artillery units previously established and there also is the very real problem, as you can appreciate, that if a mobilization were required, the lead time in obtaining artillery equipment is much greater than it is, for example, in light infantry. This is a factor which cannot be be ignored in a judgment where you are considering mobilization as one of the factors.

Mr. HARKNESS: On the other hand, it is not as great as in the case of the armoured, the engineers and some other technical corps.

Mr. HELLYER: That is correct, but the proportion of reduction in the armoured in relation to the artillery is not too different.

Mr. HARKNESS: I would say there is quite a disproportion.

Mr. HELLYER: Also, the training in some of the armoured units will be changed to reconnaissance.

Mr. MCPHERSON: Of the 20 armoured corps units ten will train as armoured units and ten as reconnaissance units.

Mr. MACRAE: I would like to deal with specific units. I would expect that the members of the committee as well as members of parliament will be receiving a great many telegrams and phone calls within the next 48 hours, and I would like to ask who we should get in touch with. I have questions dealing with two famous regiments, the North Shore and the Carleton and York, both of which I served with. I would like to know whom I should contact in national defence headquarters this afternoon in order to obtain specific answers.

Mr. HELLYER: The answers are all in the order of battle which you have.

Mr. MACRAE: No. You misunderstood me. I had not intended being specific, but I will. The Carleton and York regiment retains its four rifle companies, its support and headquarters company and battalion headquarters. The North Shore regiment is, I understand, of equivalent strength but retains two companies only, one at Campbellton and one at Newcastle. I would anticipate there will be questions asked about that.

Mr. HELLYER: I think there are some cases where additional information can be given. I believe the director of public information will be the channel of communication through to the people responsible, or you might contact my office or Mr. Cardin's office if you prefer.

Mr. MACRAE: Did you say the director of public information?

Mr. HELLYER: Yes, Colonel Bourgeois.

The VICE-CHAIRMAN: The meeting will stand adjourned to the call of the Chair.

APPENDIX "A"

NOTE—*Original pagination of this Report is indicated in margin*

REPORT
of
THE COMMISSION
on the
REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
PART II

TABLE OF CONTENTS—PART II Page 1

Subject	*Page*
Summary of Recommendations	2
Introduction	5
Major and Minor Units	6
Militia Headquarters and Militia Advisors	7
Regular Army Increments	10
Call-outs	11
Qualifications	12
Trades Qualifications	15
Pay	15
The Young Militiamen Program	16
Manning Depots and Personnel Selection Units	18
Canadian Officers' Training Corps	21
Canadian Women's Army Corps	22
Medical Units	23
Royal Canadian Dental Corps	24
Regiment de Hull	25
Supplementary Order of Battle	26
Special List	27
Service Battalions	28
Special Units	28
Armouries	30
Transportation	33
Control	34
Index to Appendices	35

Page 2

SUMMARY OF RECOMMENDATIONS

Militia Headquarters and Militia Advisors Page 10

That the present 27 Militia Group Headquarters be replaced by 15 Militia Headquarters and five Militia Advisors.

Call-outs Page 12

That, as the Regular Army increment will make the appointment of call-outs redundant, personnel affected should, on termination of employment, be given terminal leave equal to one month's pay for each year of service.

Trades Qualifications Page 15

That similar civilian trade qualifications be recognized for Militia trades-pay.

The Young Militiamen Program Page 18

That the Young Soldiers Training Program be re-designated the Young Militiamen Program and that the potential advantages inherent in this Program, both to the Militia and the youth of the country, be vigorously pursued.

Manning Depots and Personnel Selection Units Page 20

That Manning Depots and Command Personnel Selection Units be disbanded.

Canadian Officers' Training Corps Page 21

(*a*) That university students, before being accepted as COTC candidates, should be accepted by a Militia unit.

(*b*) That, when commissioned, they should fulfill a voluntary commitment to serve with a Militia unit.

(*c*) That, unless there exists a satisfactory flow from COTC to Militia units, the COTC plan be abolished.

Page 3

Canadian Women's Army Corps Page 23

(*a*) That the CWAC be continued and their recruitment in units be encouraged.

(*b*) That promotion of CWAC personnel be a unit responsibility.

(*c*) That before promotion to Senior NCO rank and again before being commissioned, CWAC personnel be required to attend at least one summer concentration of their Corps.

Medical Units Page 24

(*a*) That, where applicable, medical units should continue and form part of the Service Battalion.

(*b*) That medical advisory staff comprising one Colonel and a clerk on the basis of one per Command should be authorized and located in Command Headquarters.

Royal Canadian Dental Corps Page 25

(*a*) That a Dental Headquarters be established in each Command.

(*b*) That a dental officer and one dental assistant be attached to each major unit.

(*c*) That dental officers now serving who become surplus to requirements be posted to the Special List.

Supplementary Order of Battle Page 26

That units removed from the current Order of Battle should be transferred and held in the listing to be known as the Supplementary Order of Battle.

Special List Page 27

That officers, especially those with specialist or technical qualities, retired for reasons of age, be encouraged to transfer to the Special List.

Service Battalions Page 28 Page 4

That Service Battalions be constituted in larger cities and that these bear the name of the city.

Special Units Page 30

(*a*) That experimental sub-units be formed in selected units to train in guerilla warfare and related activities as a special force in the Militia.

(*b*) That the formation of an emergency reserve similar to British "Ever Readies" should be initiated when it is apparent that Regular Army resources are overextended.

Transportation Page 34

That where necessary and advantageous transportation should be provided to carry militiamen to and from parades.

PART II Page 5

INTRODUCTION

The subject matter contained in Part II of the Commission's Report is derived from two sources. Firstly, there are the detailed proposals which logically follow the general recommendations stated in Part I. In these proposals, the detail has been spelled out in order that the intent of the related recommendation is clearly understood. It is recognized that implementation will be carried out by the various staff echelons and, of necessity, must involve a number of people. It follows that a clear definition is required to ensure uniform interpretation.

Secondly, a number of recommendations are included on matters specifically related to organization rather than to principles and policies. To the extent it is deemed necessary, these recommendations are given in detail.

A section of this Report is devoted to the future status of Militia units and sub-units in each Command. It can be expected that this section will be critically scrutinized and will generate, for obvious reasons, strong objections from individuals and groups identified with those units which will be removed from the Order of Battle or relegated to a lesser status.

The Commission wishes to reiterate its concern that unless the announcement of these changes and the resultant implementation
Page 6 are most carefully planned, a serious blow to the morale of the Militia generally, will be inevitable. It is important that the proposals affecting units be held in strictest confidence until approval has been given. Publicity should be delayed until personnel in the units concerned have been advised. Morale is sensitive rather than sensible and involves emotions rather than facts. Delicate handling of this portion of the Report is a matter of first importance.

MAJOR AND MINOR UNITS

In Part I of the Report reference is made to major and minor units. Although a numerical definition of these units is required to provide a guide, implicit in the concept of major and minor units is quality as well as quantity. The overall assessment should include general efficiency and take into consideration the number of qualified personnel trained by the unit.

A major unit is a Lieutenant Colonel's command with a total establishment of 300 all ranks including an authorized band. Major units having sub-units in more than one locality may be authorized
Page 7 additional company strengths as appropriate. A minor unit is a Major's command with an establishment of 100 all ranks.

At the review prior to change of command, a major unit whose effective strength is less than 50% of the revised establishment should be reduced to a minor unit. Similarly, a battalion or equivalent designated a minor unit on obtaining an effective strength of 50% of the establishment of a major unit may be considered for upgrading to a major unit. It will be clear from the proposed formula that an incentive is provided for Commanding Officers to keep both strength and performance at a high level to avoid being downgraded or, conversely, to obtain the status of a major unit. The proposed review on change of command provides normally a three year period for Commanding Officers to demonstrate performance. The review should take place immediately prior to the change of command and the redesignation, if any, be recommended by the Militia Commander or Militia Advisor and be concurred in by the Area Commander concerned. (See also Part I, page 20.)

MILITIA HEADQUARTERS AND MILITIA ADVISORS

Militia Group Headquarters were formed at the time of the
Page 8 last reorganization in 1954. The recommendation proposed 25 Militia Group Headquarters as replacement for the 35 Militia Formation Headquarters existing at that time. No establishment was suggested other than a minimum requirement of one officer and one NCO for each Headquarters. As of 30 April 1964 the total strength of all Militia Headquarters was 354 officers and 287 men. This is a most impressive demonstration of Parkinson's Law and the chief reason for the Commission's recommendation that the name be changed and a firm establishment assigned.

Although some Headquarters are doing an excellent job, this is largely due to the inventiveness and energy of the Commander and not because a real need exists at an annual direct cost of $940,000. The present arrangement is far too costly in relation to its usefulness. It is felt that on a much reduced basis there is a continuing role largely to provide staff training for good ex-Commanding Officers and to provide Area Headquarters with advice and assistance in resolving unit problems. Some staff training of selected Militia Officers could be achieved without increasing the Headquarters establishment by attaching unit officers to a Militia Headquarters for special exercises or summer camp.

The proposed establishment should consist of a full Colonel to be called the Militia Commander, a Lieutenant Colonel, Deputy Commander and a staff officer in the rank of Major qualified in A & Q matters. The function of the Headquarters would be to advise units in all G, A and Q matters including summer camps, selection and promotion of officers. They should have no responsibility for administrative paperwork and where possible be quartered with Area Headquarters. Direct communication on administrative matters should exist between the Area Headquarters and the unit. In some localities a full Headquarters is not required and a Militia Advisor in the rank of Colonel is proposed to provide advice to units. It is recommended that one Militia Commander may be appointed a Brigadier in the Commands as presently constituted. This officer should be carefully selected for his qualifications and experience and the four appointed in concert could form a Committee to advise Defence Headquarters staff on Militia matters across the country. Page 9

Detailed requirements proposed by the Commission are as follows and total 15 Militia Headquarters and five Militia Advisors in lieu of the present 27 Militia Group Headquarters.

MILITIA HQ

BC Militia Headquarters	Vancouver
Edmonton Militia Headquarters	Edmonton
Calgary Militia Headquarters	Calgary
Sask Militia Headquarters	Regina
Man Militia Headquarters	Winnipeg
Western Ont Militia Headquarters	London
Northern Ont Militia Headquarters	Sault Ste Marie
Hamilton Militia Headquarters	Hamilton
Toronto Militia Headquarters	Toronto
Eastern Ont Militia Headquarters	Ottawa/Kingston
Montreal Militia Headquarters	Montreal
Sherbrooke Militia Headquarters	Sherbrooke
Eastern Quebec Militia Headquarters	Quebec
NB Militia Headquarters	Fredericton/St John
NS/PEI Militia Headquarters	Halifax

Page 10

MILITIA ADVISORS

BC Interior Militia Advisor	Vernon
Northern Sask Militia Advisor	Saskatoon
Trois Rivieres Militia Advisor	Trois Rivieres
PEI Militia Advisor	Charlottetown
Nfld Militia Advisor	St John's.

Recommendation:

That the present 27 Militia Group Headquarters be replaced by 15 Militia Headquarters and five Militia Advisors.

REGULAR ARMY INCREMENTS

Part I of the Commission's Report envisages a system of Regular Force personnel attached to Militia units in replacement of the present Regular Army instructional pools and call-outs under Canadian Army Order 94-2. Requirements of units vary with location and number of sub-units and consequently it is not possible to propose a fixed scale for major and minor units. It is necessary, therefore, that each unit be dealt with individually according to its circumstance. The proposed Regular Army requirement with respect to each unit is shown in detail in Appendix 3 to Annex 1 of this
Page 11 Report. In general the scale for a concentrated unit should be a Captain or junior Major, a Warrant Officer and two Sergeants if a major unit; an officer, one Warrant Officer and one Sergeant is proposed for a minor unit, but with variations according to locations and number of sub-units.

Both Regular Army and Militia Commanders strongly supported the principle of Regular Army personnel attached to units for the mutual benefit of both the Regular Force and the Militia. The total officers and NCOs needed to satisfy this requirement will be less than the present instructional staff for the Militia. In addition the 332 call-outs under Canadian Army Order 94-2 will be eliminated. Regular Army personnel should be attached to a unit for duty, and should not be withdrawn for special duties by Area HQ without the concurrence of the unit Commanding Officer.

CALL-OUTS

The reorganization anticipates the orderly termination of the 332 call-outs presently on strength. These appointments will become redundant when the Regular Army assistance increment is posted to the unit and cessation of employment should take place at that time.

These WOs and NCOs are not entitled to any special consideration by virtue of the terms of their employment; nevertheless,
Page 12 because of their employment the Department of National Defence does have a moral responsibility to ensure they are not abruptly terminated or unjustly treated.

Annual reductions in the cost in excess of $1.5 million will result from their termination and consideration should be given to a formula of re-establishment allowance to WOs and NCOs in this category. Based on performance while so employed, it is recommended that terminal leave of one month's pay of rank for each year of service should be granted to call-outs on termination.

Recommendation:

That, as the Regular Army increment will make the appointment of call-outs redundant, personnel affected should, on termination of employment, be given terminal leave equal to one month's pay for each year of service.

QUALIFICATIONS

Qualification requirements for officers, NCOs, and militiamen should be reviewed and revised together with age limits for promotion for officers and NCOs.

Officers:

Lieutenant:

Provisional 2nd Lieutenants should be required to complete qualifications to Lieutenant based on common to all corps subjects within a maximum period of two years. The present limitation of five years in the rank before promotion should not prevent the earlier promotion of keen and qualified young officers when a vacancy exists. Page 13

Captain:

Lieutenants should qualify for promotion to the rank of Captain within three years of their appointment as Lieutenants. Captain qualifications should include passing a course based on corps subjects.

Major:

Qualification for field officer rank should include passing the field officer's course, emphasizing the employment of all arms and including tactics and brigade deployment.

Lieutenant Colonel:

Promotion to command in the rank of Lieutenant Colonel should be restricted to officers who have satisfactorily completed the Militia Staff Course and had received superior ratings in previous ranks.

NCOs:

Junior NCOs:

Prerequisite for promotion should include one block of a two block trade Gp 1 and common to all Corps NCO course.

Senior NCOs: Page 14

Final block of two block trade Gp 1 and Special to Corps Senior NCO Course.

Staff Sergeant:

Qualified Senior NCO and block one of a two block trade Gp 2.

WO2:

Qualified Senior NCO and final block of two block trade Gp 2.

Militiaman:

Recruit's qualification should require satisfactory completion of the common to all Corps Training Syllabus.

Trained Militiaman:

To qualify for the designation of "trained militiaman" a recruit must have satisfactorily completed the Special to Corps Training Syllabus.

As stated in Part I, officers and NCOs serving in combatant units should be qualified for and promoted to the respective ranks prior to attaining the following suggested ages:

Lieutenants	Age 26	Junior NCO	Age 26
Captains	Age 29	Senior NCO	Age 32
Majors	Age 34	WO2	Age 37
Lt Cols	Age 37	WO1	Age 40

The retirement age for officers and NCOs in technical and service units should conform with Regular Army practice.

Page 15

TRADES QUALIFICATIONS

Militia tradesmen cannot be expected to obtain the same standard as the Regular troops and separate qualifications should be established for ab initio training of tradesmen. Further, civilian trade qualifications should be recognized as partial or even full qualifications for Militia trades-pay where skills are similar. The impossibility of obtaining trade qualifications within a reasonable time discourages militiamen and fails completely in its objective.

Recommendation:

That similar civilian trade qualifications be recognized for Militia trades-pay.

PAY

Part I outlined in descriptive form a new proposal for Militia pay in the form of bonus rather than a per diem rate. Apart from providing an incentive for attendance at parades, the proposed system would substantially reduce the administrative paperwork under the present procedures. (See Part I, page 30.) The intention is that this
Page 16 new procedure would be applicable for local training and summer camp. Attendance at Corps Schools or similar full time courses would be carried out under normal Pay and Allowance Regulations.

Appendix 1 to Annex B shows the scale of bonus, after tax deductions, for all ranks with an example of how the bonus is computed.

Appendix 2 to Annex B is an example of the proposed Canadian Militia Bonus Ledger Sheet.

Appendix 3 to Annex B is an example of the proposed Canadian Militia Bonus Voucher.

The Commission is of the opinion that the latter two forms will replace the existing paperwork and that this will be all the documentation necessary with respect to pay. Adherence to the Block system allows for no exceptions, nor should any be needed.

THE YOUNG MILITIAMEN PROGRAM

The Young Soldiers Training Program, also called the Student Militia Training Program, has the unanimous endorsement of both Regular and Militia Commanders. It is not yet clear that the Program will provide a flow of militiamen to units, largely because it has not been in operation long enough to indicate a pattern. However, it is
Page 17 established beyond question that young men who undertake this

training derive great benefit from it. Commanders who have operated programs commented, without exception, on the remarkable improvement achieved by these young soldiers in a very short training program. Their keenness and application earned the highest praise wherever the Program was discussed.

Improvement could be achieved in two areas. Firstly, the increasing popularity of the Program should permit a more stringent selection procedure. Secondly, there are variations in the Program between Commands and efforts should be made to establish uniform training standards applicable across the country, and operate the Program within the unit rather than a separated project. It is suggested that a Manual for the guidance of all Commanding Officers be prepared based on the experience and procedures developed by a selected Commanding Officer who has been highly successful in the operation of the Program. As a first step toward uniformity, the Commission recommends that a new name, i.e., Young Militiamen Program, be immediately taken into use in all Commands.

There is a strong expectancy that when the average age of the Militia is reduced, the young militiaman will be encouraged to join the Militia and the Program will be a major source of recruits.

The benefits to the individual militiaman from this training, however, go far beyond the immediate objective of finding recruits for Militia units. Training in self-discipline, group activity and the responsibilities of citizenship are provided to a youth at a critical age in his development. The broad benefits to the individual young man strongly suggest that this program should have complete endorsement by the Federal Government as a whole. Page 18

Recommendation:

> That the Young Soldiers Training Program be re-designated the Young Militiamen Program and that the potential advantages inherent in this Program, both to the Militia and the youth of the country, be vigorously pursued.

MANNING DEPOTS AND PERSONNEL SELECTION UNITS

Manning Depots were created to prevent the reoccurrence of the confusion experienced in the mass recruitment of the 27th Brigade for Korea. The new concept of forces-in-being and the roles assigned to the Militia has made Manning Depots redundant and accordingly they should be disbanded. The same disposition also applies to the Command Personnel Selection Units.

The direct cost of maintaining Manning Depots is in excess of $650,000 annually. Their artificial duties are the complete documentation of the Militia in accordance with the Regular Army procedures. The enrolment of a militiaman is a major operation using the Regular Army form. A militiaman who presents himself at a unit may be delayed from three to six weeks before he is accepted and the necessary paperwork processed. The effect of this is to discourage potential recruits who are unable to understand why it takes this length of time before their application is completed. Page 19

In Part I of the Report it was recommended that a recruit should be engaged by the unit and at the time he first presents himself for

enrolment. This can be accomplished by completion of the attestation card used prior to 1939 and can be completed under unit control. This simple document, which contains all essential details, would be substituted for the present five-part form which takes hours to complete. As an indication of the detail involved, Part One of the form has 39 sections on personal information and two full pages are required for the medical examination. It is not surprising that it takes a minimum of three parade nights to process the form.

In the first instance, it is important to enroll a recruit promptly, and the avoidance of this mass of paperwork at this stage is imperative, particularly when it is recognized that the turnover in the Militia exceeds 100% annually.

Selection procedures are not required at the time of enrolment because they involve so much waste effort in relation to the number of militiamen who remain with the unit. The Commission feels, however, that when a militiaman is qualified and considered for promotion to Junior NCO rank, the selection procedures should be carried out at that time, and provision should be made for Personnel Selection Sections to be retained for this purpose, and to train regimental officers in selection techniques.

Page 20

A Personnel Selection Officer and clerk and a Personnel Selection Training Officer and clerk would comprise the Personnel Selection Section. There would be a Section attached to the Area Headquarters in each Area and in addition a Personnel Selection Officer and clerk on the basis of one per 600 all ranks Militia in the Area to be attached to selected units to facilitate the processing of militiamen prior to promotion. Half of the above officers may be Majors and clerical personnel may be CWAC or men in the rank of Sergeant.

To ensure a reserve of trained, up-to-date PSOs, for emergencies, a number of PSOs equal to the above establishment would be called out for a two-week course at a Regular personnel depot or camp annually.

All Manning Depot and Command Personnel Selection Unit officers surplus to the proposed establishment would be posted to the Special List and those called out for training would normally be obtained from the Special List.

Recommendation:

That Manning Depots and Command Personnel Selection Units be disbanded.

Page 21

CANADIAN OFFICERS' TRAINING CORPS

One purpose of the COTC in the past has been to provide a flow of trained officers to Militia Units. In recent years, officers from this source have not, in any appreciable number, joined the Militia.

University students before being accepted as COTC candidates should be accepted by a Militia unit in the locale of the university which they attend. On completion of their university training and on being granted a commission they should fulfill a voluntary commitment to serve with a Militia unit in the community in which they eventually take up residence. It is the opinion of the Commission that unless ways and means are found to provde at satisfactory flow from COTC to Militia units, the COTC plan should be abolished.

Recommendations:

(*a*) That university students, before being accepted as COTC candidates, should be accepted by a Militia unit.

(*b*) That, when commissioned, they should fulfill a voluntary commitment to serve with a Militia unit.

(*c*) That, unless there exists a satisfactory flow from COTC to Militia units, the COTC plan be abolished.

CANADIAN WOMEN'S ARMY CORPS

Page 22

The CWAC with a numerical strength of 218 officers and 3254 Other Ranks is the fourth largest Corps in the Militia. Approximately half of these ORs are serving in units in the 18 trades open to women personnel. In past emergencies it has been demonstrated that women can perform many jobs normally assigned to men. The CWAC can undertake duties with static units, transport units and clerical and communications duties in the Security and Survival roles. To the extent they are able to release men for combat duty their contribution is a most valuable one.

It is the view of the Commission that the CWAC should be retained and women should be encouraged to join units in the respective trades open to them. While serving with units, promotion to NCO ranks should be on the recommendation of the Commanding Officer and in accordance with the provisions of Canadian Army Order 256-6.

The number of women serving in any one unit is insufficient to give them needed training in leadership, and this should be provided by summer concentration of CWAC personnel. CWAC personnel should attend a summer concentration before promotion to Senior NCO rank and again before being commissioned. This training is essential, since it can be expected that CWAC in the Militia would have to provide officers and NCOs in time of emergency to direct the rapid expansion of the Corps.

Recommendations:

Page 23

(*a*) That the CWAC be continued and their recruitment in units be encouraged.

(*b*) That promotion of CWAC personnel be a unit responsibility.

(*c*) That before promotion to Senior NCO rank and again before being commissioned, CWAC personnel be required to attend at least one summer concentration of their Corps.

MEDICAL UNITS

The present Militia medical companies appear to be the best means of training medical personnel who will be immediately required in the event of an emergency. Existing medical companies in localities where Service Battalions will be formed should become the medical unit of the Service Battalion. The Militia medical advisory staff should continue on the basis of one per Command to maintain liaison with the profession and to encourage trained medical personnel to join Militia units.

In order to retain as many medical officers as possible in uniform, supernumerary medical officers should be authorized for major units and for sub-units when located a considerable distance from their respective headquarters. Medical officers now on strength surplus to the revised requirements should be transferred to the Special List
Page 24 of Officers and when required they would be available for attendance at summer camps or special medical courses.

Recommendations:

(*a*) That, where applicable, medical units should continue and form part of the Service Battalion.

(*b*) That medical advisory staff comprising one Colonel and a clerk on the basis of one per Command should be authorized and located in Command Headquarters.

ROYAL CANADIAN DENTAL CORPS

The existence of dental units is largely a device to have dental officers in uniform available in the event of an emergency. The training of dental companies has not proven a practical matter and accordingly dental companies should be disbanded.

In order to maintain dentists in uniform it is proposed that there should be a Dental Headquarters established in each Command. This headquarters would consist of a Commanding Officer, 2IC, Adjutant QM, one dental assistant and one dental storeman. In addition, a dental officer and one dental assistant should be attached to each major unit. The duties of the Commanding Officer of the Dental Head-
Page 25 quarters would be to maintain liaison with the profession and to assist in recruiting dental officers for attachment to units.

Dental officers now serving who will be surplus to requirements should be posted to the Special List. Consideration should be given to calling these officers out for refresher courses in field dental administration and to participate in summer training. The detail of the above proposal forms part of Appendix 3 to Annex A.

Recommendations:

(*a*) That a Dental Headquarters be established in each Command.

(*b*) That a dental officer and one dental assistant be attached to each major unit.

(*c*) That dental officers now serving who become surplus to requirements be posted to the Special List.

REGIMENT DE HULL

In the course of its investigation the Commission was made aware of the difficulty, in Quebec Command, of servicing properly the unit in Hull because of its distance from Montreal and Three Rivers respectively. Proximity to Ottawa logically suggests that for administrative and training purposes this unit should come under Eastern Ontario Area. This proposal is contained in Appendix 3 to Annex A.

SUPPLEMENTARY ORDER OF BATTLE

Page 26

In Appendix 2 of Annex A, the term "Supplementary Order of Battle" is introduced in connection with the disposition of units and sub-units. It is considered that units removed from the Order of Battle should not be treated as de-activated or dormantized or any similar term. In order that the name of the unit might be preserved and to facilitate the reactivation of the unit in the future, a Secondary Order of Battle is proposed. It can be expected that the international situation will not remain constant and that the requirements for units, therefore, could vary in the future. The creation of a Supplementary Order of Battle provides a logical repository for units and carries a connotation that the unit, if required, can readily be mobilized in the active Order of Battle.

Recommendation:

That units removed from the current Order of Battle should be transferred and held in the listing to be known as the Supplementary Order of Battle.

SPECIAL LIST

Page 27

The reorganization of units and establishment of age limits for respective ranks will mean the involuntary retirement of a large number of officers in all ranks. Officers who are retired under the proposed changes should have their present rank confirmed on transfer to the Reserve of Officers. All officers who express a willingness to serve in some capacity in static or Internal Security units as suggested in Part I, page 21, should be posted to the Special List.

Specialist officers, i.e. medical, dental, selection of personnel officers and officers with technical qualifications should in every instance be encouraged to transfer to the Special List pending decisions which might require their services in a different capacity in the future. In effect, the Special List would provide a means of holding available officers until their further requirement could be determined.

Recommendation:

That officers, especially those with specialist or technical qualities, retired for reasons of age, be encouraged to transfer to the Special List.

SERVICE BATTALIONS

Page 28

It is proposed in Appendix 3 of Annex A to constitute Service Battalions in larger cities. Except when indicated in this Appendix, a Service Battalion will bear the name of the city in which it is located. It is not intended that Service Battalions in the Militia Order of Battle should be identical with the Experimental Service Battalion of the Regular Force. Its purpose is to provide a headquarters formation responsible for the services units in the particular locality and its composition will necessarily vary from city to city. The unified headquarters will function as a regimental

headquarters for services units of company strength such as RCASC and RCAMC. The number of these will vary depending on the units or sub-units of the respective corps remaining in each locality.

Recommendation:

That Service Battalions be constituted in larger cities and that these bear the name of the city.

SPECIAL UNITS

Page 29

Since the beginning of history, armies have had special units which have formed the corps d'elite of these armies. Association with these units was the objective of all keen soldiers, and because they were special, the units set the standard of training and performance for the entire army. In World War II, Jock columns in the desert, Special Air Service in Italy, and Wingate's Chindits are examples of special units which distinguished themselves in battle and won lasting fame.

There is a need for similar units in the battle order of the Militia to satisfy the interest inherent in soldiers to belong to a special and distinguished unit. A number of proposals have been received along these lines, and it is the opinion of the Commission that a special unit should be tried experimentally to determine whether in fact it is a worthwhile objective.

A commando type unit specially trained in guerilla warfare and related activities is certain to have a unique appeal to keen militiamen. On an experimental basis it is proposed that selected units undertake the formation and training of a sub-unit within their establishment. Special assistance would be provided by the Regular Forces and, depending on results, the project could be expanded.

Page 30

Along these lines the British have formed the Army Emergency Reserve, called the "Ever Readies". Personnel who volunteer are carefully selected from territorial army units. They receive a substantial bounty (£150 a year) if they sign on for one year and agree to be available for service outside the country up to six months in the year. If called out, they receive an additional bonus and their civilian job is protected by law. The purpose of the "Ever Readies" is to have immediately available a stand-by force for emergency purposes. It is not considered that the defence commitments of Canada warrant the formation of a similar force at the present time. However, should additional commitments under U.N. or NATO arrangements overextend Regular Army resources, this means of providing an immediately available reserve pool should be implemented.

Recommendations:

(*a*) That experimental sub-units be formed in selected units to train in guerilla warfare and related activities as a special force in the Militia.

(*b*) That the formation of an emergency reserve similar to British "Ever Readies" should be initiated when it is apparent that Regular Army resources are overextended.

ARMOURIES

The reorganization of the Militia has eased considerably the accommodation problem that existed in many parts of the country. However, there remain a few areas where the situation is critical and requires early attention. These localities presently have units which are vigorous despite the handicap of inadequate accommoda- Page 31
tion. Unless some positive plan is made to alleviate the situation, it can be expected that in the process of time the units will lose their interest and enthusiasm.

Listed below are localities which the Commission considers should have immediate attention:

Vancouver:

It is suggested that a study of Armoury accommodation be made in the Vancouver Area for the following reasons:

(1) Although promised, there have been no new buildings constructed since 1935. During that period of time there has been a decided shift in population which places the Beatty Street Armouries in a most unenviable position. It is a venerable landmark in the City's history with no outdoor drill space or parking area, bypassed by progress and serving fewer people each year.

(2) Four years ago rented accommodation housing the Irish Fusiliers was destroyed by fire. Since that time the Irish have been occupying sub-standard accommodation.

(3) The land occupied and owned by DND at Jericho has long been coveted by the City of Vancouver for recreational purposes. Each year new attacks are made by the City to obtain this valuable waterfront property. It might be possible for DND to release, rent or trade this property to the City and new accommodation made available for the units presently being housed there.

Funds for a multiple purpose armoury could be found from the Page 32
disposal of Beatty Street and from that DND property recommended for disposal by the Commission.

Kimberley:

The 17th Fd Sqn in Kimberley occupies a lodge hall and a garage at an annual cost of $4600. This space is entirely inadequate for the unit and should be replaced by a company-sized armoury.

Sudbury:

Sudbury is an area where the Militia should be maintained. Under the reorganization it has one infantry battalion and a technical squadron. These units are presently housed in a rented factory and a rented hall. Both buildings are reported to be in indifferent condition. A very strong case can be made for the construction of an armoury in this part of Central Ontario Area. It is expected that with the reorganization, two excellent units can function in Sudbury and proper facilities should be provided as high priority.

Eastern Quebec Area:

In the lower St. Lawrence region are a number of excellent units which have survived despite the inattention which has been given to accommodation in this area in the last 25 years. In the Lake St. John district an armoury is urgently needed in Jonquiere Area

Page 33 between Jonquiere and Arvida where units in both localities can be readily served because they are only three miles apart. Regiment du Saguenay, the unit in the area, is a strong unit in an expanding part of the Province of Quebec. The provision of adequate armoury facilities in accordance with the above proposal should be given highest priority.

Two companies of the Regiment du Chaudiere are presently located in leased property in Beauceville and St. George du Beauce. The Fusiliers du St Laurent has D Coy located in the leased Arena in Matane. None of these three buildings are satisfactory and a study should be undertaken to determine the best possible solution to the accommodation problem which is presently a severe handicap to these sub-units.

TRANSPORTATION

It has been stated elsewhere that sub-units located within reasonable distance of another unit or sub-unit should be encouraged to become part of that unit or sub-unit and continue in the Militia. As a matter of principle, every effort should be made either to retain the individual in his own Corps, or to facilitate the transfer to another Corps of every fit officer and militiaman who desires to continue service.

Page 34 Where reasonable public transportation is not available, transportation should be provided to carry militiamen to and from parades. School buses operated by communities might well be interested in additional revenue from this service in lieu of military transportation. The elimination of maintenance costs incurred by small sub-units would more than provide necessary funds to arrange transportation in these special cases.

Recommendation:

That where necessary and advantageous transportation should be provided to carry militiamen to and from parades.

CONTROL

The Commission hopes that the Militia as reorganized will be found to be a flexible organization which can be increased or decreased in size and cost as prevailing conditions require. The instrument of control will be found in the size of establishments of major and minor units rather than in the disbandment and organization of units. The requirement of allowing each community in the country to make its proportionate contribution makes the proposed system imperative. As reorganized, by controlling the size of establishments, the Militia can be expanded to meet almost any foreseen requirements or can be reduced to minimum requirements without hardship to any community.

INDEX TO APPENDICES

Page 35

Appendix 1 to Annex A:

Present Militia Order of Battle by Areas

British Columbia Area....(i)
Alberta Area....(ii)
Saskatchewan Area....(viii)
Manitoba Area....(x)
Western Ontario Area....(xii)
Central Ontario Area....(xiv)
Eastern Ontario Area....(xix)
Quebec Command (less East Que Area)....(xxii)
Eastern Quebec Area....(xxvi)
New Brunswick Area....(xxviii)
Nova Scotia/Prince Edward Island Area....(xxx)
Newfoundland Area....(xxxiii)

Appendix 2 to Annex A:

Militia Headquarters Units and Sub-units to be Relocated, Transferred to Supplementary Order of Battle or Disbanded

British Columbia Area....(xxxiv)
Alberta Area....(xxxvi)
Saskatchewan Area....(xxxviii)
Manitoba Area....(xxxix)
Western Ontario Area....(xl)
Central Ontario Area....(xlii)
Eastern Ontario Area....(xlv)
Western Quebec Area....(xlvii)
Eastern Quebec Area....(l)
New Brunswick Area....(li)
Nova Scotia/Prince Edward Island Area....(lii)
Newfoundland Area....(liv)

Appendix 3 to Annex A:

Reorganized Militia Order of Battle

British Columbia Area....(lv)
Alberta Area....(lvii)
Saskatchewan Area....(lx)
Manitoba Area....(lxii)
Western Ontario Area....(lxiii) Page 36
Central Ontario Area....(lxv)
Eastern Ontario Area....(lxix)
Western Quebec Area....(lxxi)
Eastern Quebec Area....(lxxiv)
New Brunswick Area....(lxxvi)
Nova Scotia/Prince Edward Island Area....(lxxvii)
Newfoundland Area....(lxxix)

Appendix 1 to Annex B:

Canadian Militia Bonus Based on Training Year....(lxxx)

Appendix 2 to Annex B:

Canadian Militia Bonus Sheet....(lxxxi)

Appendix 3 to Annex B:

Canadian Militia Bonus Voucher....(lxxxii)

Appendix 1 to Annex C:

Summary of Cost Reductions....(lxxxiii)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

BRITISH COLUMBIA AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	24 Mil Gp HQ	VANCOUVER						Located in HQ BC Area Building
2	25 Mil Gp HQ	VICTORIA						Located in Bay St Armouries VICTORIA. See Serial 13
3	27 Mil Gp HQ	VERNON						Located at Camp VERNON. See Serial 7
4	BCR	VANCOUVER	Land 300.	Armoury (1912) 2 Misc Bldgs	358,000.	6,500.	12,390.	Armoury land donated. 2 Misc Bldgs on leased land
5	C Sqn	NANAIMO		8 Misc Bldgs (1942)	171,700.	5,111.	Nil	
6	BCD	KELOWNA		Former School (1932) Gp Hut	23,500. Plus land 2,800.	1,500.	3,620.	
7	HQ & A Sqn	VERNON	Land 125.	Armoury (1913) 3 Misc Bldgs	55,000.	6,300.	3,620.	Land donated
8	C Sqn	PENTICTION		Armoury	42,875.	1,350.	3,320.	Land and Building bought 1951
9	15 Fd Regt	VANCOUVER		Armoury (1932) and garage	175,000. Plus land 3,500.	6,550.	12,312.	
10	85 Fd Bty	LADNER		Hangar No 3	513,000.			Power and water contract includes all Buildings at Boundary Bay
11	24 Fd Regt	TRAIL		Armoury (1953)	362,243. Plus land 8,000.	4,100.	6,473.	
12	111 Fd Bty	NELSON	Land no cost	Armoury (1902)	9,000.	1,750.	3,620.	
13	5 Indep Med Bty	VICTORIA		Armoury (1914)	300,800.	22,300.	24,990.	Land donated
14	HQ 7 Fd Engr Regt	VANCOUVER						See Serial 41
15	6 Fd Sqn	NORTH VANCOUVER		Armoury (1913)	20,000.	4,300.	7,240.	Land donated
16	22 Fd Sqn	CHILLIWACK		Armoury (1912)	14,000. Plus land 600.	3,550.	3,620.	
17	44 Fd Sqn	TRAIL						See Serial 11
18	West Cst Sig Regt	VANCOUVER						See Serial 41
19	5 Area Sig Sqn	VICTORIA						See Serial 13
20	RM Rang	KAMLOOPS		Armoury (1902)	10,800. Plus land 2.	3,400.	3,620.	

PRESENT MILITIA ORDER OF BATTLE BY AREAS

BRITISH COLUMBIA AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	Mor Pl	MERRITT		Armoury (1914)	9,000. Plus land 1.	800.	2,853.	
22	A Coy	PRINCE GEORGE	Land 476.	Armoury (1943)	13,000.	4,000.	6,610.	
23	Pl B Coy	QUESNEL	900.	Legion Hall				
24	C Coy	SALMON ARM		Armoury (1952)	109,397. Plus land 1,800.	1,550.	3,170.	
25	Pl	ARMSTRONG		Armoury (1914)	14,000.	900.	2,853.	Land donated
26	D Coy	REVELSTOKE		Armoury (1902)	8,000.	1,050.	2,853.	Land donated
27	WESTMR R	NEW WESTMINSTER	Land no rent	2 Misc Bldgs Armoury (1895)	49,000.	5,900.	7,240.	
28	B Coy	MISSION		Armoury	2,200.	1,350.	3,620.	Land & Bldgs bought 1944
29	SEAFORTH OF C	VANCOUVER		Armoury (1935) & garage	418,000. Plus land 32,137.	9,325.		
30	C SCOT R	VICTORIA	See Serial 13					
31	A Coy	DUNCAN	1,200.	Agriculture Hall		1,600.	3,470.	
32	B Coy	NANAIMO	See Serial 5					
33	C Coy	COURTENAY		6 Misc Bldgs (1942)	157,000. Plus land 12,500.	6,400.	3,620.	
34	Pl	CAMPBELL RIVER	840.	Community Hall		Nil	Nil	
35	D Coy	FORT ALBERNI		3 Wartime Bldgs (1940)	119,000. Plus land 96.	8,700.	3,620.	
36	IR FUS OF C	VANCOUVER		2 Armoury & Garage	150,000.	6,700.	13,635.	Land & Bldgs bought 1942
37	C Coy	POWELL RIVER	1. 1.	Garage Hut No 1		650.	1,902.	
38	D Coy	PRINCE RUPERT		Officers Mess and Armoury (1937)	96,000. Plus land 2,000.	2,300.	3,620.	
39	152 Coy RCASC	ABBOTSFORD		3 Wartime Huts (1943)	45,000.	3,200.	3,320.	DOT Land
40	155 Coy RCASC	VICTORIA	See Serial 13					

Page (iii)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

BRITISH COLUMBIA AREA (Cont'd)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
41	156 Coy RCASC	VANCOUVER		8 Misc Bldgs (1938)	669,000.			Power and Water contracts cover all Bldgs
42	24 Med Coy	VANCOUVER	See Serial 36					
43	61 Dent Unit	VANCOUVER	See Serial 36					
44	8 Ord Bn	VANCOUVER	See Serial 41					
45	8 Tech Regt	VANCOUVER	See Serial 41					
46	40 Tech Sqn	VICTORIA	See Serial 13					
47	8 Pro Coy	VANCOUVER	See Serial 41					
48	4 Int Trg Coy	VANCOUVER	See Serial 36					
49	APIS	VICTORIA	See Serial 13					
50	111 MAN DEP	VANCOUVER	See Serial 41					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

ALBERTA AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	22 MIL GP HQ	CALGARY	See Serial 10					
2	23 MIL GP HQ	EDMONTON	See Serial 21					
3	SALH	MEDICINE HAT	1,698.10	Armoury 6 Misc Bldgs Offrs Mess	18,884. 90,000.	5,500.	6,815.	Land donated, leased to city Former wartime hut
4	2 Tps C Sqn	BOW ISLAND	1,800.	Store		600.	1,189.	
5	19 D	EDMONTON		Armoury (1911)	120,000. Plus land 6,000.	2,650.	3,620.	
6	Tp	CAMROSE	1,200.	Agriculture Hall		9.		
7	Tp	FORT SASKATCHEWAN	1,200.	Legion Hall				
8	D Sqn	WETASKAWIN	Land 1.	2 Wartime Huts		4,800.	7,240.	
9	Tp	DEVON	1,200.	Legion Hall				
10	KO CALG R	CALGARY		2 Misc Bldgs & Armoury (1916)	317,000.	27,400.	32,402.	Land donated
11	A Sqn	GLEICHEN	600.	Masonic Hall		600.	1,535.	
12	Tp	STRATHMORE		Armoury (1953)	117,000. Plus land 1.	2,000.	2,715.	
13	C Sqn	RED DEER		Armoury (1941)	170,000. Plus land 9,500.	7,200.	11,098.	
14	Tp	OLDS		Armoury (1952)	114,000. Plus land 1.	3,300.	2,715.	
15	Tp	INNISFAIL		Armoury	10,000. Plus land 2,000.	1,400.	2,220.	
16	18 Fd Regt	LETHBRIDGE		4 Misc Bldgs	93,000.	5,900.	7,363.	D.O.T. Land
17	93 Fd Bty	FORT MACLEOD		3 Misc Bldgs (1942)	32,000.	10,600.	3,520	Building on airport site
18	19 Med Regt	CALGARY	See Serial 10					
19	23 Med Bty	BANFF	Free	Laundry		2,100.	3,620.	
20	78 Med Bty	RED DEER	See Serial 13					

Page (v)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

ALBERTA AREA (Continued)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	20 Med Regt	EDMONTON		1 Misc Bldg Armoury (1913)	795,000. Plus land 71,543.	3,150.	45,080.	
22	Tp	BEAUMONT	1,500.	Community Hall				
23	HQ 8 Fd Engr Regt	LETHBRIDGE		2 Misc Bldgs	73,000.	4,920.	3,520.	
24	25 Fd Sqn	EDMONTON	See Serial 21					
25	13 Fd Sqn	BROOKS		Armoury	15,000.	800.	1,981.	Bldg & Land bought 1961
26	Tp	CALGARY	See Serial 62					
27	Tp	BASSANO		Armoury	1,000.	1,420.	1,585.	Bldg & Land bought 1962
28	17 Fd Sqn	CRANBROOK KIMBERLEY		Armoury 100F Hall Garage	13,000.	3,100. 1,300.	3,520. 2,302.	Bldg & Land bought 1939
29	Tp	CRESTON	1,800.	Plywood Bldg		1,500.	1,500.	
30	33 Fd Sqn	LETHBRIDGE	See Serial 23					
31	7 Indep Sig Sqn	CALGARY	See Serial 10					
32	8 Indep Sig Sqn	EDMONTON	See Serial 21					
33	CALG HIGHRS	CALGARY	See Serial 10					
34	A Coy	VULCAN		Armoury (1949) garage	45,200. Plus land 1.	3,200.	3,520.	
35	C Coy	DRUMHELLER	3,600.	Memorial Hall		1,100.	6,040.	
36	D Coy	HANNA	900.	Memorial Hall				
37	Pl.	DELIA	500.	Legion Hall				
38	L EDMN R	EDMONTON	See Serial 21					
39	A Coy	VERMILLION	Land 1.	Armoury (1953)	70,000.	1,290.	3,620.	
40	Pl	VEGREVILLE		Armoury (1954)	139,950.	1,690.	3,620.	Land donated

PRESENT MILITIA ORDER OF BATTLE BY AREAS

ALBERTA AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
41	D Coy	GRANDE PRAIRIE	Land 800.	2 Wartime Huts (1943)	77,000.	3,750.	6,790.	
42	MG P1	DAWSON CREEK		Bldg No 16 (1946)	20,000.	5,950.	1,245.	
43	A Tk P1	PEACE RIVER	1,020.	Arena				
44	E Coy	FT SMITH NWT	1,000.	Forestry Warehouse		400.	3,170.	Rental paid by N.A. & N.R.
45	YUKON R	WHITEHORSE YT		Drill Hall (1946)	20,430.	7,350.	1,245.	
46	HQ 7 Colm RCASC	CALGARY	See Serial 10					
47	150 Coy RCASC	CALGARY	See Serial 10					
48	151 Coy RCASC	RED DEER	See Serial 13					
49	153 Coy RCASC	HIGH RIVER		Garage	26,000.	1,180.	1,868.	Bldg & Land bought 1954
50	2 PLo	MEDICINE HAT	See Serial 3					
51	154 Coy RCASC	EDMONTON	See Serial 21					
52	ALTA Det of WEST COMD Advisory Staff	EDMONTON						
53	21 Med Coy	CALGARY	See Serial 10					
54	22 Med Coy	PONOKA		Armoury & garage	28,000.	1,650.	3,620.	Land donated
55	23 Med Coy	EDMONTON	See Serial 10					
56	ALTA Det of WEST COMD Dent Advisory Staff	CALGARY						
57	59 Dent Unit	CALGARY	See Serial 10					
58	60 Dent Unit	EDMONTON	See Serial 21					
59	6 Ord Coy	CALGARY	See Serial 10					
60	7 Ord Bn	EDMONTON	See Serial 21					
61	38 Tech Sqn	EDMONTON		Armoury	254,000.	4,900.	6,790.	Land & Bldg bought 1955
62	A Sqn 9 Tech Regt	CALGARY		Armoury (1960)	500,000. Plus land 93,500.	5,500.	6,800.	

Page (vii)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

ALBERTA AREA (Continued)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
63	31 Tech Sqn	BLAIREMORE	1,500.	Cafe (1942) Armoury & garage	14,500. Plus land 3,300.	1,700.	3,620.	
64	32 Tech Sqn	LETHBRIDGE	See Serial 16					
65	14 Pro Coy	CALGARY	See Serial 10					
66	15 Pro Coy	EDMONTON	See Serial 21					
67	6 Int Trg Coy	EDMONTON	See Serial 21					
68	WESTERN COMMAND Ch Unit	EDMONTON	See Serial 21					
69	WESTERN COMMAND PSU	EDMONTON	See Serial 21					
70	110 MAN DEP	CALGARY	See Serial 10					
71	116 MAN DEP	EDMONTON	See Serial 21					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

SASK, AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	20 MIL GP HQ	REGINA	See Serial 11					
2	21 MIL GP HQ	SASKATOON	See Serial 26					
3	SASK D	MOOSE JAW		Armoury (1913)	105,974.	12,200.	7,122.	Land donated
4	14 H	SWIFT CURRENT		Armoury (1955)	302,396. Plus land 1,000.	4,675.	7,040.	
5	B Sqn	MAPLE CREEK		Armoury (1913)	28,041.	2,510.	4,965.	Land donated.
6	C Sqn	SHAUNAVON	1,080.	Legion Hall				
7	53 Fd Regt	Yorkton		Armoury (1938)	28,500.	2,690.	6,840.	
8	B Tp 64 Fd Bty	KAMSACK		Armoury (1953)	28,500. Plus land 601.	895.	768.	
9	162 Fd Bty	MELVILLE	2,700.	Store & garage		451.		
10	B Tp 202 Fd Bty	CANORA	1,200.	Legion Hall				
11	10 Fd Regt	REGINA		Armoury (1928) garage	350,000.	13,418.	31,751.	Land donated
12	65 Fd Bty	GRENFELL		Armoury (1953)	118,900. Plus land 1,000.	1,850.	3,270.	
13	76 Fd Bty	INDIAN HEAD		Armoury (1913)	14,913.	1,035.	1,535.	Land donated
14	K Tp 76 Fd Bty	MOOSOMIN		Armoury (1913)	13,155.	Leased to per yr. 600.	Town for 1. DND rents for	Land donated
15	21 Indep Med Bty	SASKATOON	See Serial 26					
16	44 Indep Med Bty	PRINCE ALBERT		Armoury (1914)	105,000.	12,675.	6,811.	Land donated
17	14 Fd Sqn	REGINA	See Serial 11					
18	2 Indep Sig Sqn	REGINA	See Serial 11					
19	Op Tp	SASKATOON	See Serial 26					
20	REGINA RIF	REGINA	See Serial 11					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

SASK AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	B Coy	FT QU'APPELLE	990.	Community Hall				
22	1 N SASK R	PRINCE ALBERT	See Serial 16					
23	A Coy	NORTH BATTLEFORD		Armoury (1914) & garage	30,000.	6,450.	3,158.	Land donated
24	B Coy	MELFORT	2,400. Free	Agriculture Hall Post Office				
25	C Coy	LLOYDMINSTER		Stable (1908)	1,500.	1,685.	768.	
26	2 N SASK R	SASKATOON		Armoury (1960)	462,626.	6,600.	9,315.	
27	C Coy	ROSETOWN	120. 1,440.	Garage Legion Hall				
28	D Coy	KINDERSLEY	1,440.	Community Hall				
29	S SASK R	ESTEVAN	180.	Garage 4 Misc Bldgs (1942)	3,300.	2,700.	5,500.	DOT Land
30	A Coy	WEYBURN	109. 2,400.	Garage Legion Hall			768.	
31	142 Coy RCASC	REGINA	See Serial 11					
32	Tpt Pl	MOOSE JAW	See Serial 3					
33	19 Med Coy	REGINA	See Serial 11					
34	2 Pls	MOOSE JAW	See Serial 3					
35	20 Med Coy	SASKATOON	See Serial 26					
36	SASK AREA Det of WESTERN COMMAND Med Advisory Staff	SASKATOON	See Serial 26					
37	58 Dent Unit	REGINA	See Serial 11					
38	5 Ord Coy	REGINA	See Serial 11					
39	37 Tech Sqn	SASKATOON	See Serial 26					
40	Rec Tp	RADISSON	420.	Community Hall				
41	109 MAN DEP	REGINA	See Serial 11					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

MANITOBA AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	19 MIL GP HQ	WINNIPEG		2 Misc Bldgs				
2	FGH	WINNIPEG	See Serial 9					
3	12 D	VIRDEN		Armoury	14,450. Plus land 6,000.	2,300.	3,620.	
4	A Sqn	MINNEDOSA		Armoury (1912) garage	24,500.	2,000.	2,377.	
5	C Sqn	NEEPAWA		Drill Hall (1942)	112,410.	4,000.	8,376.	
6	26 Fd Regt (SP)	BRANDON		Armoury (1906)	76,452. Plus land 3,900.	4,500.	13,563.	
7	38 Fd Bty	PORTAGE LA PRAIRIE		Indoor Range (1911) Armoury (1942)	78,233. 35,178. Plus land 6,500.	4,500.	7,519.	
8	70 Fd Bty	DAUPHIN		Drill Hall (1941)	132,792.	4,100.	8,510.	
9	39 Fd Reg (SP)	WINNIPEG		Armoury (1914) garage	519,592. Plus land 125,000.	29,500.	57,219.	
10	D Tp 17 Fd Bty	EMERSON	2,700.	Town Hall				
11	6 Fd Engr Regt	WINNIPEG	See Serial 9	(Trg area for Wpg Engr units is based at Pinawa Dam for 500. per year)				
12	12 Fd Sqn	WINNIPEG	See Serial 9					
13	21 Fd Sqn	FLIN FLON		Quonset Hut (1956)	197,159.	4,500.	3,170.	
14	46 Fd Sqn	PINE FALLS	Land 275.	Quonset Hut (1954)	56,375.	2,600.	2,377.	
15	10 Indep Sig Sqn	WINNIPEG	See Serial 9					
16	R WPG RIF	WINNIPEG	See Serial 9					
17	WPG GREN	WINNIPEG	See Serial 9					
18	CAMERONS OF C	WINNIPEG	See Serial					
19	HQ 6 Colm RCASC	WINNIPEG		Armoury (1915) garage	153,000. Plus land 18,897.	22,000.	21,794.	
20	140 Coy RCASC	WINNIPEG	See Serial 19					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

MANITOBA AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	141 Coy RCASC	BRANDON	See Serial 6					
22	143 Coy RCASC	WINNIPEG	See Serial 19					
23	MAN AREA DET of WESTERN COMMAND Med Advisory Staff	WINNIPEG	See Serial 9					
24	18 Med Coy	WINNIPEG	See Serial 9					
25	MAN AREA Det of WESTERN COMMAND Dent Advisory Staff	WINNIPEG	See Serial 9					
26	57 Dent Unit	WINNIPEG	See Serial 9					
27	6 Ord Bn	WINNIPEG	See Serial 9					
28	7 Tech Regt	WINNIPEG	See Serial 9					
29	13 Pro Coy	WINNIPEG	See Serial 19					
30	5 Int Trg Coy	WINNIPEG	See Serial 19					
31	108 MAN DEP	WINNIPEG	See Serial 9					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

WEST ONT AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	18 MIL GP HQ	LONDON	See Serial 17					
2	26 MIL GP HQ	WINDSOR	See Serial 40					
3	1 H	LONDON		Armoury (1905)	199,325. Plus land 26,250.	8,450.	14,200.	
4	WINDSOR R	WINDSOR		Armoury (1907)	60,077.	6,900.	15,237.	
5	ELGIN R	ST THOMAS		Armoury (1903)	39,818. Plus land 6,000.	2,000.	4,571.	
6	7 Fd Regt	SARNIA	DPW	Federal Bldg Officers Mess	29,000.	2,000.	3,620.	Owned by DPW purchased 1909
7	12 Fd Bty	LONDON	See serial 3					
8	48 Fd Bty	WATFORD		Armoury (1913)	11,400. Plus land 900.	1,400.	1,902.	
9	11 Fd Regt	GUELPH		Armoury (1910)	145,000.	5,000.	12,745.	
10	1 16 Fd Bty	FERGUS	1,200.	Fair Bldg		710.		
11	21 Fd Regt	WINGHAM	240.	Fire Hall Armoury (1913)	11,168.	2,229.	1,902.	Land donated
12	97 Fd Bty	WALKERTON		Armoury (1908)	22,158. Plus land 125.	1,350.	1,902.	
13	100 Fd Bty	LISTOWEL		Armoury (1915)	18,630.	3,000.	3,620.	Land donated
14	56 Fd Regt	BRANTFORD		Garage Armoury (1906)	15,500. 39,983. Plus land 21,381.	4,147.	10,860.	
15	69 Fd Bty	SIMCOE		Armoury (1914)	29,950. Plus land 6,400.	2,832.	4,571.	
16	169 Fd Bty	PARIS		Armoury	4,000.	2,600.	1,902.	Purchased 1910
17	11 Fd Engr Regt	LONDON		9 Misc Bldg (1940)	114,000.			
18	7 Fd Sqn	LONDON	See serial 17					
19	11 Fd Sqn	SARNIA	See serial 6					
20	48 Fd Sqn	KITCHENER		4 Wartime bldgs (1942)	80,000. Plus land 11,062.	6,000.	9,732.	

PRESENT MILITIA ORDER OF BATTLE BY AREAS

SASK. AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	9 Sig Regt	LONDON	See serial 17					
22	3 RCR	LONDON	See serial 3					
23	A & B Coys	WOODSTOCK		Armoury (1906)	75,000. Plus land 6, 000.	2,850.	7,240.	
24	1 Pl	INGERSOL	DPW no rent	Federal Bldg				Owned by DPW
25	PERTH R	STRATFORD		Armoury (1908)	75,675. Plus land 8,100.	6,200.	5,522.	
26	Sp Coy	ST MARY'S		Former Post Office (1906)	33,344. Plus land 2,300.	1,000.	1,902.	
27	HLI OF C	GALT		Armoury (1914)	61,246.	3,000.	3,620.	Land donated
28	1 E & K SCOT	WINDSOR	See serial 4					
29	D Coy	LEMINGTON	300.00	Dance Hall				
30	2 E &K SCOT	CHATHAM		Armoury (1905)	66,789.	4,000.	7,240.	Purchased 1907
31	D Coy	WALLACEBURG		Armoury	35,000.	1,500.	2,790.	
32	SF OF C	KITCHENER	22,338.	Office Bldg	65,000.	2,800.	3,620.	
33	4 Colm RCASC	LONDON		Armoury & garage		5,480.	3,170.	
34	137 Coy RCASC	KITCHENER	See serial 20					
35	12 Med Coy	KITCHENER	See serial 32					
36	15 Med Coy	LONDON	See serial 17					
37	WEST ONT AREA DET of CENTRAL COMMAND Med Advisory Staff	LONDON	See serial 17					
38	55 Dent Unit	LONDON	See serial 17					
39	5 Ord Bn	LONDON	See serial 17					
40	39 Tech Sqn	WINDSOR	12,800.	Factory		666.	3,620.	
41	6 Pro Coy	LONDON	See serial 33					
42	C, D & G Secs	GUELPH	See serial 9					
43	107 MAN DEP	LONDON	See serial 17					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

CENT ONT AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	14 MIL GP HQ	TORONTO	See Serial 24					
2	15 MIL GP HQ	TORONTO	See Serial 24					
3	16 MIL GP HQ	TORONTO	See Serial 24					
4	17 MIL GP HQ	DUNDAS	See Serial 23					
5	GGHG	TORONTO		Armoury (1961)	898,294.	13,500.	24,454.	
6	GREY & SIM FOR	OWEN SOUND		Armoury (1952)	325,277. Plus land 1.	4,000.	6,290.	
7	Tp	DURHAM		Armoury (1909)	20,500. Plus land 250.	800.	3,620.	
8	Tp	COLLINGWOOD	2,100.	Factory				
9	B Sqn	BARRIE		Armoury (1914)	54,000. Plus land 1.	5,000.	7,360.	
10	C Sqn	MIDLAND		Armoury (1953)	255,107. Plus land 5,324.	2,900.	6,473.	
11	Tp	ORILLIA		Armoury (1914)	24,000. Plus land 1.	2,350.	3,620.	
12	ONT R	OSHAWA	1. for land	3 Misc Bldgs (1941) Armoury (1914)	13,000. 35,066. Plus land 3,500.	1,350. 4,300.	3,980. 6,790.	
13	QY RANG	FT YORK TORONTO	Land 1.	Armoury (1934)	368,334.	32,000.	41,372.	
14	B Sqn	NEWMARKET	22,500.	Old York Manor				
15	C Sqn	AURORA		Armoury (1874)	9,000.	2,300.	2,853.	Land donated
16	ALQ R	NORTH BAY		7 Misc Bldgs (1942)	42,000. Plus land 62,960.	13,900.	16,960.	
17	A Sqn	KAPUSKASING	DOT no rent	H Hut		2,650.	2,853.	Owned by DOT
18	B Sqn	VIRGINIATOWN	1,500.	Commuhity Hall				
19	Tp	KIRKLAND LAKE	DRW	Post Office		178.		
20	C Sqn	HAILEYBURY		Former Arena (1913)	82,000.	3,000.	3,170.	Land donated

PRESENT MILITIA ORDER OF BATTLE BY AREAS

CENT ONT AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	D Sqn	TIMMINS		Hockey Arena	35,000.	5,200.	3,170.	Purchases 1952
22	8 Fd Regt	HAMILTON		Armoury (1904) & Annex	572,000. Plus land 46,999.	20,000.	44,542.	
23	102 Fd Bty	DUNDAS		Armoury (1935)	41,290.	3,100.	6,910.	Land donated
24	29 Fd Regt (SP)	TORONTO	135,000.	Bradshaw Bldg		12,000.	25,440.	Shared with CA(R)
25	44 Fd Regt	ST CATHARINES		Armoury (1905)	105,109. Plus land 1,200.	5,000.	10,230.	
26	49 Fd Regt	SAULT STE MARIE		Armoury (1952)	1,189,505.	16,000.	40,770.	Land donated
27	57 Fd Regt	WELLAND	Land 1.	Former Commissary (1947)	54,140.	5,300.	6,790.	
28	171 Fd Bty	FORT ERIE	13,420.	Factory			3,620.	
29	172 Fd Bty	NIAGARA FALLS		Armoury (1910)	44,000. Plus land 2,700.	4,350.	6,910.	
30	58 Fd Regt	SUDBURY	5,400.	Hall		650.	3,620.	
31	40 Med Regt	KENORA	1.	School Former Prov Jail	63,000. (1920)	2,300.	3,620.	
32	118 Med Bty	PORT ARTHUR		Armoury (1914) Garage	150,057. Plus land 19,000.	16,000.	14,720.	
33	121 Med Bty	FORT FRANCIS		Armoury (1950)	23,000. Plus land 3,500.	800.	1,427.	
34	42 Med Regt	TORONTO		Groceteria	335,000.	10,000.	18,080.	Purchased 1949
35	1 Loc Regt	TORONTO	See Serial 34					
36	TORONTO Arty Mil Band	TORONTO	See Serial 34					
37	2 Fd Engr Regt	TORONTO	See Serial 13					
38	8 Fd Sqn	NORTH BAY	See Serial 16					
39	18 Fd Sqn	HAMILTON	See Serial 22					
40	2 Sig Regt	TORONTO		Armoury	231,000.	6,300.	21,810.	Purchased 1918

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
41	2 Sig Sqn	LAKEVIEW PORT CREDIT	10,000.	Cdn Arsenals Bldg		2,133.	3,620.	
42	8 Sig Regt	TORONTO	See Serial 40					
43	1 Indep Sig Sqn	HAMILTON	See Serial 22					
44	3 QOR OF C	TORONTO	See Serial 24					
45	R REGT C	TORONTO	See Serial 13					
46	RHLI	HAMILTON	See Serial 22					
47	A Coy	ANCASTER	1,200.	Valley Hall				
48	B Coy	WATERDOWN	1,500.	Community Hall				
49	LINC & WELLD R	ST CATHARINES	See Serial 25					
50	A Coy	NIAGARA-ON-THE-LAKE		Bldg No 3 (1760)	20,500.			
51	B Coy	WELLAND	See Serial 27					
52	C Coy	FORT ERIE	See Serial 28					
53	D Coy	NIAGARA FALLS	See Serial 29					
54	LORNE SCOTS	BRAMPTON		Armoury (1915) & Annex	21,365. Plus land 6,000.	2,200.	3,620.	
55	A Coy	(Long Branch) PORT CREDIT	See Serial 41					
56	B Coy	OAKVILLE		Armoury & garage	35,000.	1,600.	1,902.	Purchased 1949
57	C Coy	GEORGETOWN		Armoury (1890)	22,000.	2,000.	1,902.	
58	P1	MILTON		Former Church	670.	850.	1,902.	Purchased 1892
59	D Coy	ORANGEVILLE		Former Church	11,000.	1,800.	3,620.	Purchased 1952
60	48 HIGHRS	TORONTO	See Serial 13					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

CENT ONT AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
61	A & SH OF C	HAMILTON	See Serial 22					
62	D Coy	GRIMSBY	11,460.	Office & Warehouse		198.		
63	LAKE SUP SCOT R	PORT ARTHUR	See Serial 32					
64	A Coy	FORT WILLIAM	800.	Lodge Hall				
65	C Coy	ATIKOKAN	DPW no rent	Federal Bldg				
66	D Coy	TERRACE BAY	Lease terminated Oct 63					
67	TOR SCOT R	TORONTO	See Serial 13					
68	1R RC	TORONTO	See Serial 13					
69	5 Colm RCASC	TORONTO	See Serial 5					
70	P1	OWEN SOUND	See Serial 6					
71	133 Coy RCASC	HAMILTON	29,860.40	Factory		6,500.	22,150.	
72	138 Coy RCASC	PORT ARTHUR	See Serial 32					
73	CENTRAL ONT Det of CENTRAL COMMAND Med Advisory Staff	OAKVILLE	See Serial 56					
74	13 Med Coy	OWEN SOUND	See Serial 6					
75	16 Med Coy	HAMILTON	See Serial 22					
76	17 Med Coy	PORT ARTHUR	See Serial 32					
77	26 Med Coy	TORONTO	See Serial 24					
78	CENTRAL AREA Det of CENTRAL COMMAND Dent Advisory Staff	OAKVILLE	See Serial 56					
79	56 Dent Unit	TORONTO	See Serial 24					
80	4 Ord Bn	TORONTO	See Serial 24					
81	4 Ord Coy	HAMILTON	See Serial 71					
82	4 Tech Regt	TORONTO	See Serial 34					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

CENT ONT AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
83	5 Tech Regt	HAMILTON	See Serial 71					
84	30 Tech Sqn	ST CATHARINES		Warehouse	80,000.	800.	7,360.	Purchased 1952
85	33 Tech Sqn	SUDBURY	5,500.	Factory		2,600.	3,470.	
86	2 Tps	ESPANOLA	600.	Community Hall				
87	34 Tech Sqn	SAULT STE MARIE	See Serial 26					
88	35 Tech Sqn	PORT ARTHUR	See Serial 32					
89	2 Pro Coy	TORONTO	See Serial 24					
90	G & H Secs	CAMP BORDEN		C Pro C School				Shared with CA(R)
91	2 Int Trg Coy	TORONTO	See Serial 24					
92	CENTRAL COMMAND Ch Unit	TORONTO	No accn required					
93	CENTRAL COMMAND PSU	TORONTO	See Serial 24					
94	106 MAN DEP	TORONTO	See Serial 24					
95	115 MAN DEP	PORT ARTHUR	See Serial 32					

Page (xix)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

EAST ONT AREA

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	12 MIL GP HQ	OTTAWA	Nil	Office Bldg	(Rent paid by DPW to Crain)			
2	13 MIL GP HQ	PETERBOROUGH	See Serial 11					
3	4 PLDG	OTTAWA	15,000.	Office Bldg		4,500.	11,840.	
4	C Sqn	PRESCOTT	4,800.	High School		300.	2,762.	
5	D Sqn	SMITH'S FALLS		Former Factory	28,000.	3,050.	2,762.	Purchased 1950
6	3 Indep Med Bty	GANANOQUE		Armoury (1913)	14,580. Plus land 2,500.	2,400.	3,520.	
7	33 Med Regt	COBOURG		Armoury (1905)	57,526. Plus land 7,050.	7,750.	3,620.	
8	47 Med Bty	NAPANEE		Armoury (1915)	48,151. Plus land 101.	9,550.	3,620.	
9	30 Fd Regt	OTTAWA	9,720.	Parish Hall		1,530.	3,520.	
10	Tp	KEMPTVILLE		Armoury (1914)	11,800.	2,030.	2,762.	Land donated
11	50 Fd Regt	PETERBOROUGH		Armoury (1909)	169,000. Plus land 10,000.	12,700.	12,280.	
12	45 Fd Bty	LINDSAY		Armoury (1914)	35,000. Plus land 2,100.	5,700.	3,620.	
13	3 Fd Sqn	OTTAWA		Quonset Hut (1952)	44,200.	3,150.		
14	55 Fd Sqn	KINGSTON	See Serial 17					
15	3 Sig Regt	OTTAWA		Former School	115,000.	6,100.	12,198.	Purchased 1951
16	GGFG	OTTAWA		Armoury (1879)	30,608.	9,600.	22,580.	
17	PWOR	KINGSTON		Militia Trg Bldg Armoury (1871)	792,000.	13,850.	12,745.	
18	HAST & PER	BELLEVILLE		Armoury (1909)	135,511. Plus land 19,000.	10,000.	7,090.	
19	A Coy	TRENTON		"H" Hut (1946)	15,000. Plus land 2.	2,235.	1,387.	
20	B Coy	MADOC		Armoury (1914)	16,800. Plus land 475.	4,450.	3,620.	

PRESENT MILITIA ORDER OF BATTLE BY AREAS

EAST ONT AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	5 Pl	NORWOOD		Armoury (1913)	8,500.	700.	793.	Garage at Campbellford rented for 60. per yr for Norwood pers.
22	C Coy	PORT HOPE	Land 1.	"H" Hut (1947)	18,000.	2,500.	2,790.	
23	7 Pl	MILLBROOK		Armoury (1914)	11,431. Plus land 501.	2,300.	793.	
24	D Coy	PICTON		Armoury (1914)	64,470. Plus land 1,503.	10,400.	5,998.	
25	BROCK RIF	BROCKVILLE		Armoury (1902)	59,898.	5,000.	9,232.	Land donated
26	L&R SCOT R	PEMBROKE		Armoury (1914)	43,202. Plus land 451.	6,000.	6,132.	
27	A Coy	RENFREW		Armoury (1914)	34,913. Plus land 2.	5,300.	6,282.	
28	C Coy	CARLETON PLACE		Armoury (1952)	92,389. Plus land 1.	2,400.	2,762.	
29	D Coy	PERTH		Armoury	6,231.	2,000.	2,762.	Purchased 1935
30	SD&G HIGHRS	CORNWALL		Armoury (1938)	235,000. Plus land 8,000.	6,300.	11,637.	
31	D Coy	ALEXANDRIA		Armoury	17,500.	3,140.	2,762.	Land donated
32	CH OF O	OTTAWA	See Serial 16					
33	130 Coy RCASC	OTTAWA		Admin Bldg	203,000.	17,000.	26,675.	Purchased 1943
34	D Pl	KINGSTON	See Serial 17					
35	EAST ONT AREA of CENTRAL COMMAND Med Advisory Staff	PETERBOROUGH	No accn allocated					
36	9 Med Coy	CORNWALL	See Serial 30					
37	10 Med Coy	OTTAWA	See Serial 33					
38	11 Med Coy	KINGSTON	See Serial 17					
39	EAST ONT AREA of CENTRAL COMMAND Dent Advisory Staff	OTTAWA	See Serial 1					

Page (xxi)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

EAST ONT AREA (Continued)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
40	54 Dent Unit	OTTAWA	See Serial 33					
41	3 Ord Coy	OTTAWA	See Serial 33					
42	28 Tech Sqn	PETERBOROUGH	See Serial 11					
43	113 MAN DEP	OTTAWA	See Serial 33					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

QUEBEC COMMAND

(LESS EAST QUE AREA)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	9 MIL GP HQ	SHERBROOKE		Factory	75,000.	4,328.	7,080.	Purchased 1951
2	10 MIL GP HQ	MONTREAL		Hospital	Exchange	9,715.	11,207.	Exchange of property in 1948
3	11 MIL GP HQ	THREE RIVERS		Convent	285,000.	4,710.	14,160.	Purchased 1952
4	SHER R	SHERBROOKE		Court House	10,000.	19,022.	11,582.	Purchased 1912
5	7/11H	RICHMOND	1,440.	Storage		390.	464.	
6	A Sqn	ASBESTOS	4,200.	Garage		2,290.	1,485.	
7	A Sqn	DANVILLE	600.	Town Hall		240.		
8	B Sqn	WINDSOR MILLS	1,980.	Armoury		1,975.	2,640.	
9	C Sqn	BURY	7,200	Garage Armoury	11,750. Plus land 500.	2,895.	3,420.	Garage at Sawyerville rented 120. per yr for this sqn
10	TRR	THREE RIVERS		Armoury (1907)	63,687.	9,035.	10,602.	Land donated
11	RHC	MONTREAL		Armoury (1934)	217,229. Plus land 1.	18,690.	13,292.	
12	A Sqn	ST. JEAN	See Serial 35					
13	B Sqn	LONGUEUIL		Drill Hall (1940)	40,000.	9,070.		Owned by N.A & N.R.
14	R DE HULL	HULL		Drill Hall (1938)	234,800. Plus land 10,000.	13,400.	16,120.	
15	27 Fd Regt	COWANSVILLE	2,100.	Armoury Former Church	6,800.	1,330. 1,630.	10,650.	Purchased 1929
16	24 Fd Bty	GRANBY	3,000.	Drill Hall		4,090.	3,420.	
17	35 Fd Bty	FARNHAM		Drill Hall	248,457.	20,745.	10,080.	
18	34 Fd Regt	MONTREAL	1. land	Armoury (1883)	250,116	20,620.	13,062.	Land leased from city
19	37 Fd Regt	MONTREAL	See Serial 18					
20	131 Fd Bty	LACHUTE	1,200. 1,620.	Town Hall Factory Bldg		1,415.	1,115.	

Page (xxiii)

PRESENT MILITIA ORDER OF BATTLE BY AREAS
QUEBEC COMMAND (Continued)
(LESS EAST QUE AREA)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	46 Fd Regt	DRUMMONDVILLE		Armoury (1953)	307,811. Plus land 11,500.	5,310.	5,647.	
22	72 Fd Bty	COATICOOK		Armoury (1915)	33,407.	2,750.	5,780.	Land donated
23	73 Fd Bty	VICTORIAVILLE	1.	Hangar		8,020.	8,077.	
24	62 Fd Regt	SHAWINIGAN		Armoury (1952)	322,197. Plus land 25,000.	6,342.	5,647.	
25	2 Med Regt	MONTREAL	See Serial 18					
26	3 Loc Bty	MONTREAL	See Serial 18					
27	3 Fd Engr Regt	WESTMOUNT		Armoury	140,000.	9,072.	14,168.	Purchased 1921
28	9 Fd Sqn	NORANDA	Land 2. 300.	Former Church Recreation Center	42,500.	3,335.	7,627.	
29	11 Sig Regt	WESTMOUNT	See Serial 27					
30	15 Indep Sig Sqn	THREE RIVERS	See Serial 3					
31	CGG	MONTREAL		Armoury (1913)	144,726.	14,140.	13,480.	Land donated
32	VRC	MONTREAL	240.	Garage Armoury	198,676.	9,935.	6,840.	Purchased 1943
33	3 RHC	MONTREAL		Armoury (1923)	58,430.	20,450.	11,607.	
34	4 R22eR	MONTREAL		Armoury	190,000.	6,495.	6,840.	Purchased 1932
35	A Coy	ST JEAN		Armoury		R.C.A.F.	1,485.	Bldg on RCAF Land
36	D Coy	VALLEYFIELD	5,500.	Commerical Bldg		3,255.	2,970.	
37	6 R22eR	ST HYACINTHE		Armoury (1906)	73,139 . Plus land 7,500.	6,635.	10,167.	
38	A Coy	ACTON VALE	1,500.	Recreation Hall				
39	D Coy	TRACY	4,998.	Dormitory		4,215.	2,227.	
40	FUS MR	MONTREAL	180.	Garage Armoury	50,000.	15,800.	11,507.	Purchased 1911

PRESENT MILITIA ORDER OF BATTLE BY AREAS
QUEBEC COMMAND (Continued)
(LESS EAST QUE AREA)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
41	R DE JOL	JOLIETTE	6,000.	Warehouse Drill Hall (1912)	16,858. Plus land 400.	700. 4,680.	2,227. 2,227.	
42	B Coy	ST PAUL L'ERMITE	2,400. 2.	Hostel Garage		1,135.	1,485.	
43	C Coy	L'EPIPHANIE	6,300.	Community Centre				
44	D Coy	ST JEROME		2 Misc Bldgs & Armoury (1942)	47,178. Plus land 5,725.	8,940.	5,780.	
45	R DE MAIS	MONTREAL	See Serial 18					
46	A & B Coy	MONTREAL NORTH		Parish Hall	75,000.	5,725.	5,780.	Purchased 1951
47	FUS DE SHER	SHERBROOKE		Armoury (1908)	99,594. Plus land 5,000.	18,540 .	11,630.	
48	D Coy	MAGOG	3,900.	Office Bldg		1,315.	743.	
49	RMR	MONTREAL	1. for land	Armoury (1925)	170,436.	9,615.	11,670.	Land leased from Westmount
50	D Coy	STE ANNE DE BELLEVUE	4,800.	Drill Hall		660.	1,114.	
51	3 Colm RCASC	MONTREAL		Factory	450,000.	28,685.	12,063.	Purchased 1949
52	1 Med Bn	MONTREAL	DPW	Armoury				
53	8 Med Coy	SHERBROOKE	See Serial 1					
54	53 Dent Unit	MONTREAL	See Serial 52					
55	QUEBEC COMMAND DENT Advisory Staff	MONTREAL	See Serial 52					
56	3 Ord Bn	MONTREAL	See Serial 51					
57	B Coy	STE THERESE (Bouchard)		Bldg No 4	N/A	N/A	N/A	Shared with CA(R)
58	2 Tech Regt	MONTREAL		Factory	158,363.	9,705.	4,905.	Purchased 1948
59	22 Tech Sqn	CAP DE LA MADELEINE		Tank Hangar (1957)	149,849. Plus land 15,341.	6,690.	5,780.	
60	24 Tech Sqn	SHERBROOKE	See Serial 1					

Pgae (xxv)

PRESENT MILITIA ORDER OF BATTLE BY AREAS
QUEBEC COMMAND (Cont'd)
(LESS EAST QUE AREA)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
61	QUEBEC COMMAND Ch Unit	MONTREAL	No accn required					
62	3 Pro Coy	MONTREAL	See Serial 51					
63	101 Pro Pl	DRUMMONDVILLE	See Serial 21					
64	102 Pro Pl	THREE RIVERS	See Serial 3					
65	1 Int Trg Coy	MONTREAL		Drill Hall	30,000.	13,670.	6,840.	
66	QUEBEC COMMAND PSU	MONTREAL	See Serial 65					
67	104 MAN DEP	MONTREAL	See Serial 65					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

EAST QUE AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	6 Fd Regt	QUEBEC		Armoury (1894)	500,000.	26,005.	30,200.	
2	59 Fd Bty	LEVIS		Armoury	68,500.	9,480.	9,127.	Purchased 1957
3	80 Fd Bty	NEW RICHMOND		2 Misc Bldgs	17,000.	2,175.	2,227.	Purchased 1950
4	82 Fd Bty	GASPE		Garage & Barn (1930)	17,600. Plus land 1,000.	1,915.	1,485.	
5	187 Fd Bty	ARVIDA	1800. 800.	Dormitory Legion Hall		4,555.	3,620.	Indoor range rented from city for 960.00 per year.
6	57 Loc Bty	QUEBEC	See serial 1					
7	10 Fd Sqn	QUEBEC		4 Misc Bldgs	296,000.	26,555.	25.555.	
8	15 Fd Sqn	THETFORD MINES	900.	Garage Post Office (1903)	31,000. Plus land 1,800.	3,060.	3,420.	
9	3 Indep Sig Sqn	QUEBEC	See serial 1					
10	RRC	QUEBEC	See serial 1					
11	VOLTIGEURS	QUEBEC	See serial 1					
12	R DU SAG	CHICOUTIMI		4 Misc Bldgs	136,000.	5,085.	5,647.	Purchased 1948
13	B Coy	PORT ALFRED	5,700.	Recreation Centre		45.	1,114.	
14	C Coy	JONQUIERE	1,320.	Garage		850.	1,485.	
15	R DE CHAUD	LEVIS	See serial 2					
16	A Coy	BEAUCEVILLE	4,200.	Recreation Hall		1,785.	1,114.	
17	Pl	ST JOSEPH DE BEAUCE	960.	School				
18	B Coy	LAC MEGANTIC		5 Misc Bldgs (1941)	26,000. Plus land 4,400.	4,880.	3,420.	
19	D Coy	ST GEORGES DE BEAUCE	3,900.	Garage		365.	2,227.	
20	FUS DU ST-L	RIMOUSKI		Armoury (1910)	9,000. Plus land 800.	3,090.	3,420.	

PRESENT MILITIA ORDER OF BATTLE BY AREAS

EAST QUE AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
	FUS DU ST-L (Cont'd)							
21	A Coy	RIVIERE DU LOUP		Armoury (1910)	34,135. Plus land 4,107.	1,965.	3,420.	
22	Pl	CABANO		2 G.P. Huts (1963)	32,850. Plus land 2,550.	195.		
23	B Coy	MONTMAGNY		Old Post Office (1915)	17,000.	2,950.	3,420.	
24	C Coy	MONT JOLY	DPW	Old Post Office		1,440.	1,485.	
25	FUS DU ST-L D Coy	MATANE	7,124.	Arena		530.	1,856.	
26	2 Colm RCASC	QUEBEC	See serial 7					
27	A Coy 2 Ord Bn	BEAUPORT		Armoury (1914)	29,990.	4,995.	3,420.	Land donated
28	25 Tech Sqn	ARVIDA	See serial 5					
29	42 Tech Sqn	QUEBEC	See serial 7					
30	4 Pro Coy	BEAUPORT	See serial 27					
31	7 Med Coy	STE FOY	10,560.	Science Bldg		50.	3,420.	
32	7 MIL GP HQ	STE FOY	See serial 31					
33	8 MIL GP HQ	LEVIS	See serial 1					
34	103 MAN DEP	QUEBEC	See serial 7					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

NB AREA

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	8 CH (M)	SUSSEX		7 Misc Bldgs (1941)	129,000. Plus land 10,000.	20,675.	31,140.	
2	HQ Sqn	HAMPTON	120. 1200. 180.	Masonic Hall Legion Hall Garage		220.		
3	A Sqn	PETITCODIAC	120. 700. 180.	Garage Community Hall Memorial Hall				
4	G Sqn	SACKVILLE	180.	Garage Garage	28,500.	1,960.	3,420.	Purchased 1927
5	3 Fd Regt	SAINT JOHN		Misc Bldgs (1911)	308,000. Plus land 22,944.	22,150.	58,170.	
6	12 Fd Regt	FREDERICTON		Armoury (1871)	50,000.	8,980.	6,430.	
7	89 Fd Bty	WOODSTOCK		Armoury (1909)	54,257. Plus land 10,386.	3,878.	6,090.	
8	1 Fd Sqn	SAINT JOHN	See serial 5					
9	4 Indep Sig Sqn	MONCTON		11 Misc Bldgs (1941)	264,000. Plus land 6,000.	33,758.	43,760.	
10	5 Indep Sig Sqn	SAINT JOHN	See serial 5					
11	6 Indep Sig Sqn	FREDERICTON	See serial 6					
12	1 RNBR	FREDERICTON	See serial 6					
13	HQ Sp & F Coy	SAINT JOHN	See serial 5					
14	B Coy	ST STEPHEN	175. for 7 mos	High School Post Office (1895)	36,150. Plus land 3,000.	1,850.	3,120.	
15	C Coy	GRAND FALLS	2,100.	Bowling Alley		510.	3,420.	
16	1 Pl	PLASTER ROCK	3,000.	Theatre		760.	2,160.	
17	D Coy	EDMUNSTON	5,700.	Store		740.	2,670.	
18	2 RNBR	BATHURST	50. 1,800.	High School Armoury (1885) Kent House	36,000. Plus land 1,000.	3,690. 695.	3,120. 3,120.	

Page (xxix)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

NB AREA (Continued)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
19	2 RNBR (Con'td) Sp Coy	NEWCASTLE		Armoury (1953)	351,749. Plus land 8,400.	6,630.	9,360.	
20	A Coy	CHATHAM		Armoury (1911)	9,500. Plus land 6,000.	2,115.	3,420.	
21	C Coy	CAMPBELLTON		Armoury	25,000.	2,035.	3,420.	Purchased 1910
22	D Coy	DALHOUSIE	5,400.	Fire Hall			1,780.	
23	112 Coy RCASC	SAINT JOHN	See serial 5					
24	113 Coy RCASC	MONCTON	See serial 9					
25	3 Med Coy	MONCTON	See serial 9					
26	4 Med Coy	SAINT JOHN	See serial 5					
27	21 Tech Sqn	MONCTON	See serial 9					
28	51 Dent Unit	SAINT JOHN	See serial 5					
29	5 MIL GP HQ	MONCTON	See serial 9					
30	6 MIL GP HQ	SAINT JOHN	See serial 5					
31	102 MAN DEP	SAINT JOHN	See serial 5					
32	16 Pro Coy	MONCTON	See serial 9					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

NS/PEI AREA

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	2 MIL GP HQ	CHARLOTTETOWN	See Serial 4					
2	3 MIL GP HQ	SYDNEY	See Serial 26					
3	4 MIL GP HQ	HALIFAX	See Serial 7					
4	PEIR	CHARLOTTETOWN		5 Wartime Huts	49,000. Plus land 2,000.		3,620.	
5	B Sqn	MONTAGUE	1,200.	Lodge & Dance Hall		480.	1,930.	
6	C Sqn	SUMMERSIDE		Armoury (1910)	00. Plus land 2,500.	555.	2,815.	
7	HAL RIF	HALIFAX		Armoury (1896)	200,000. Plus land 30,189.	27,135.	30,990.	
8	14 Fd Regt	YARMOUTH		6 Wartime Bldgs (1941)	71,000. Plus land 3,050.	8,380.	20,510.	
9	133 Fd Bty	LIVERPOOL	DPW (nil)	5 Wartime Bldgs Federal Bldg	22,250. Plus land 15,000.	1,795. DPW	3,370. DPW	
10	88 Fd Bty	WINDSOR	4,279.	Civic Bldg				Shared with CA(R)
11	1 Fd Regt	HALIFAX	See Serial 7					
12	87 Fd Bty	EASTERN PASSAGE		5 Wartime Bldgs	125,000.		3,620.	
13	201 Fd Bty	EASTERN PASSAGE						
14	6 Indep Fd Bty	SYDNEY	See Serial 26					
15	5 Fd Engr Regt	HALIFAX		Armoury	55,000.	5,294.	3,670.	Purchased 1952
16	45 Fd Sqn	SYDNEY	See Serial 26					
17	5 Sig Regt	CHARLOTTETOWN		Armoury (1866)	5,700. Plus land 1,500.	13,600.	20,831.	
18	6 Sig Regt	HALIFAX	See Serial 7					
19	PL FUS	HALIFAX	See Serial 7					
20	1 NS HIGHRS	AMHERST		Armoury (1915)	100,000. Plus land 11,000.	4,510.	9,830.	

PRESENT MILITIA ORDER OF BATTLE BY AREAS

NS/PEI AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
21	SP & D Coy	NEW GLASGOW	222. for land	Drill Hall & Adm Bldg Garage	47,800. 53,000.	2,500.	8,675.	Purchased 1960
22	A Coy	PICTOU		Commissary (1940)	28,000. Plus land 2,450.	2,315.	7,910.	
23	B Coy	SPRINGHILL	120.	Garage Armoury (1900)	20,000. Plus land 3.	2,050.	5,930.	
24	C Coy	TRURO		3 Misc Bldgs	47,900. Plus land 5,000.	3,275.	2,970.	
25	E Coy	ANTIGONISH		Legion Hall	13,700.	940.	1,775.	Purchased in 1952
26	2 NS HIGHRS	SYDNEY		10 Wartime Bldgs	187,000.	15,985.	26,750.	
27	A & C Coys	GLACE BAY		Armoury (1953)	371,118. Plus land 3,500.	7,905.	7,190.	
28	B Coy	NORTH SYDNEY		NCO Mess & garage (1941)	76,500. Plus land 1,000.	1,930.	9,065.	
29	WEST NSR	ALDERSHOT		12 Wartime Huts (1940)	140,000.	37,165.	1,395.	
30	B Coy	BRIDGETOWN	3,600.	Community Centre		130.	1,775.	
31	C Coy	DEEP BROOK		H Hut			3,370.	
32	D Coy	BRIDGEWATER		Armoury (1867)	30,000.	1,310.	3,055.	A garage is leased for 120. per year for D Coy pers at New Germany
33	2 Pls	LUNENBURG		Armoury (1912)	50,000. Plus land 1,000.	1,255.	1,775.	
34	Band	MIDDLETON		Armoury (1905)	15,000. Plus land 550.	925.	3,270.	
35	1 Colm RCASC	HALIFAX		4 Misc Bldgs (1905)	85,000.	6,274.	9,730	Part of Citadel complex
36	110 Coy RCASC							
37	Food Svc Pl	CHARLOTTETOWN	See serial 4					
38	Tpt Pl	CHARLOTTETOWN	See serial 4					
39	111 Coy RCASC	SYDNEY	See serial 26					

PRESENT MILITIA ORDER OF BATTLE BY AREAS

NS/PEI AREA (Continued)

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
40	EASTERN COMMAND Med Advisory Staff	HALIFAX	No accn required					
41	2 Med Coy	HALIFAX	See Serial 7					
42	5 Med Coy	CHARLOTTETOWN	See Serial 4					
43	6 Med Coy	SYDNEY	See Serial 26					
44	1 ORD BN A Coy	HALIFAX		2 Wartime Bldgs (1908)	355,000.	180.		
45	20 Tech Sqn	HALIFAX	See Serial 44					
46	EASTERN COMMAND Dent Advisory Staff	HALIFAX	See Serial 44					
47	50 Dent Unit	HALIFAX	See Serial 7					
48	5 Pro C	HALIFAX	See Serial 7					
49	2 Secs	CHARLOTTETOWN	See Serial 4					
50	3 Int Trg Coy	HALIFAX	See Serial 7					
51	EASTERN COMMAND PSU	HALIFAX	See Serial 44					
52	EASTERN COMMAND Ch Unit	HALIFAX	See Serial 44					
53	101 MAN DEP	HALIFAX	See Serial 7					

Page (xxxiii)

PRESENT MILITIA ORDER OF BATTLE BY AREAS

NFLD AREA

Appendix 1
to ANNEX A
of Part II of the Report
of the Commission on
Reorganization of the Militia

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOMMODATION					REMARKS
			RENTED ANNUAL RENT	BUILDING TYPE	ORIGINAL COST	ANNUAL MAINT	COST CIV STAFF	
			$		$	$	$	
1	1 MIL GP HQ	ST JOHN'S		Wartime Bldgs	Unknown	Unknown	Unknown	
2	56 Fd Sqn	ST JOHN'S	See serial 1					
3	R NFLD R	ST JOHN'S	See serial 1					
4	A Coy	CORNERBROOK		Hanger (1941)	49,000. Plus land 1.	5,595.	6,370.	
5	B Coy	GRAND FALLS	Land 2.00	Hanger (1941)	49,000.	6,080.	6,855.	
6	C Coy	BELL ISLAND	3,600. 1,805.	Masonic Hall St Kevin's Hall				
7	2 Pls 111 Coy RCASC	ST JOHN'S	See serial 1					
8	1 Med Coy	ST JOHN'S	See serial 1					
9	Pl	CORNERBROOK	See serial 4					
10	NFLD AREA Det of EASTERN COMMAND Med Advisory Staff	ST JOHN'S	See serial 1					
11	112 MAN DEP	ST JOHN'S	See serial 1					

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

BRITISH COLUMBIA AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	24 MIL GP HQ	VANCOUVER	Disband	SOS or absorbed by units as applicable	Some to be available for new Militia HQ. Remainder returned to HQ BC Area	Unknown
2	25 MIL GP HQ	VICTORIA	Disband	SOS or absorbed by units as applicable	Available for remaining units	Unknown
3	27 MIL GP HQ	VERNON	Disband	SOS or absorbed by units as applicable	Available for combined Command both BCD and RM Rang	Unknown
4	C Sqn BCR	NANAIMO	Relocate with parent unit in VANCOUVER	Absorbed by B Coy Scot R	B Coy C Scot R to retain best accommodation and release surplus	2,500.
5	HQ BCD	KELOWNA	Relocate to VERNON	Absorbed by B Sqn	To be used by B Sqn	Unknown
6	24 Fd Regt	TRAIL	Transfer to Supplementary Order of Battle	Absorbed by 44 Fd Sqn	To be used by 44 Fd Sqn	Unknown
7	111 Fd Bty	NELSON	Transfer to Supplementary Order of Battle	Absorbed by Tp 44 Fd Sqn to be located in NELSON	To be used by Tp 44 Fd Sqn	Nil
8	HQ 7 Fd Engr Regt	VANCOUVER	Transfer to Supplementary Order of Battle	SOS or absorbed by units as applicable	See footnote	See footnote
9	22 Fd Sqn	CHILLIWACK	Transfer to Supplementary Order of Battle	SOS or absorbed by B Coy Western R to be located at ABBOTSFORD	Declare surplus or lease to community	7,170.
10	West Cat Sig Regt less one Sqn	VANCOUVER	One sqn to remain active. Remainder transferred to Supplementary Order of Battle	To form one sqn	To be used by sqn and other units	See footnote
11	5 Area Sig Sqn	VICTORIA	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for remaining units	Unknown
12	C Coy IR FUS of C	POWELL RIVER	Relocate with parent unit in VANCOUVER	SOS	Vacate and return to owner	2,552.
13	D Coy IR FUS of C	PRINCE RUPERT	Relocate with parent unit in VANCOUVER	SOS	Declare surplus or lease to community	5,920.
14	Pl B Coy RM Rang	QUESNEL	Relocate with parent Company in KAMLOOPS	SOS	Vacate and return to owner	900.
15	Pl C Coy RM Rang	ARMSTRONG	Relocate with parent Company in SALMON ARM	Parade at SALMON ARM	Declare surplus or lease to community	2,753.

Page (xxxv)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

BRITISH COLUMBIA AREA (Continued)

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
16	B Coy Westmr R	MISSION	Relocate to ABBOTSFORD	Parade at ABBOTSFORD	Declare surplus or lease to community	4,970.
17	A Coy C Scot R	DUNCAN	Relocate with parent unit in VICTORIA	SOS or parade at NANAIMO or VICTORIA	Vacate and return to owner	6,270.
18	Pl C Coy C Scot R	CAMPBELL RIVER	Relocate with parent company in COURTENAY	SOS	Vacate and return to owner	840.
19	D Coy C Scot R	PORT ALBERNI	Relocate with parent unit in VICTORIA	SOS	Declare surplus or lease to community	12,320.
20	152 Coy RCASC	ABBOTSFORD	Transfer to Supplementary Order of Battle	Absorbed by B Coy Westmr R to be located at ABBOTSFORD	To be used by B Coy Westmr R	Non applicable
21	61 Dent Unit	VANCOUVER	Disband	SOS or absorbed by new organization	See footnote	See footnote
22	8 Tech Regt less one Sqn	VANCOUVER	One sqn to remain active. Remainder transferred to Supplementary Order of Battle	To form one sqn	To be used by sqn and other units	See footnote
23	40 Tech Sqn	VICTORIA	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for remaining units	Unknown
24	APIS	VICTORIA	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for remaining units	Unknown
25	111 Man Dep	VANCOUVER	Disband	SOS except for those fit to to be absorbed by other units	See footnote	See footnote

NOTE: Remaining units in VANCOUVER can be accommodated without the retention of the Shaughnessy property, which should be declared surplus. Shaughnessy accommodation is not the most suitable nor in the best location for a Militia Armoury. Annual reduction in accommodation costs $20,335.

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

ALBERTA AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	22 Mil GP HQ	CALGARRY	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
2	23 Mil GP HQ	EDMONTON	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
3	Two Tps C Sqn SALH	BOW ISLAND	Relocate with Parent unit in MEDICINE HAT	SOS	Vacate and return to owner	3,589
4	Tp 19D	FORT SASKATCHEWAN	Relocate with parent unit in EDMONTON	SOS or parade at EDMONTON	Vacate and return to owner	1,200.
5	Tp D Sqn 19D	DEVON	Relocate with parent squadron at WETASKIWIN	SOS or parade at WETASKIWIN or EDMONTON	Vacate and return to owner	1,200.
6	Tp A Sqn KO Calg R	STRATHMORE	Relocate with parent squadron at STRATHMORE	SOS or parade at CALGARY or GLEICHEN	Declare surplus or lease to community	4,716.
7	C Sqn KO Calg R	RED DEER	Relocate with parent unit at CALGARY	To be absorbed by 78 Fd Bty RED DEER	Retain for use of 78 Fd Bty	Unknown
8	Tp C Sqn KO Calg R	INNISFAIL	Relocate with parent unit at CALGARY	SOS or parade at OLDS	Declare surplus or lease to community	3,620.
9	19 Med Rgt	CALGARY	Transfer to Supplementary Order of Battle	SOS or absorbed by other units in CALGARY	Available for other units	Unknown
10	23 Med Bty	BANFF	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	5,720.
11	Tp	BEAUMONT	Relate with parent unit in EDMONTON	SOS or parade at EDMONTON	Vacate and return to owner	1,500.
12	Tp 13 Fd Sqn	CALGARY	Relocate with parent unit at BROOKS	Absorbed by other units in CALGARY	Declare surplus	12,300.
13	Tp 13 Fd Sqn	BASSANO	Relocate with parent unit at BROOKS	SOS or parade at BROOKS	Declare surplus or lease to community	3,005.
14	Tp 17 Fd Sqn	CRESTON	Relocate with parent unit at KIMBERLEY	SOS	Vacate and return to owner	4,800.
15	OP Tp 8 Indep Sig Sqn	WETASKIWIN	Relocate with parent unit at EDMONTON	To be absorbed by D Sqn 19D WETASKIWIN	Available for D Sqn 19D	Unknown
16	Pl D Coy Calg Highrs	DELIA	Relocate with parent Company at HANNA	Parade at HANNA	Vacate and return to owner	500.
17	Fl A Coy L Edmn R	VEGREVILLE	Relocate with parent Company at VERMILION	SOS	Declare surplus or lease to Community	5,310.

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

ALBERTA AREA (Continued)

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
18	MG Pl L Edmn R	DAWSON CREEK BC	Relocate with parent unit at EDMONTON	SOS	Declare surplus or lease to community	7,195.
19	E Coy L Edmn R	FORT SMITH NWT	Relocate with parent unit at EDMONTON	SOS	Vacate and return to owner	3,570.
20	HQ 7 Colm RCASC	CALGARY	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for other units	Unknown
21	151 Coy RCASC	RED DEER	Transfer to Supplementary Order of Battle	To be absorbed by 78 Fd Bty	To be retained for use of 78 Fd Bty	Unknown
22	153 Coy RCASC	HIGH RIVER	Transfer to Supplementary Order of Battle	Absorbed by Sqn KO Calg R to be located at HIGH RIVER	To be retained for Sqn KO Calg R	Nil
23	Two Pls 153 Coy RCASC RCASC	MEDICINE HAT	Relocate to parent unit at HIGH RIVER and transfer to Supplementary Order of Battle	Nil strength	Non applicable	Nil
24	22 Med Coy	PONOKA	To be transferred to Supplementary Order of Battle	SOS	Declare surplus or lease to community	5,270.
25	Western Command Dent Advisory Staff	EDMONTON	Disband	SOS	Available for other units	Nil
26	59 Dent Unit	CALGARY	Disband	SCS or absorbed by new organization	Available for other units	Nil
27	60 Dent Unit	EDMONTON	Disband	SOS or absorbed by new organization	Available for other units	Nil
28	7 Ord Bn less one Coy	EDMONTON	Transfer to Supplementary Order of Battle	Absorbed by remaining Coy	Retained for remaining Coy	Nil
29	A Sqn Tech Regt	CALGARY	Transfer to Supplementary Order of Battle	Absorbed by other units in CALGARY	To be declared surplus	See Serial 13
30	31 Tech Sqn	BLAIRMORE	Transfer to Supplementary Order of Battle	Absorbed by Engr sub-unit to be located in BLAIRMORE	To be retained	Nil
31	Western Command PSU	EDMONTON	Disband	SOS or absorbed by new organization	Available for other units	Nil
32	110 Man Dep	CALGARY	Disband	SOS except for those fit to be absorbed by other units	To be declared surplus	See Serial 31
33	116 Man Dep	EDMONTON	Disband	SOS except for those fit to be absorbed by other units	Available for other units	Nil

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
SASKATCHEWAN AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	20 MIL GP HQ	REGINA	Disband	SOS or absorbed by other units as applicable	Some to be available for new Militia HQ. Remainder available for other units	Unknown
2	21 MIL GP HQ	SASKATOON	Disband	SOS or absorbed by other units as applicable	Available for other units in SASKATOON	Unknown
3	C Sqn 14H	SHAUNAVON	Relocate with parent unit at SWIFT CURRENT	SOS	Vacate and return to owner	1080.
4	K Tp 65 Fd Bty	MOOSOMIN	Relocate with parent battery at GRENFELL	SOS	To be declared surplus or leased to community	600.
5	B Tp 202 Fd Bty	CANORA	Relocate to YORKTON and transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	1200.
6	21 Indep Med Bty	SASKATOON	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for other units in SASKATOON	Nil
7	OP Tp 2 Indep Sig Sqn	SASKATOON	Relocate with parent unit in REGINA	SOS or absorbed by other units as applicable	Available for other units in SASKATOON	Nil
8	C Coy 2 N Sask R	ROSETOWN	Relocate with parent unit in SASKATOON	SOS	Vacate and return to owner	1560.
9	D Coy 2 N Sask R	KINDERSLEY	Relocate with parent unit in SASKATOON	SOS	Vacate and return to owner	1440.
10	A Coy S Sask R	WEYBURN	Relocate with parent unit in ESTEVAN	SOS	Vacate and return to owner	3277.
11	58 Dent Unit	REGINA	Disband	SOS or absorbed by new organization	Available for other units	Unknown
12	Rec Tp 37 Tech Sqn	RADISSON	Relocate with parent unit in SASKATOON	SOS	Vacate and return to owner	420.
13	109 Man Dep	REGINA	Disband	SOS except those fit to be absorbed by other units	Available for other units in REGINA	Unknown

Page (xxxix)

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

MANITOBA AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	19 MIL GP HQ	WINNIPEG	Disband	SOS or absorbed by units as applicable	Some to be available for new Militia HQ. Remainder returned to HQ Man Area	Unknown
2	12D	VIRDEN	Transfer to Supplementary Order of Battle	To form sub-unit of 26 Fd Regt (SP)	To be retained	Nil
3	A Sqn	MINNEDOSA	Transfer to Supplementary Order of Battle	To form sub-unit of 26 Fd Regt (SP)	To be retained	Nil
4	C Sqn	NEEPAWA	Transfer to Supplementary Order of Battle	To form sub-unit of 26 Fd Regt (SP)	To be retained	Nil
5	28 Fd Bty	PORTAGE LA PRAIRIE	Relocate to NEEPAWA	To form sub-unit of FGHM	To be retained	Nil
6	39 Fd Regt (SP)	WINNIPEG	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for other units in Winnipeg	Unknown
7	D TP 17 FD BTY	EMERSON	Relocate to Winnipeg with parent unit. Transfer to Supplementary order of Battle	SOS	Vacate and return to owner	2,700
8	HQ 6 Fd Engr Regt and 12 Fd Sqn	WINNIPWG	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for other units in Winnipeg	Unknown
9	Wpg Gren	WINNIPEG	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for other units in Winnipeg	Unknown
10	HQ 6 Colm RCASC & 143 Coy RCASC	WINNIPEG	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Available for other units in Winnipeg	Unknown
11	141 Coy RCASC	BRANDON	Transfer to Supplementary Order of Battle	SOS or absorbed by 26 Fd Regt (SP)	Available for 26 Fd Regt (SP) Brandon	Unknown
12	57 Dent Unit	WINNIPEG	Disband	SOS or absorbed by new organization	Available for other units in Winnipeg	Unknown
13	6 Ord Bn less one Coy	WINNIPEG	One Coy to remain active. Remainder transferred to Supplementary Order of Battle	To form one Coy	To be retained	Unknown
14	7 Tech Regt less one Sqn.	WINNIPEG	One Sqn to remain active. Remainder transferred to Supplementary Order of Battle	To form one Sqn	To be retained	Unknown
15	108 Man Dep	WINNIPEG	Disband	SOS except those fit to be absorbed by other units	Available for other units in Winnipeg	Unknown

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
WESTERN ONTARIO AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	18 Mil Gp HQ	LONDON	Disband	SOS or absorbed by other units as applicable	Return to Regular Army	10,550
2	26 Mil Gp HQ	WINDSOR	Disband	SOS or absorbed by other units as applicable	Vacate and return to owner	17,086
3	7 Fd Regt	SARNIA	Transfer to Supplementary Order of Battle	Absorbed by Inf Coy	Retain for use of Inf Coy	nil
4	12 Fd Bty	LONDON	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for units now in Wolseley Barracks	6,322
5	48 Fd Bty	WATFORD	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community	3,302
6	16 Fd Bty	FERGUS	Relocate with parent unit at GUELPH	Parade at GUELPH	Vacate and return to owner	1,910
7	169 Fd Bty	PARIS	Relocate with parent unit at BRANTFORD	Parade at BRANTFORD	Declare surplus or lease to community	4,502
8	HQ 11 Fd Engr Regt	LONDON	Transfer to Supplementary Order of Battle	SOS or absorbed by 7 Fd Sqn	See serial 4	See serial 4
9	11 Fd Sqn	SARNIA	Transfer to Supplementary Order of Battle	Absorbed by Inf Coy	Retain for use of Inf Coy	nil
10	9 Sig Regt less one Sqn	LONDON	Transfer to Supplementary Order of Battle	SOS or absorbed by remaining Sqn	See serial 4	See serial 4
11	Pl B Coy 3 RCR	INGERSOLL	Relocate with parent unit at WOODSTOCK	Parade at WOODSTOCK	Vacate and return to owner	unknown DPW building
12	Perth R	STRATFORD	Transfer to Supplementary Order of Battle	Absorbed by 3 RCR	Retain for 3 RCR	nil
13	Sp Coy	ST MARY'S	Transfer to Supplementary Order of Battle	Absorbed by 3 RCR. Parade at STRATFORD	Declare surplus or lease to community	2,902
14	HLI of C	GALT	Transfer to Supplementary Order of Battle	Absorbed by amalgamation of HLI of C with SF of C to be located in Kitchener and Galt	Retain for use of amalgamated unit	Nil

Page (xli)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
WESTERN ONTARIO AREA (Continued)

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
15	D Coy 1 E & K Scot	LEAMINGTON	Relocate with parent unit at WINDSOR	SOS	Vacate and return to owner	300
16	D Coy 2 E & K Scot	WALLACEBURG	Relocate with parent unit at CHATHAM	Parade at CHATHAM	Declare surplus or lease to community	4,290
17	SF of C	KITCHENER	Transfer to Supplementary Order of Battle	Absorbed by amalgamation of HLI of C with SF of C to be located in Kitchener and Galt SOS or absorbed by remaining Coy of C to be located in Kitchener and Galt	Retain for use of amalgamated unit	See Serial 14
18	4 Colm RCASC less one Coy	LONDON	Transfer to Supplementary Order of Battle	SOS or absorbed by remaining Coy	Declare surplus or lease to community	8,650
19	137 Coy RCASC	KITCHENER	Transfer to Supplementary Order of Battle	Absorbed by other units	Declare surplus or lease to community	15,732
20	14 Med Coy	WINDSOR	Transfer to Supplementary Order of Battle	Nil strength	Non-applicable	Non-applicable
21	55 Dent Unit	LONDON	Disband	SOS or absorbed by new organization	See serial 1	See serial 1
22	5 Ord Bn less one Coy	LONDON	Transfer to Supplementary Order of Battle	SOS or absorbed by remaining Coy	See serial 4	See serial 4
23	107 Man Dep	LONDON	Disband	SOS except for those fit to to be absorbed by other units	See serial 1	See serial 1

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minor Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
CENTRAL ONTARIO AREA

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	14 Mil Gp HQ	TORONTO	Disband	SOS or absorbed by other units as applicable	Vacate College St and return to owner when Moss Park ready	172,440
2	15 Mil Gp HQ	TORONTO	Disband	SOS or absorbed by other units as applicable	Vacate College St and return to owner when Moss Park ready	See serial 1
3	16 Mil Gp HQ	TORONTO	Disband	SOS or absorbed by other units as applicable	Vacate College St and return to owner when Moss Park ready	See serial 1
4	17 Mil Gp HQ	DUNDAS	Disband	SOS or absorbed by other units as applicable	Required for other units	nil
5	Tp Grey & Sim For	DURHAM	Relocate with parent unit at OWEN SOUND	SOS	Declare surplus or leave to community	4,420
6	Tp Grey & Sim For	COLLINGWOOD	Relocate with parent unit at OWEN SOUND	SOS	Vacate and return to owner	2,100
7	Tp Grey & Sim For	ORILLIA	Relocate with parent Coy at MIDLAND	SOS	Declare surplus or lease to community	5,970
8	B Sqn Alq R	VIRGINIATOWN	Relocate at KIRKLAND LAKE	Parade at KIRKLAND LAKE	Vacate and return to owner	1,500
9	44 Fd Regt	ST CATHERINES	Transfer to Supplementary Order of Battle less 10 Fd Bty	Absorbed by 10 Fd Bty	Available for 30 Tech Sqn and other units	8,160
10	57 Fd Regt	WELLAND	Transfer to Supplementary Order of Battle	Absorbed by 171 Fd Bty FORT ERIE	Declare surplus or lease to community	12,900
11	58 Fd Regt	SUBDURY	Transfer to Supplementary Order of Battle	Absorbed by Inf Bn	Retain for Inf Bn	nil
12	40 Med Regt	KENORA	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community	5,920
13	118 Med Bty	PORT ARTHUR	Transfer to Supplementary Order of Battle	Absorbed by Lake Sup Scot R	Available for other units	nil
14	121 Med Bty	FORT FRANCES	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community	2,227
15	42 Med Regt	TORONTO	Transfer to Supplementary Order of Battle	Absorbed by 29 Fd Regt	Falaise Property Declare surplus	28,080

(Page xliii)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

CENTRAL ONTARIO AREA (Continued)

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
16	1 Loc Regt	TORONTO	Transfer to Supplementary Order of Battle	Absorbed by 29 Fd Regt	See serial 15	See serial 15
17	18 Fd Sqn	HAMILTON	Transfer to Supplementary Order of Battle	Absorbed by other units	Vacate Burlington St. Property and return to owner	58,510
18	2 Sig Sqn	PORT CREDIT	Relocate with parent unit at TORONTO	Nil strength	Required for other units	unknown
19	8 Sig Regt	TORONTO	Transfer to Supplementary Order of Battle	Absorbed by 2 Sig Regt	Spadina Armoury. Declare surplus or lease to community	28,110
20	A Coy RHLI	ANCASTER	Relocate with parent unit at HAMILTON	SOS or parade at HAMILTON	Vacate and return to owner	1,200
21	B Coy RHLI	WATERDOWN	Relocate with parent unit at HAMILTON	SOS or parade at HAMILTON	Vacate and return to owner	1,500
22	A Coy Linc & Welld R	NIAGARA-ON-THE-LAKE	Relocate with unit at ST CATHERINES	SOS or parade at ST CATHERINES	Required for Summer Camp	nil
23	B Coy Linc & Welld R	WELLAND	Relocate at FORT ERIE	Parade at FORT ERIE	See serial 10	See serial 10
24	Pl C Coy Lorne Scots	MILTON	Relocate with parent Coy at GEORGETOWN	Parade at GEORGETOWN	Declare surplus or lease to community	2,752
25	D Coy A & SH of C	GRIMSBY	Relocate with parent unit at HAMILTON	SOS or parade at HAMILTON	Vacate and return to owner	11,658
26	5 Colm RCASC less two Coys	TORONTO	Transfer to Supplementary Order of Battle	Absorbed by 1 Toronto Service Bn	Required for Service Bn	unknown
27	Pl	OWEN SOUND	Relocate with parent Coy at TORONTO	Absorbed by other units	Available for other units	nil
28	Central Comd Dent Advisory Staff	OAKVILLE	Disband	SOS	Vacate	unknown

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

CENTRAL ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
29	56 Dent Unit	TORONTO	Disband	SOS or absorbed by new organization	When Moss Park ready vacate and return to owner	See serial 1
30	4 Ord Bn less two Coys	TORONTO	Transfer to Supplementary Order of Battle	Absorbed by 2 Toronto Service Bn	When Moss Park ready vacate and return to owner	See serial 1
31	4 Tech Regt less two Sqns	TORONTO	Transfer to Supplementary Order of Battle	Absorbed by 1 Toronto Service Bn	See serial 15	See serial 15
32	5 Tech Regt less one Sqn	HAMILTON	Transfer to Supplementary Order of Battle	Absorbed by Hamilton Service Bn	See serial 17	See serial 17
33	Central Comd PSU	TORONTO	Disband	SOS or absorbed by new organization	See serial 1	See serial 1
34	106 Man Dep	TORONTO	Disband	SOS except for those fit to be absorbed by other units	See serial 1	See serial 1
35	115 Man Dep	PORT ARTHUR	Disband	SOS except for those fit to be absorbed by other units	Required for other units	nil

NOTE: When Moss Park Armoury is ready for occupancy an additional annual saving in accommodation costs of $29,815 can be realized by disposal of Richmond St. Armoury.

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
EASTERN ONTARIO AREA

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	12 MIL GP HQ	OTTAWA	Disband	SOS or absorbed by other units as applicable	Vacate and return to owner	13,399.
2	13 MIL GP HQ	PETERBOROUGH	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
3	4 PLDG	OTTAWA	Transfer to Supplementary Order of Battle	SOS or absorbed by other units as applicable	Vacate and return to owner	31,340.
4	C Sqn	PRESCOTT	Transfer to Supplementary Order of Battle	SOS or absorbed by Brock Rif at BROCKVILLE	Vacate and return to owner	7,862.
5	D Sqn	SMITH'S FALLS	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community	5,812.
6	F Tp 25 Fd Bty	KEMPTVILLE	Relocate with parent unit in OTTAWA	Absorbed by Sqn 3 Sig Regt to be relocated in KEMPTVILLE	Retain	Nil
7	50 Fd Regt	PETERBOROUGH	Transfer to Supplementary Order of Battle	Absorbed by Prince of Wales Rang to be activated in PETERBOROUGH	Retain	Nil
8	45 Fd Bty	LINDSAY	Transfer to Supplementary Order of Battle	Absorbed by Prince of Wales Rang to be activated in LINDSAY	Retain	Nil
9	33 Med Regt	COBOURG	Transfer to Supplementary Order of Battle	Absorbed by Prince of Wales Rang to be activated in COBOURG	Retain	Nil
10	47 Fd Bty	NAPANEE	Transfer to Supplementary Order of Battle	Absorbed by Coy of Hast and Per to be activated in NAPANEE	Retain	Nil
11	3 Indep Med Bty	GANANOQUE	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community	5,920.
12	3 Fd Sqn	OTTAWA	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	Declare surplus or lease to community	3,150
13	55 Fd Sqn	KINGSTON	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	Declare surplus or lease to community	2,079. Plus a portion of KINGSTON Armoury costs
14	A Coy Hast & Per	TRENTON	Relocate with parent unit in BELLEVILLE	SOS or parade at BELLEVILLE	Declare surplus or lease to community	3,622.

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

EASTERN ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
15	Pl	NORWOOD	Relocate with parent Coy in MADOC	SOS	Declare surplus or lease to community	1,336.
16	C Coy	PORT HOPE	Relocate with parent unit in BELLEVILLE	SOS or parade at COBOURG with PWR	Declare surplus or lease to community	5,291.
17	Pl	MILLBROOK	Relocate with parent unit in BELLEVILLE	SOS	Declare surplus or lease to community	3,093.
18	D Coy L&R Scot R	PERTH	Relocate with parent unit in PEMBROKE	SOS	Declare surplus or lease to community	5,185.
19	D Coy SD & G Highrs	ALEXANDRIA	Relocate with parent unit in CORNWALL	SOS	Declare surplus or lease to community	5,902.
20	Tpt Pl 130 Coy RCASC	KINGSTON	Relocate with parent unit in OTTAWA	SOS or absorbed by other units	Available for other units	Nil
21	9 Med Coy	CORNWALL	Transfer to Supplementary Order of Battle	SOS or absorbed by SD & G Highrs	Available for SD & G Highrs	Unknown
22	11 Med Coy	KINGSTON	Transfer to Supplementary Order of Battle	SOS or absorbed by PWOR	Available for PWOR	Unknown
23	54 Dent Unit	OTTAWA	Disband	SOS or absorbed by new organization	Available for other units	Unknown
24	113 Man Dep	OTTAWA	Disband	SOS except for those fit to be absorbed by other units	Available for other units	Unknown

NOTE: 30 Fd Regt will share accommodation with RCN at HMCS CARLETON. Rented building at 526 St Patrick St Ottawa now occupied by this unit can be vacated and returned to owner. Annual Reduction in accommodation costs $14,770.

Page (xlvii)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

WESTERN QUEBEC AREA

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	9 MIL GP HQ	SHERBROOKE	Disband	SOS or absorbed by other units as applicable	Declare surplus or lease to community	11,408.
2	10 MIL GP HQ	MONTREAL	Disband	SOS or absorbed by other units as applicable	Declare surplus or lease to community (3626 St Urbain)	20,922.
3	11 MIL GP HQ	TROIS RIVIERES	Disband	SOS or absorbed by other units as applicable	Declare surplus or lease to community	18,870.
4	SHER R	SHERBROOKE	Transfer to Supplementary Order of Battle	Absorbed by other units	Declare surplus or lease to community	30,604.
5	7/11 H	RICHMOND	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	2,294.
6	A Sqn	ASBESTOS	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	8,815.
7	B Sqn	WINDSOR	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	6,595.
8	C Sqn	BURY	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community Vacate and return to owner	6,607.
9	34 Fd Regt	MONTREAL	Transfer to Supplementary Order of Battle	SOS or absorbed by other units including 5 Fd Bty	Retain for use of reorganized artillery and Second Montreal Service Bn	See Serial 34
10	37 Fd Regt	MONTREAL	Transfer to Supplementary Order of Battle	SOS or absorbed by other units including 5 Fd Bty	Retain for use of reorganized artillery and Second Montreal Service Bn	See Serial 34
11	131 Fd Bty	LACHUTE	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	3,350.
12	2 Med Regt	MONTREAL	Transfer to Supplementary Order of Battle	SOS or absorbed by other units including 2 Fd Bty	Retain for use of reorganized artillery and Second Montreal Service Bn	See Serial 34

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

WESTERN QUEBEC AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
13	3 Loc Bty	MONTREAL	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	Retain for use of reorganized artillery and Second Montreal Service Bn	See Serial 34
14	58 Fd Sqn	ASBESTOS	Transfer to Supplementary Order of Battle	Nil strength	See Serial 6	See Serial 6
15	11 Sigs Regt	WESTMOUNT	Transfer to Supplementary Order of Battle	Absorbed by 15 Indep Sig Sqn to be relocated at WESTMOUNT	Retain	Nil
16	15 Indep Sigs Sqn	TROIS RIVIERES	Relocate at WESTMOUNT	Absorbed by other units TROIS RIVIERES	See Serial 3	See Serial 3
17	VRC	MONTREAL	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	Declare surplus or lease to community. Vacate garage and return to owner	17,015.
18	A Coy 6 R22eR	ACTON VALE	Relocate with parent unit at ST HYACINTHE	SOS	Vacate and return to owner	1,500.
19	D Coy 6 R22eR	TRACY	Relocate with parent unit at ST HYACINTHE	SOS	Vacate and return to owner	11,440.
20	R de Jol	JOLIETTE	Transfer to Supplementary Order of Battle	SOS	Declare surplus or lease to community. Vacate warehouse and return to owner	6,907. 8,927.
21	B Coy	ST PAUL L'ERMITE	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	5,022.
22	C Coy	L'EPIPHANIE	Transfer to Supplementary Order of Battle	SOS	Vacate and return to owner	6,300.
23	D Coy	ST JEROME	Transfer to Supplementary Order of Battle	Absorbed by Coy of 4 R22eR (Chateauguay-Maisonneuve) to be located in ST JEROME	Retain for 4 R22eR (Chateauguay-Maisonneuve)	Nil
24	R de Mais	MONTREAL	Transfer to Supplementary Order of Battle	Absorbed 4 R22eR (Chateauguay-Maisonneuve)	Retain for other units	Nil
25	A&B Coys	MONTREAL NORTH	Transfer to Supplementary Order of Battle	Absorbed 4 R22eR (Chateauguay-Maisonneuve)	Retain for 4 R22eR (Chateauguay-Maisonneuve)	Nil

Page (xlix)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
WESTERN QUEBEC AREA (Continued)

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
26	D Coy Fus de Sher	MAGOG	Relocate with parent unit at Sherbrooke	SOS	Vacate and return to owner	5,958.
27	HQ 3 Colm RCASC less two Coys	MONTREAL	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	Retain for First Montreal Service Bns	Nil
28	125 Coy RCASC	SHERBROOKE	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	See Serial 1	See Serial 1
29	126 Coy RCASC	TROIS RIVIERES	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	See Serial 3	See Serial 3
30	1 Med Coy (less two (less two Coys)	MONTREAL	Transfer to Supplementary Order of Battle	To form two Coys for Montreal Service Bns	Declare surplus or lease to community (1631 Delorimier)	Unknown (DPW Bldg)
31	53 Dent Unit	MONTREAL	Disband	SOS or absorbed by new organization	See Serial 30	See Serial 30
32	Que Comd Dent Advisory Staff	MONTREAL	Disband	SOS or absorbed by new organization	See Serial 30	See Serial 30
33	3 Ord Bn less one Coy	MONTREAL	Transfer to Supplementary Order of Battle	To form Ord Coy for First Montreal Service Bn	Retain See Serial 27	Nil
34	2 Tech Regt less two Sqns	MONTREAL	Transfer to Supplementary Order of Battle	To form two Sqns for First and Second Montreal Service Bns	Declare surplus or lease to community (1055-61 Gregoire)	14,610.
35	24 Tech Sqn	SHERBROOKE	Transfer to Supplementary Order of Battle	SOS or absorbed by other units	See Serial 1	See Serial 1
36	3 Pro Coy less two Pls	MONTREAL	Transfer to Supplementary Order of Battle	To form two Pro Pls for Montreal Service Bns	Retain See Serial 27	Nil
37	101 Pro Pl	DRUMMONDVILLE	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for other units	Nil
38	102 Pro Pl	TROIS RIVIERES	Transfer to Supplementary Order of Battle	Absorbed by other units	See Serial 3	See Serial 3
39	Que Comd PSU	MONTREAL	Disband	SOS or absorbed by new organization	Declare surplus or lease to community (1179 Bleury)	20,510.
40	104 Man Dep	MONTREAL	Disband	SOS except those fit to be absorbed by other units	See Serial 39	See Serial 39

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
EASTERN QUEBEC AREA

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	7 MIL GP HQ	QUEBEC	Disband	SOS or absorbed by units as applicable	Vacate and return to owner (University of Laval)	14,030.
2	8 MIL GP HQ	LEVIS	Disband	SOS or absorbed by units as applicable	Available for other units	Unknown
3	80 Fd Bty	NEW RICHMOND	Relocate at MONTMAGNY	Absorbed by Pl B Coy Fus de St-L in NEW RICHMOND	Retained for Pl B Coy Fus du St-L	Nil
4	82 Fd Bty	GASPE	Relocate at BEAUPORT	Absorbed by B Coy Fus du St-L in GASPE	Retained for B Coy Fus du St-L	Nil Nil
5	187 Fd Bty	ARVIDA	Transfer to Supplementary Order of Battle	Absorbed by R du Sag CHICOUTIMI	Vacate and return to owner	11,735.
6	57 Loc Bty	QUEBEC	Transfer to Supplementary Order of Battle	Absorbed by 6 Fd Regt	Available for other units	See serial 13
7	RRC	QUEBEC	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for other units	See serial 13
8	Voltigeurs	QUEBEC	Transfer to Supplementary Order of Battle	Absorbed by Voltigeurs Service Bn	Available for other units	See serial 13
9	B Coy R du Sag	PORT ALFRED	Relocate at CHICOUTIMI	Parade at CHICOUTIMI	Vacate and return to owner	6,859.
10	Pl A Coy Rde Chaud	ST JOS de BEAUCE	Relocate with parent Coy at BEAUCEVILLE	Parade at BEAUCEVILLE	Vacate and return to owner	960.
11	B Coy Fus du St-L	MONTMAGNY	Relocate at GASPE	Absorbed by 80 Fd Bty in MONTMAGNY	Retained for 80 Fd Bty	Nil
12	Pl B Coy Fus du St-L	MONTMAGNY	Relocate at NEW RICHMOND	Absorbed by 80 Fd Bty in MONTMAGNY	Retained for 80 Fd Bty	Nil
13	2 Colm RCASC less one Coy	QUEBEC	Transfer to Supplementary Order of Battle	Absorbed by Voltigeurs Service Bn	Declare surplus or lease to community (PARC D'ARTILLERIE)	52,215.
14	105 Man Dep	QUEBEC	Disband	SOS except for personnel fit to be absorbed by other units	See serial 13	See serial 13

Page (li)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
NEW BRUNSWICK AREA

APPENDIX 2 to ANNEX "A" to Part II of Report by Commission on Reorganization of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	5 MIL GP HQ	MONCTON	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
2	6 MIL GP HQ	SAINT JOHN	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
3	HQ Sqn 8 CH(M)	HAMPTON	Relocate with parent unit at SUSSEX	Parade at SUSSEX	Vacate and return to owner	1,720.
4	A Sqn 8 CH (M)	PETITCODIAC	Relocate with parent unit at SUSSEX	Parade at SUSSEX	Vacate and return to owner	1,100.
5	12 Fd Regt less two Btys	FREDERICTON	Transfer to Supplementary Order of Battle	SOS or absorbed by remaining battery at FREDERICTON	Available for other units	Unknown
6	1 Fd Sqn	SAINT JOHN	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for other units	Unknown
7	4 Indep Sigs Sqn	MONCTON	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for other units	Unknown
8	6 Indep Sigs Sqn	FREDERICTON	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for other units	Unknown
9	B Coy 1 RNBR	ST STEPHEN	Relocate with parent unit at FREDERICTON	SOS	Declare surplus or lease to community	5,145.
10	Pl C Coy 1 RNBR	PLASTER ROCK	Relocate with parent Coy at GRAND FALLS	Parade at GRAND FALLS	Vacate and return to owner	5,920.
11	A Coy 2 RNBR	CHATHAM	Relocate at NEWCASTLE	Parade at NEWCASTLE	Declare surplus or lease to community	5,535.
12	D Coy 2 RNBR	DALHOUSIE	Relocate at CAMPBELLTON	Parade at CAMPBELLTON	Declare surplus or lease to community	7,180.
13	3 Med Coy	MONCTON	Transfer to Supplementary Order of Battle	Absorbed by other units	Available for other units	Unknown
14	51 Dent Unit	SAINT JOHN	Disband	SOS or absorbed by new organization	Available for other units	Unknown
15	102 Man Dep	SAINT JOHN	Disband	SOS except those fit to be absorbed by other units	Available for other units	Unknown

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
NOVA SCOTIA PRINCE EDWARD ISLAND AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	2 MIL GP HQ	CHARLOTTETOWN	Disband	SOS or absorbed by other units as applicable	Declare surplus or lease to community	34,431.
2	3 MIL GP HQ	SYDNEY	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
3	4 MIL GP HQ	HALIFAX	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
4	Hal Rif	HALIFAX	Transfer to Supplementary Order of Battle	Absorbed by Hal Rif Service Bn	Available for other units	See Serial 13
5	88 Fd Bty	WINDSOR	Transfer to Supplementary Order of Battle	Absorbed by a Coy of West NSR to be located in WINDSOR	Retained for Coy West NSR	Nil
6	6 Indep Fd Bty	SYDNEY	Transfer to Supplementary Order of Battle	Absorbed by 2 NS Highrs	Available for other units	Unknown
7	HQ 5 Fd Engr Regt	HALIFAX	Transfer to Supplementary Order of Battle	SOS or absorbed by 30 Fd Sqn	Retain for use of 30 Fd Sqn	Nil
8	6 Sig Regt less one Sqn	HALIFAX	Transfer to Supplementary Order of Battle	SOS or absorbed by remaining Sqn	Retain for use of Sig Sqn	Nil
9	C Coy 1 NS Highrs	TRURO	Relocate with parent unit at AMHERST	SOS	Declare surplus or lease to community	6,245.
10	E Coy 1 NS Highrs	ANTIGONISH	Relocate with parent unit at AMHERST	SOS	Declare surplus or lease to community	2,715.
11	Pl F Coy 1 NS Highrs	RIVER HEBERT	Relocate with parent unit at AMHERST	Nil strength	Accommodation vacated	Unknown
12	B Coy West NSR	BRIDGETOWN	Relocate at MIDDLETON	Parade at MIDDLETON	Vacate and return to owner	5,505.
13	HQ 1 Colm RCASC	HALIFAX	Transfer to Supplementary Order of Battle	SOS or absorbed by 110 Coy RCASC	Declare surplus or lease to community	16,004.
14	Two Pls 110 Coy RCASC	CHARLOTTETOWN	Relocate with parent unit at HALIFAX	Absorbed by other units	See Serial 1	See Serial 1
15	Eastern Comd Dent Advisory Staff	HALIFAX	Disband	SOS	Available for other units	Unknown

Page (liii)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED
NOVA SCOTIA PRINCE EDWARD ISLAND AREA (Continued)

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOM-MODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
16	50 Dent Unit	HALIFAX	Disband	SOS or absorbed by new organization	Available for other units	Unknown
17	Eastern Comd PSU	HALIFAX	Disband	SOS or absorbed by new organization	Available for other units	
18	101 Man Dep	HALIFAX	Disband	SOS except those fit to be absorbed by other units	Available for other units	Unknown

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minor Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

APPENDIX 2 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

MILITIA HEADQUARTERS UNITS AND SUB-UNITS TO BE RELOCATED, TRANSFERRED TO SUPPLEMENTARY ORDER OF BATTLE OR DISBANDED

NEWFOUNDLAND AREA

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	DISPOSITION			REDUCTION IN ACCOMMODATION COSTS
			HQ UNIT OR SUB-UNIT	PERSONNEL	ACCOMMODATION	
						$
1	1 MIL GP HQ	ST JOHN'S	Disband	SOS or absorbed by other units as applicable	Available for other units	Unknown
2	C Coy R Nfld R	BELL ISLAND	Relocate with parent unit at ST JOHN'S	SOS	Vacate and return to owner	5,405.
3	Two Pls 111 Coy RCASC	ST JOHN'S	Relocate with parent unit at SYDNEY, NS	SOS or absorbed by other units as applicable	Available for other units	Unknown
4	112 Man Dep	ST JOHN'S	Disband	SOS except for those fit to be absorbed by other units	Available for other units	Unknown

Page (lv)

REORGANIZED MILITIA ORDER OF BATTLE

BRITISH COLUMBIA AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	BC Militia HQ	VANCOUVER	HQ BC Area						Regular Assistance and Administration to be provided by Staff of HQ BC Area
2	BCR	VANCOUVER	Beatty St Armoury	X		1	1	2	To train as recce
3	BCD	VERNON	Camp Vernon	X		1	2	2	To train as recce; 1 Lt Col to comd BCD and RM Rang. HQ to be in Vernon. One WO to be WO 2.
4	B Sqn	KELOWNA	Armoury						
5	C Sqn	PENTICTON	Armoury						
6	15 Fd Regt	VANCOUVER	Bessborough Armoury	X		1	1	2	
7	85 Fd Bty	LADNER	Vancouver Wrls Station						
8	5 Fd Bty	VICTORIA	Bay St Armoury			1	1	1	Officer to be a Captain WO to be WO 2 (This bty formerly 5 Indep Med Bty)
9	6 Fd Sqn	NORTH VANCOUVER	Armoury		X	1	1		
10	44 Fd Sqn	TRAIL	Armoury		X	1	1	2	Officer to be a Major WO to be WO 1
11	Tp	NELSON	Armoury						
12	3 Area Sig Sqn	VANCOUVER	Jericho Beach		X	1	1		
13	RM Rang	KAMLOOPS	Armoury	X		1	1	3	See serial 3 remarks
14	Mor Pl	MERRITT	Armoury						
15	A Coy	PRINCE GEORGE	Armoury			1	1		Officer to be Captain WO to be WO 2
16	C Coy	SALMON ARM	Armoury						
17	D Coy	REVELSTOKE	Armoury						
18	Westmr R	NEW WESTMINSTER	Armoury	X		1	1	2	
19	B Coy	ABBOTSFORD	Armoury						
20	SEAFORTH of C	VANCOUVER	Seaforth Armoury	X		1	1	2	

REORGANIZED MILITIA ORDER OF BATTLE

BRITISH COLUMBIA AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
21	C Scot R	VICTORIA	Bay St Armoury	X		1	2	3	One WO to be WO 2
22	B Coy	NANAIMO	Camp Site						
23	C Coy	COURTENAY	Camp Site						
24	Ir Fus of C	VANCOUVER	Seaforth Armoury	X		1	1	2	
25	VANCOUVER Service Bn	VANCOUVER	Jericho Beach	X		2	1	2	One Offr to be a Capt
26	156 Coy RCASC	VANCOUVER	Jericho Beach				1		WO to be WO 2
27	24 Med Coy	VANCOUVER	Jericho Beach				1		WO to be WO 2
28	A Coy 8 Ord Bn	VANCOUVER	Jericho Beach				1		WO to be WO 2
29	A Sqn 8 Tech Regt	VANCOUVER	Jericho Beach				1		WO to be WO 2
30	8 Pro Coy	VANCOUVER	Jericho Beach				1		WO to be WO 2
31	155 Coy RCASC	VICTORIA	Bay St Armoury		X	1	1		
32	4 Int Trg Coy	VANCOUVER	HQ BC Area						Regular Assistance and Administration to be provided by staff of HQ BC Area
33	BC Area Det Pers Selection	VANCOUVER	HQ BC Area						Regular Assistance and Administration to be provided by staff of HQ BC Area
34	BC Interior Militia Advisor	VERNON	Armoury						
35	TOTALS			9	4	16	22	23	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minor Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

ALBERTA AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Edmonton Militia HQ	EDMONTON	HQ Alta Area						Regular Assistance and Administration to be provided by staff of HQ Alta Area
2	Calgary Militia HQ	CALGARY	HQ Calg Grn						Regular Assistance and Administration to be provided by staff of HQ Alta Area and Calg Grn
3	SALH	MEDICINE HAT	Armoury	X		1	1	2	
4	19D	EDMONTON	HMCS NONSUCH	X		1	2	2	To train as Recce One WO to be WO 2
5	Tp	CAMROSE	Fair Grounds						
6	D Sqn	WETASKIWIN	Armoury						
7	KO Calg R	CALGARY	Mewata Armoury	X		2	2	3	One Offr to be Capt One WO to be WO 2
8	A Sqn	GLEICHEN	Armoury						
9	B Sqn	HIGH RIVER	Armoury						
10	Tp C Sqn	OLDS	Armoury						
11	18 Fd Regt	LETHBRIDGE	Kenyon Fd	X		1	1	2	
12	93 Fd Bty	FT McLEOD	Armoury						
13	20 Fd Regt	EDMONTON	Prince of Wales Armoury	X		1	1	2	
14	78 Fd Bty	RED DEER	Armoury			1	1		
15	8 Fd Engr Regt	LETHBRIDGE	Engr Armoury	X		1	1	2	
16	25 Fd Sqn	EDMONTON	Prince of Wales Armoury		X	1	1		
17	13 Fd Sqn	BROOKS	Armoury		X	1	1		
18	17 Fd Sqn	KIMBERLEY	Rented Buildings		X	1	1	1	
19	Tp	BLAIRMORE	Armoury						
20	7 Indep Sigs Sqn	CALGARY	Mewata Armoury		X	1	1		
21	8 Indep Sigs Sqn	EDMONTON	Prince of Wales Armoury		X	1	1		

REORGANIZED MILITIA ORDER OF BATTLE

ALBERTA AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
22	Calg Highrs	CALGARY	Mewata Armoury	X		2	2	3	
23	A Coy	VULCAN	Armoury						
24	C Coy	DRUMHELLER	Navy League Bldg						
25	D Coy	HANNA	Legion Hall						
26	L Edmn R	EDMONTON	Prince of Wales Armoury	X		1	1	2	
27	A Coy	VERMILLION	Armoury						
28	D Coy	GRANDE PRAIRIE	Armoury			1	1		
29	Calgary Service Bn	CALGARY	Lincoln Park	X		2	1	2	One Offr to be a Capt
30	150 Coy RCASC	CALGARY	Lincoln Park				1		WO to be a WO 2
31	21 Med Coy	CALGARY	Lincoln Park				1		WO to be a WO 2
32	6 Ord Coy	CALGARY	Lincoln Park				1		WO to be a WO 2
33	14 Pro Coy	CALGARY	Lincoln Park				1		WO to be a WO 2
34	Edmonton Service Bn	EDMONTON	Prince of Wales Armoury	X		2	1	2	One Offr to be a Capt
35	154 Coy RCASC	EDMONTON	Prince of Wales Armoury				1		WO to be a WO 2
36	23 Med Coy	EDMONTON	Prince of Wales Armoury				1		WO to be a WO 2
37	A Coy 7 Ord Bn	EDMONTON	Prince of Wales Armoury				1		WO to be a WO 2
38	38 Tech Sqn	EDMONTON	Prince of Wales Armoury				1		WO to be a WO 2
39	15 Pro Coy	EDMONTON	Prince of Wales Armoury				1		WO to be a WO 2
40	Western Comd Med Advisory Staff	See Remarks	See Remarks						To consist of one Colonel and one clerk. Location according to availability of most suitable officer.

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
41	Western Comd Dental HQ	See Remarks	See Remarks						Location according to availability of personnel. To consist of one Colonel, 2 IC, Adjt QM, dental assistant and dental storeman. One dental officer and one dental assistant to be attached to each major unit.
42	32 Tech Sqn	LETHBRIDGE	Kenyon Fd Armoury		X	1	1		
43	Western Comd Ch Unit	EDMONTON	HQ Western Comd						To be administered by HQ Western Command
44	6 Int Trg Coy	EDMONTON	Prince of Wales Armoury						Regular Assistance and Administration to be provided by staff of HQ Alta Area
45	Alta Area Pers Selection Det	EDMONTON	HQ Alta Area						Regular Assistance and Administration to be provided by staff of HQ Alta Area
46	TOTALS			10	6	22	30	23	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minor Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

SASKATCHEWAN AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Sask Militia HQ	REGINA	HQ Sask Area						Regular Assistance and Administration to be provided by staff of HQ Sask Area
2	Sask D	MOOSE JAW	Armoury	X		1	1	2	To be Recce
3	14 H	SWIFT CURRENT	Armoury	X		1	1	2	To be Recce
4	B Sqn	MAPLE CREEK	Armoury						
5	10 Fd Regt	REGINA	Armoury	X		1	2	3	
6	65 Fd Bty	GRENFELL	Armoury						
7	76 Fd Bty	INDIAN HEAD	Armoury						
8	53 Fd Regt	YORKTON	Armoury	X		1	2	3	
9	B Tp 64 Fd Bty	KAMSACK	Armoury						
10	162 Fd Bty	MELVILLE	Rented store and garage						
11	44 Indep Fd Bty	PRINCE ALBERT	Armoury		X	1	1	1	
12	14 Fd Sqn	REGINA	Armoury		X	1	1		
13	2 Indep Sig Sqn	REGINA	Armoury		X	1	1		
14	Regina Rif	REGINA	Armoury	X		1	1	2	
15	B Coy	FORT QU'APPELLE							
16	1 N SASK R	PRINCE ALBERT	Armoury	X		2	2	3	
17	A Coy	NORTH BATTLEFORD	Armoury						
18	B Coy	MELFORT							
19	C Coy	LLOYDMINSTER	Armoury						
20	2 N SASK R	SASKATOON	Armoury	X		1	1	2	
21	S SASK R	ESTEVAN	Armoury		X	1	1		
22	REGINA Service Bn	REGINA	Armoury	X		2	1	2	One Officer to be a Capt
23	142 Coy RCASC	REGINA	Armoury				1		WO to be WO 2
24	Tpt Pl	MOOSE JAW	Armoury					1	To be S Sgt

Page (lxi)

REORGANIZED MILITIA ORDER OF BATTLE

SASKATCHEWAN AREA (Continued)

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB-UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
25	19 Med Coy	REGINA	Armoury				1		WO to be WO 2
26	Two Pls	MOOSE JAW	Armoury						
27	5 Ord Coy	REGINA	Armoury				1		WO to be WO 2
28	20 Med Coy	SASKATOON	Armoury		X		1		
29	37 Tech Sqn	SASKATOON	Armoury		X	1	1		
30	Sask Area Pers Selection Det	REGINA	HQ Sask Area						Regular Assistance and Administration to be provided by staff of HQ Sask Area
31	Northern Saskatchewan Militia Advisor	SASKATOON	Armoury						
32	TOTALS			8	6	15	20	21	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minor Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

MANITOBA AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

21314—7

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Man Militia HQ	WINNIPEG	HQ Man Area						Regular Assistance and Administration to be provided by staff of HQ Man Area
2	FGH (M)	WINNIPEG	Fort Osborne	X		1	1	2	
3	Sqn	PORTAGE LA PRAIRIE	Armoury						
4	26 Fd Regt (SP) & 71 Fd Bty	BRANDON	Armoury	X		2	2	3	One Offr to be a Capt One WO to be a WO 2
5	70 Fd Bty	DAUPHIN	Armoury						
6	38 Fd Bty	NEEPAWA	Armoury						
7	Fd Bty	MINNEDOSA	Armoury						
8	Fd Bty	VIRDEN	Armoury						
9	21 Fd Sqn	FLIN FLON	Armoury		X	1	1		
10	46 Fd Sqn	PINE FALLS	Armoury		X	1	1		
11	10 Indep Sig Sqn	WINNIPEG	Minto Armoury		X	1	1		
12	R Wpg Rif	WINNIPEG	Minto Armoury	X		1	1	2	
13	Camerons of C	WINNIPEG	McGregor Armoury	X		1	1	2	
14	Winnipeg Service Bn	WINNIPEG	Minto Armoury	X		2	1	2	One Offr to be a Capt
15	140 Coy RCASC	WINNIPEG	Minto Armoury				1		
16	18 Med Coy	WINNIPEG	Minto Armoury				1		
17	A Coy 6 Ord Bn	WINNIPEG	Minto Armoury				1		
18	A Sqn 7 Tech Regt	WINNIPEG	Minto Armoury				1		
19	13 Pro Coy	WINNIPEG	Minto Armoury				1		
20	5 Int Trg Coy	WINNIPEG	Fort Osborne						Regular Assistance and Administration to be provided by HQ Man Area
21	Man Area Pers Selection Det	WINNIPEG	Fort Osborne						Regular Assistance and Administration to be provided by HQ Man Area
22	TOTALS			5	3	10	14	11	

Unless otherwise stated rank of Regular assistance will be: For Major Units: Majors and WO 1; For Minor Units: Capts and WO 2; For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

WESTERN ONTARIO AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Western Ont Militia HQ	LONDON	HQ W Ont Area						Accommodation and administration to be provided by staff of HQ W Ont Area
2	1H	LONDON	Dundas St Armoury	X		1	1	2	
3	Windsor R	WINDSOR	Armoury	X		1	1	2	To train as Recce
4	Elgin R	ST THOMAS	Armoury	X		1	1	2	Designated as Armoured Delivery Unit but to train with tanks
5	11 Fd Regt	GUELPH	Armoury	X		1	1	2	
6	21 Fd Regt	WINGHAM	Armoury	X		1	2	3	One WO to be WO2
7	97 Fd Bty	WALKERTON	Armoury						
8	100 Fd Bty	LISTOWEL	Armoury						
9	56 Fd Regt	BRANTFORD	Armoury	X		1	1	2	
10	69 Fd Bty	SIMCOE	Armoury						
11	7 Fd Sqn	LONDON	Dundas St Armoury		X	1	1		
12	48 Fd Sqn	GALT	Armoury		X	1	1		
13	Sqn 9 Sig Regt	LONDON	Dundas St Armoury		X	1	1		
14	3 RCR	LONDON	Dundas St Armoury	X		1	2	3	One WO to be WO2
15	A & B Coys	WOODSTOCK	Armoury						
16	Coy	STRATFORD	Armoury						
17	Inf Bn	GALT	Armoury	X		1	1	2	Inf Bn to be formed from amalgamation of HLI of C and SF of C. Name to be decided by units concerned.
18	Two Coys	KITCHENER	Victoria St Armoury						
19	1 E & K Scot	WINDSOR	Armoury	X		1	1	2	

REORGANIZED MILITIA ORDER OF BATTLE

WESTERN ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
20	2 E&K Scot	CHATHAM	Armoury	X		1	1	2	
21	Coy	SARNIA	DPW Bldg						
22	London Service Bn	LONDON	HMCS Prevost	X		2	1	2	One Offr to be Capt
23	Coy RCASC	LONDON	HMCS Prevost				1		WO to be WO2
24	15 Med Coy	LONDON	HMCS Prevost				1		WO to be WO2
25	A Coy 5 Ord Bn	LONDON	HMCS Prevost				1		WO to be WO2
26	6 Pro Coy	LONDON	HMCS Prevost				1		WO to be WO2
27	12 Med Coy	KITCHENER	Victoria St Armoury		X		1		WO to be WO2
28	39 Tech Sqn	WINDSOR	HMCS Hunter		X	1	1		
29	TOTALS			11	5	16	22	24	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minor Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

Page (lxv)

REORGANIZED MILITIA ORDER OF BATTLE

CENTRAL ONTARIO AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Toronto Militia HQ	TORONTO	College St until Moss Park ready						Regular assistance and administration to be provided by HQ Central Ont Area
2	Hamilton Militia HQ	HAMILTON	James St Armoury						Regular assistance and administration to be provided by HQ Central Ont Area
3	GGHG	TORONTO	Denison Armoury	X		1	1	2	To train as recce
4	Grey & Sim For	OWEN SOUND	Armoury	X		1	2	3	One WO to be WO2
5	B Sqn	BARRIE	Armoury						
6	C Sqn	MIDLAND	Armoury						
7	Ont R	OSHAWA	Armoury	X		1	1	2	
8	QY Rang	TORONTO	Armoury	X		1	2	3	To train as recce; One WO to be WO2
9	B Sqn	NEWMARKET	York Manor rented						
10	C Sqn	AURORA	Armoury						
11	8 Fd Regt	HAMILTON	James St Armoury	X		2	2	3	One Offr to be Captain One WO to be WO2
12	102 Fd Bty	DUNDAS	Armoury						
13	10 Fd Bty	ST CATHERINES	Lake St Armoury						
14	171 Fd Bty	FORT ERIE	Rented Factory						
15	172 Fd Bty	NIAGARA FALLS	Armoury						
16	29 Fd Regt	TORONTO	Richmond St Until Moss Park ready	X		1	1	2	
17	49 Fd Regt	SAULT STE MARIE	Armoury	X		1	1	2	
18	2 Fd Engr Regt	TORONTO	Fort York	X		1	1	2	
19	8 Fd Sqn	NORTH BAY	Hutted Armoury		X	1	1		
20	2 Sig Regt	TORONTO	College St until Moss Park ready	X		1	1	2	
21	Tp	NEWMARKET	York Manor rented						

REORGANIZED MILITIA ORDER OF BATTLE

CENTRAL ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
22	1 Indep Sig Sqn	HAMILTON	James St Armoury		X	1	1		
23	3 QOR of C	TORONTO	Richmond St until Moss Park ready	X		1	1	2	
24	R Regt of C	TORONTO	Fort York	X		1	1	2	
25	RHLI	HAMILTON	James St Armoury	X		1	1	2	
26	Linc & Welld R	ST CATHERINES	Lake St Armoury	X		1	2	3	One WO to be WO2
27	C Coy	FORT ERIE	Rented Factory						
28	D Coy	NIAGARA FALLS	Armoury						
29	Lorne Scots	BRAMPTON	Armoury	X		2	2	3	One Offr to be Capt; One WO to be WO2
30	A Coy	PORT CREDIT	Cdn Arsenals Building						
31	B Coy	OAKVILLE	Armoury						
32	C Coy	GEORGETOWN	Armoury						
33	D Coy	ORANGEVILLE	Former Church						
34	48 Highrs	TORONTO	Fort York until Moss Park ready	X		1	1	2	
35	Alq R	NORTH BAY	Hutted Armoury	X		2	2	3	Former Armoured Unit to be Infantry One Offr to be Capt; one WO to be WO2
36	A Sqn	KAPUSKASING	DOT hut						
37	B Sqn	KIRKLAND LAKE	Post Office						
38	C Sqn	HAILEYBURY	Former Arena						
39	D Sqn	TIMMINS	Former Arena						
40	A & S HC	HAMILTON	James St Armoury	X		1	1	2	
41	Lake Sup Scot R	PORT ARTHUR	Armoury	X		1	2	3	One WO to be WO2
42	A Coy	FORT WILLIAM	Lodge Hall						
43	C Coy	ATITOKAN	Federal Bldg						

REORGANIZED MILITIA ORDER OF BATTLE

CENTRAL ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
44	Tor Scot R	TORONTO	Fort York	X		1	1	2	
45	IR RC	TORONTO	Fort York	X		1	1	2	
46	Inf Bn	SUDBURY	Rented Hall	X		1	1	2	
47	1 Toronto Service Bn	TORONTO	Denison Armoury	X		2	1	2	One Offr to be Capt
48	Two Coys RCASC	TORONTO	Denison Armoury				1		WO to be WO2
49	Two Sqns RCEME	TORONTO	Denison Armoury				1		WO to be WO2
50	2 Toronto Service Bn	TORONTO	College St until Moss Park ready	X		2	1	2	One Offr to be Capt
51	26 Med Coy	TORONTO	College St until Moss Park ready				1		WO to be WO2
52	Two Coys RCOC	TORONTO	College St until Moss Park ready				1		WO to be WO2
53	2 Pro Coy	TORONTO	College St until Moss Park ready				1		One WO to be WO2
54	Pl	MARKHAM							
55	Hamilton Service Bn	HAMILTON	James St Armoury	X		2	1	2	One Offr to be Captain
56	133 Coy RCASC	HAMILTON	James St Armoury				1		WO to be WO2
57	16 Med Coy	HAMILTON	James St Armoury				1		WO to be WO2
58	4 Ord Coy	HAMILTON	James St Armoury				1		WO to be WO2
59	Sqn RCEME	HAMILTON	James St Armoury						
60	Port Arthur Service Bn	PORT ARTHUR	Armoury	X		2	1	2	One Offr to be Captain
61	138 Coy RCASC	PORT ARTHUR	Armoury				1		WO to be WO2
62	17 Med Coy	PORT ARTHUR	Armoury				1		WO to be WO2

REORGANIZED MILITIA ORDER OF BATTLE

CENTRAL ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
63	35 Tech	PORT ARTHUR	Armoury				1		WO to be WO2
64	13 Med Coy	OWEN SOUND	Armoury		X		1		
65	Central Comd Med Advisory Staff	See Remarks	See Remarks	—	—	—	—	—	To consist of one Colonel and one clerk. Location according to availability of most suitable officer.
66	Central Comd Dental HQ	See Remarks	See Remarks	—	—	—	—	—	Location according to availability of personnel. To consist of one Colonel, 2IC, Adjt QM, dental assistant and dental storeman. One dental officer and one dental assistant to be attached to each major unit.
67	30 Tech Sqn	ST CATHARINES	Lake St Armoury		X	1	1		
68	33 Tech Sqn	SUDBURY	Rented Factory		X	1	1	1	
69	Two Tps	ESPANOLA	Rented Community Hall						
70	34 Tech Sqn	SAULT STE MARIE	Armoury		X	1	1		
71	Central Comd Ch Unit	OAKVILLE	HQ Central Comd						Administered by HQ Central Comd
72	2 Int Trg Coy	TORONTO	College St						Regular assistance and administration to be provided by HQ Central Ont Area
73	Central Ontario Personnel Selection Det	OAKVILLE	HQ Central Ont Area						
74	Northern Ontario Militia Advisor	SAULT STE MARIE	Armoury						
75	TOTALS			25	6	37	49	58	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO1
For Minor Units: Capts and WO2
For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

EASTERN ONTARIO AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Eastern Ontario Militia HQ	OTTAWA or KINGSTON	HQ Eastern Ont Area						Regular Assistance and Administration to be provided by staff of HQ Eastern Ont Area
2	R de Hull	HULL	Armoury	X		1	1	2	
3	30 Fd Regt	OTTAWA	HMCS CARLETON	X		1	1	2	
4	3 Sig Regt	OTTAWA	Signals Armoury Cartier St	X		1	1	2	
5	Sqn	KEMPTVILLE	Armoury						
6	GGFG	OTTAWA	Drill Hall Cartier Square	X		1	1	2	
7	PWOR	KINGSTON	Armoury	X		1	1	2	
8	Hast & PER	BELLEVILLE	Armoury	X		2	2	3	One Offr to be a Captain One WO to be a WO 2
9	B Coy	MADOC	Armoury						
10	D Coy	PICTON	Armoury						
11	Coy	NAPANEE	Armoury						
12	Brock Rif	BROCKVILLE	Armoury	X		1	1	2	
13	L & R Scot R	PEMBROKE	Armoury	X		1	2	3	One WO to be WO 2
14	A Coy	RENFREW	Armoury						
15	C Coy	CARLETON LACE	Armoury						
16	SD & C Highrs	CORNWALL	Armoury	X		1	1	2	
17	CH of O	OTTAWA	Drill Hall Cartier Square	X		1	1	2	
18	Prince of Wales Rangers	PETERBOROUGH	Armoury	X		1	2	3	One WO to be WO 2
19	Coy	LINDSAY	Armoury						
20	Coy	COBOURG	Armoury						

REORGANIZED MILITIA ORDER OF BATTLE

EASTERN ONTARIO AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
21	Ottawa Service Battalion	OTTAWA	Wallace House	X		2	1	2	One Offr to be a Captain
22	130 Coy RCASC	OTTAWA	Wallace House				1		WO to be WO2
23	10 Med Coy	OTTAWA	Wallace House				1		
24	3 Ord Coy	OTTAWA	Wallace House				1		
25	Pro Pl	OTTAWA	Wallace House				1		
26	28 Tech Sqn	PETERBOROUGH	Armoury		X	1	1		
27	Eastern Ontario Area Pers Selection Det	OTTAWA or KINGSTON	HQ Eastern Ont Area						Regular Assistance and Administration to be provided by staff of HQ Eastern Ont Area
28	TOTALS			12	1	15	20	27	

Unless otherwise stated rank of Regular assistance will be:

For Majors Units: Majors and WO1
For Minor Units: Capts and WO1
For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

WESTERN QUEBEC AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Montreal Militia HQ	MONTREAL	HQ Quebec Comd						Regular Assistance and Administration to be provided by staff of HQ Quebec Command
2	Sherbrooke Militia HQ	SHERBROOKE	Armoury Belvedere St						Regular Assistance and Administration to be provided by staff of HQ Quebec Command
3	TRR	TROIS RIVIERES	Armoury 574 St Francois	X		1	1	2	
4	RCH	MONTREAL	Armoury 4185 Cote des Neiges	X		1	2	3	
5	A Sqn	ST JOHN	Armoury						
6	B Sqn	LONGUEUIL	Armoury						
7	27 Fd Regt	COWANSVILLE	Armoury	X		1	2	3	
8	24 Fd Bty	GRANBY	Drill Hall						
9	35 Fd Bty	FARNHAM	Drill Hall						
10	5 Fd Bty	MONTREAL	Craig St Armoury		X	1	1	1	
11	46 Fd Regt	DRUMMONDVILLE	Armoury	X		1	2	3	
12	72 Fd Bty	COATICOOK	Armoury						
13	73 Fd Bty	VICTORIAVILLE	Hangar						
14	62 Fd Regt	SHAWINIGAN	Armoury	X		1	1	2	
15	2 Fd Bty	MONTREAL	Craig St Armoury		X	1	1		
16	3 Fd Engr Regt	WESTMOUNT	Armoury 1-3 Hillside	X		1	1	2	
17	9 Fd Sqn	NORANDA	Former Church		X	1	1		
18	57 Fd Sqn	ST HILAIRE	Leased Armoury		X	1	1		
19	15 Indep Sig Sqn	WESTMOUNT	Armoury 1-3 Hillside		X	1	1		
20	14 Indep Sig Sqn	SHERBROOKE	Armoury Belvedere St		X	1	1		
21	CGG	MONTREAL	Armoury 4171 Esplanade	X		1	1	2	

REORGANIZED MILITIA ORDER OF BATTLE

WESTERN QUEBEC AREA (Continued)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
22	3 RHC	MONTREAL	Armoury 2067 Bleury	X		1	1	2	
23	4 R22eR (CHATEAUGUAY-MAISONNEUVE)	MONTREAL	Armoury 4600 Lacombe	X		2	2	3	
24	A & B Coys	MONTREAL NORTH	Armoury 760 St Zotique						
25	Coy	VALLEYFIELD	Leased Armoury						
26	Coy	ST JEROME	Armoury						
27	6 R22eR	ST HYACINTHE	Armoury	X		1	1	2	
28	A Coy	ST JOHN	Armoury						
29	Fus MR	MONTREAL	Armoury 3721 Henri-Julien	X		1	1	2	
30	Fus de Sher	SHERBROOKE	Armoury Belvedere St	X		1	1	2	
31	RMR	MONTREAL	Armoury 4625 St Catherine St W	X		1	1	2	
32	D Coy	STE ANNE DE BELLEVUE	Leased Drill Hall						
33	Firt Montreal Service Bn	MONTREAL	BEL AIR Armoury	X		2	1	2	One Offr to be a Capt
34	Coy RCASC	MONTREAL	BEL AIR Armoury				1		WO to be a WO 2
35	Coy 1 Med Bn	MONTREAL	BEL AIR Armoury				1		WO to be a WO 2
36	A Coy 3 Ord Bn	MONTREAL	BEL AIR Armoury				1		WO to be a WO 2
37	A Sqn 2 Tech Regt	MONTREAL	BEL AIR Armoury				1		WO to be a WO 2
38	P1 3 Pro Coy	MONTREAL	BEL AIR Armoury				1		WO to be a WO 2
39	Second Montreal Service Bn	MONTREAL	Craig St Armoury	X		2	1	2	One Offr to be a Capt

REORGANIZED MILITIA ORDER OF BATTLE

WESTERN QUEBEC AREA (continued)

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
	Second Montreal Service Bn continued								
40	Coy RCASC	MONTREAL	Craig St Armoury				1		WO to be a WO2
41	Coy 1 Med Bn	MONTREAL	Craig St Armoury				1		WO to be a WO 2
42	8 Ord Coy	STE THERESE	Craig St Armoury				1		WO to be a WO 2
43	B Sqn 2 Tech Regt	MONTREAL	Craig St Armoury				1		WO to be a WO 2
44	P1 Pro Coy	MONTREAL	Craig St Armoury				1		WO to be a WO 2
45	8 Med Coy	SHERBROOKE	Armoury Belvedere St		X		1		
46	Quebec Comd Med Advisory Staff	See Remarks	See Remarks						To consist of one Colonel and one clerk. Location according to availability of most suitable officer.
47	Quebec Comd Dental HQ	See Remarks	See Remarks						Location according to availability of personnel. To consist of one Colonel, 2 IC, Adjt QM, dental assistant and dental storeman. One dental officer and dental assistant to be attached to each major unit.
48	22 Tech Sqn	CAP de la MADELEINE	Armoury		X	1	1		
49	Que Comd Ch Unit	MONTREAL	HQ Quebec Comd						Regular Assistance and Administration to be provided by staff of HQ Quebec Command.
50	1 Int Trg Coy	MONTREAL	HQ Quebec Comd						Regular Assistance and Administration to be provided by staff of HQ Quebec Command
51	Western Quebec Area Pers Selection Det	MONTREAL	HQ Quebec Comd						Regular Assistance and Administration to be provided by staff of HQ Quebec Command
52	Trois Rivieres Militia Advisor	TROIS RIVIERE	Armoury 574 St Francois						
53	TOTALS			15	8	25	37	35	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO 1
For Minot Units: Capts and WO 2
For all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

EASTERN QUEBEC AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	Eastern Quebec Militia HQ	QUEBEC	HQ Eastern Quebec Area						Regular Assistance and Administration to be provided by staff of HQ Eastern Quebec Area
2	6 Fd Regt (incl 58 and 59 Fd Bty)	LEVIS	Armoury	X		1	2	3	One Offr to be a Capt One WO to be a WO 2
3	80 Fd Bty	MONTMAGNY	Armoury						
4	82 Fd Bty	BEAUPORT	Armoury						
5	10 Fd Sqn	QUEBEC	Grande Allee Armoury		X	1	1		
6	15 Fd Sqn	THETFORD MINES	Post Office & Leased Garage		X	1	1		
7	3 Indep Sig Sqn	QUEBEC	Grande Allee Armoury		X	1	1		
8	R du Sag	CHICOUTIMI	Armoury	X		1	1	2	
9	C Coy	JONQUIERE	Leased Garage						
10	R de Chaud	LEVIS	Armoury	X		2	2	3	One Offr to be a Capt One WO to be a WO 2
11	A Coy	BEAUCEVILLE	Leased Hall						
12	B Coy	LAC MEGANTIC	Armoury						
13	D Coy	ST GEO de BEAUCE	Leased Garage						
14	Fus du St-L	RIMOUSKI	Armoury	X		3	3	3	Two Offrs to be Capts Two WOs to be WO 2
15	A Coy	RIVIERE du LOUP	Armoury						
16	Pl	CABANO	Armoury						
17	B Coy	GASPE	Armoury						
18	Pl	NEW RICHMOND	Armoury						
19	C Coy	MONT JOLI	Armoury (Old Post Office)						
20	D Coy	MATANE	Leased Arena						

Page (lxxv)

REORGANIZED MILITIA ORDER OF BATTLE

EASTERN QUEBEC AREA (Continued)

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
21	Les Voltigeurs de Quebec Service Bn	QUEBEC	Grande Allee Armoury	X		2	1	2	One Offr to be a Capt
22	Coy RCASC	QUEBEC	Grande Allee Armoury				1		WO to be WO 2
23	7 Med Coy	QUEBEC	Grande Allee Armoury				1		WO to be WO2
24	A Coy 2 Ord Bn	BEAUPORT	Armoury				1		WO to be WO 2
25	42 Tech Sqn	QUEBEC	Grande Allee Armoury				1		WO to be WO 2
26	4 Pro Coy	BEAUPORT	Armoury				1		WO to be WO 2
27	25 Tech Sqn	JONQUIERE	Leased Garage		X	1	1	1	
28	Eastern Quebec Area Pers Selection Det	QUEBEC	HQ Eastern Quebec Area						Regular Assistance and Administration to be provided by staff of HQ Eastern Quebec Area
29	TOTALS			5	4	13	18	14	

Unless otherwise stated rank of Regular assistance will be:

for Major Units: Majors and WO 1
for Minor Units: Capts and WO 2
for all types of Units: S Sgt or Sgt

REORGANIZED MILITIA ORDER OF BATTLE

NEW BRUNSWICK AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	NB Militia HQ	FREDERICTON or SAINT JOHN	HQ NB Area						Regular Assistance and Administration to be provided by staff of HQ NB Area
2	8 CH (M)	SUSSEX	Camp Site	X		1	1	2	
3	C Sqn	SACKVILLE	Garage						
4	3 Fd Regt	SAINT JOHN	Armoury	X		1	2	3	One WO to be WO 2
5	89 Fd Bty	WOODSTOCK	Armoury						
6	90 Fd Bty	FREDERICTON	Armoury						
7	5 Indep Sig Sqn	SAINT JOHN	Armoury		X	1	1		
8	1 RNBR	FREDERICTON	Armoury	X		2	2	3	One Offr to be a Capt One WO to be WO 2
9	B Coy	SAINT JOHN	Armoury						
10	C Coy	GRAND FALLS	Leased Bowling Alley						
11	D Coy	EDMUNDSTON	Leased Store						
12	2 RNBR	BATHURST	Armoury and leased building	X		1	2	3	One WO to be WO 2
13	SP & A Coy	NEWCASTLE	Armoury						
14	C & D Coy	CAMPBELLTON	Armoury						
15	Moncton Service Bn	MONCTON	Armoury	X		2	1	2	One Offr to be a Capt
16	113 Coy RCASC	MONCTON	Armoury				1		WO to be WO 2
17	21 Tech Sqn	MONCTON	Armoury				1		WO to be a WO 2
18	16 Pro Coy	MONCTON	Armoury				1		WO to be WO 2
19	112 Coy RCASC	SAINT JOHN	Armoury		X	1	1		
20	4 Med Coy	SAINT JOHN	Armoury		X		1		WO to be WO 2
21	NB Area Personnel Selection Det	FREDERICTON or SAINT JOHN	HQ NB Area						Regular Assistance and Administration to be provided by staff of HQ NB Area
22	TOTALS			5	3	9	14	13	

Unless otherwise stated rank of Regular assistance will be: For Major Units: Majors and WO 1; For Minor Units: Capts and WO 2; For all types of Units; S Sgt or Sgt.

REORGANIZED MILITIA ORDER OF BATTLE
NOVA SCOTIA PRINCE EDWARD ISLAND AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	NS/PEI Militia HQ	HALIFAX	HQ NS/PEI Area						Regular assistance and Administration to be provided by HQ NS/PEI Area
2	PEIR	CHARLOTTETOWN	HMCS Queen Charlotte & Wartime Huts	X		1	2	3	To train as recce One WO to be WO 2
3	B Sqn	MONTAGUE	Leased Lodge & Dance Hall						
4	C Sqn	SUMMERSIDE	Armoury						
5	14 Fd Regt	YARMOUTH	Hutted Armoury	X		1	1	2	
6	133 Fd Bty	LIVERPOOL	Hutted Armoury						
7	1 Fd Regt	HALIFAX	Armoury	X		1	1	2	
8	30 Fd Sqn	HALIFAX	Armoury		X	1	1		
9	45 Fd Sqn	SYDNEY	Armoury		X	1	1		
10	5 Sig Regt	CHARLOTTETOWN	HMCS Queen Charlotte	X		1	1	2	
11	Sqn 6 Sig Regt	HALIFAX	Armoury		X	1	1		
12	Pl Fus	HALIFAX	Armoury	X		1	1	2	
13	1 NS Highrs	AMHERST	Armoury	X		2	2	3	One Offr to be Capt One WO to be WO 2
14	A Coy	PICTOU	Armoury						
15	B Coy	SPRINGHILL	Armoury						
16	D Coy	NEW GLASGOW	Armoury						
17	2 NS Highrs	SYDNEY	Hutted Armoury	X		1	2	3	One WO to be WO 2
18	A Coy	GLACE BAY	Armoury						
19	B Coy	NORTH SYDNEY	Armoury						
20	West NSR	ALDERSHOT	Camp Site	X		2	2	3	One Offr to be a Capt One WO to be WO 2
21	Coy	WINDSOR	Leased Civic Bldg						
22	B Coy	MIDDLETON	Armoury						

REORGANIZED MILITIA ORDER OF BATTLE

NOVA SCOTIA PRINCE EDWARD ISLAND AREA (Continued)

21314—8

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
	West NSR (Cont'd)								
23	C Coy	DEEP BROOK	RCN Hut						
24	D Coy	BRIDGEWATER	Armoury						
25	Two Pls	LUNENBURG	Armoury						
26	The Halifax Rifles Service Bn	HALIFAX	Armoury	X		2	1	2	One Offr to be a Capt
27	100 Coy RCASC	HALIFAX	Armoury				1		WO to be WO 2
28	2 Med Coy	HALIFAX	Armoury				1		WO to be WO 2
29	A Coy 1 Ord Bn	HALIFAX	Armoury				1		WO to be WO 2
30	20 Tech Sqn	HALIFAX	Armoury				1		WO to be WO 2
31	5 Pro Coy	HALIFAX	Armoury				1		WO to be WO 2
32	111 Coy RCASC	SYDNEY	Armoury				1		
33	5 Med Coy	CHARLOTTETOWN	HMCS Queen Charlotte		X	1	1		WO to be WO 2
34	6 Med Coy	SYDNEY	Armoury		X		1		WO to be WO 2
35	Eastern Comd Med Advisory Staff	See Remarks	See Remarks						To consist of one Colonel and one clerk. Location according to availability of most suitable officer.
36	Eastern Comd Dental HQ	See Remarks	See Remarks						Location according to availability of personnel. To consist of one Colonel, 2 IC, Adjt QM, dental assistant and dental storeman. One dental officer and one dental assistant to be attached to each major unit.
37	3 Int Trg Coy	HALIFAX	HQ NS/PEI Area						Regular Assistance and Administration to be provided by staff of HQ NS/PEI Area
38	NS/PEI Personnel Selection Det	HALIFAX	HQ NS/PEI Area						Regular Assistance and Administration to be provided by staff of HQ NS/PEI Area
39	Eastern Comd Ch Unit	HALIFAX	HQ NS/PEI Area						Regular Assistance and Administration to be provided by staff of HQ NS/PEI Area
40	PEI Militia Advisor	CHARLOTTETOWN	HMCS Queen Charlotte						
41	TOTALS			9	5	16	24	22	

Unless otherwise stated rank of Regular assistance will be: For Major Units: Majors and WO 1; For Minor Units: Capts and WO 2;
For all types of Units: S Sgt or Sgt

Page (lxxix)

REORGANIZED MILITIA ORDER OF BATTLE

NEWFOUNDLAND AREA

APPENDIX 3 to
ANNEX "A" to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

SERIAL	MILITIA GP HQ UNIT OR SUB UNIT	LOCATION	ACCOM-MODATION	UNIT DESIGNATION		REGULAR ASSISTANCE			REMARKS
				MAJOR	MINOR	MAJ/CAPT	WO1/WO2	S SGT/SGT	
1	56 Field R	ST JOHN'S	FORT PEPPERRELL		X	1	1		
2	R Nfld R	ST JOHN'S	FORT PEPPERRELL	X		2	2	3	One Offr to be a Capt One WO to be WO 2
3	A Coy	CORNERBROOK	Armoury						
4	B Coy	GRAND FALLS	Armoury						
5	1 Med Coy	ST JOHN'S	FORT PEPPERRELL		X		1		
6	Pl	CORNERBROOK	Armoury						
7	Nfld Area Personnel Selection Det	ST JOHN'S	HQ Nfld Area						Regular Assistance and Administration to be provided by staff of HQ Nfld Area
8	Nfld Militia Advisor	ST JOHN'S	HQ Nfld Area						
9	TOTALS			1	2	3	4	3	

Unless otherwise stated rank of Regular assistance will be:
For Major Units: Majors and WO1
For Minor Units: Capts and WO2
For all types of Units: S Sgt or Sgt

Page (lxxx)

Appendix 1 to
ANNEX B to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

CANADIAN MILITIA BONUS
BASED ON
TRAINING YEAR

RANK		NEW RATE	BLOCK/CAMP	COMPLETION
Pte Recruit	Basic	95.00	20.00	15.00
	Gp 1	107.00	23.00	15.00
	Gp 2	131.00	29.00	15.00
Pte Trained	Basic	99.00	21.00	15.00
	Gp 1	111.00	24.00	15.00
	Gp 2	135.00	30.00	15.00
Pte THR	Basic	116.00	24.00	20.00
	Gp 1	128.00	27.00	20.00
	Gp 2	152.00	33.00	20.00
L/Cpl	Basic	156.00	34.00	20.00
	Gp 1	168.00	37.00	20.00
	Gp 2	192.00	43.00	20.00
Cpl	Basic	164.00	36.00	20.00
	Gp 1	176.00	39.00	20.00
	Gp 2	200.00	45.00	20.00
Sgt	Basic	185.00	40.00	25.00
	Gp 1	197.00	43.00	25.00
	Gp 2	221.00	49.00	25.00
S/Sgt	Basic	210.00	45.00	30.00
	Gp 1	222.00	48.00	30.00
	Gp 2	246.00	54.00	30.00
WO 2	Basic	243.00	52.00	35.00
	Gp 1	255.00	55.00	35.00
	Gp 2	279.00	61.00	35.00
WO 1	Basic	268.00	57.00	40.00
	Gp 1	280.00	60.00	40.00
	Gp 2	304.00	66.00	40.00
Lt		280.00	60.00	40.00
Capt		360.00	80.00	40.00
Major		470.00	105.00	50.00
Lt Col		600.00	135.00	60.00
Col		758.00	172.00	70.00
Brig		985.00	225.00	85.00

EXAMPLE:

A Pte Recruit can, in his first training year, receive a bonus of $95. To obtain this he must complete 6½ day's attendance in each of the three training blocks. This entitles him to $20. per each block or a total of $60. In addition, provided he spends 6 days at summer camp he is entitled to another $20. This makes his total bonus $80. Having met fully these requirements, he receives an additional bonus of $15., which makes the total amount $95.

Page (lxxxi)

Appendix 2 to
ANNEX B to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

CANADIAN MILITIA
BONUS SHEET

Attendance Record

Days Completed	Block 1 Date	Block 2 Date	Block 3 Date	Camp Training Date
½	11 Jan 64	2 Apr 64	15 Aug 64	9 Jul 64
1	13 Jan 64	6 Apr 64	17 Aug 64	
1½	19 Jan 64	6 Apr 64	3 Sep 64	10 Jul 64
2	23 Jan 64	19 Apr 64	8 Sep 64	
2½	23 Jan 64	1 May 64	20 Sep 64	11 Jul 64
3	1 Feb 64	3 May 64	29 Sep 64	
3½	3 Feb 64	3 May 64	11 Oct 64	12 Jul 64
4	8 Feb 64	9 May 64	19 Oct 64	
4½	11 Feb 64	15 May 64	27 Oct 64	13 Jul 64
5	19 Feb 64	28 May 64	4 Nov 64	
5½	19 Feb 64	13 Jun 64	11 Nov 64	14 Jul 64
6	26 Feb 64		13 Nov 64	
6½	26 Feb 64		13 Nov 64	15 Jul 64
7	11 Mar 64		1 Dec 64	
7½	17 Mar 64			16 Jul 64
8				
Totals	7½	5½	7	8
Pay Entitlement	45.00	ϕ	45.00	45.00

Regimental Number B-0000
Rank Cpl
Surname Brown
Given Names Alward Johnson
Civilian Address 000 Xmouth St.
Ottawa 4, Ont.
Unit Rush More Rifles

Pay Record Block

Effective Date	Pt 20 No & Yr	Rank & Group	Block Rate of Pay	Completion Rate
1 Dec 63	18/63	Cpl GP 2	45 00	20 00

Completed Days 28

Audited by Area Paymaster

Date _____ Signature _____

Entitlements & Payments

Entitlement	Amount	Misc Debits MV No	Misc Debits Amount	Balance Due	Payments AR No	Payments Amount
Block 1	45 00	8	5 00	40 00	11	40 00
Block 2	ϕ		ϕ	ϕ		ϕ
Block 3	45 00			45 00	19	45 00
Camp Tng	45 00	46	10 00	35 00	27	35 00
Completion	20 00		ϕ	20 00	28	20 00
Totals	155 00		15 00	140 00		140 00

Miscellaneous

Page (lxxxii)

Appendix 3 to
ANNEX B to
Part II of Report by
Commission on Reorganization
of the Canadian Army (Militia)

CANADIAN MILITIA
BONUS VOUCHER

Voucher Number 11

UNIT RUSH MORE RIFLES

Sheet Number 1

Date 17 Mar. 64

Number	Rank	Name	TRG Summary		Pay Entitlement		Debits			Net amount due		Signature
			Block	Days			MV NO	Amount				
B-0000	CPL	1 Brown AJ	1	7⅛/8	45	00	8	5	00	40	00	1 AJ Brown
		2										2
		3		/								3
		4		/								4
B-0000	CPL	5 Brown AJ	3	7/8	45	00				45	00	5 AJ Brown *Voucher* No 19
		6		/								6
		7		/								7
		8		/								
		9		/								25
		10		/								26
		11	Form 11" x 17"									27
		12										28
		13		/								29
				/								30
				/								31
		32		/								32
		33		/								33
B-0000	CPL	34 Brown AJ	Camp	8/8	45	00	46	10	00	35	00	34 AJ Brown *Voucher* No 27
B-0000	CPL	35 Brown AJ	Com-pletion	28/30	20	00				20	00	35 AJ Brown *Voucher* No 28
		36		/								36
		37		/								37
		38		/								38
		TOTALS										

HQ FE NO	Vote	PRI	SA	OBJ	Amount

CLASSIFIED BY | EXAMINED BY FOR TREASURY OFFICER | TOTAL

CAFD

I certify that the members shown on this voucher have performed training as shown: that entitlements are in accordance with their status: and that there are no outstanding charges for kit deficiencies, etc.

Date Commanding Officer

I certify that I have audited this voucher and have found it to be in accordance with unit records and that the amounts shown have been paid and recorded on unit records.

Date Signature

Designation

Page (lxxxiii)

Appendix 1 to
ANNEX C to
Part II of the Report by
Commission on Reorganization
of Canadian Army (Militia)

SUMMARY OF COST REDUCTIONS

The present system of reporting Militia costs by categories does not permit the accurate isolation of costs elements within categories. To re-cast the accounts would be a major operation and impossible to undertake because of time limitations. Accordingly the only approach open was to synthesize the Militia Personnel and Maintenance Costs for the Militia giving full effect to the proposed reorganization and compare with the firm figures provided by the Comptroller General for the year 1963-64. Similarly, the rent and maintenance reductions were calculated and compared with the Accommodation Costs for the year 1963-64. The remaining cost categories, i.e. Other Personnel Costs, Other Maintenance, Capital Expenditures and Canadian Army Support of Militia have been assumed to be the same as given for the year 1964. Since cost reductions will also occur in these areas the estimate given below is conservatively stated and will undoubtedly be exceeded.

(*a*) Reductions in Militia Pay	$7,108,000
(*b*) Reduction in Militia Rent	330,573
(c) Reductions in Militia Accommodation Cost other than Rent	747,976
Total	$8,186,549

APPENDIX "B"

DEPARTMENT OF NATIONAL DEFENCE POSITION
on the
RECOMMENDATIONS OF THE COMMISSION
on the
REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

1. *Public Relations* Reference—Part I Pages 1-4

(a) *Commission Recommendations*

(1) "That a positive public relations programme in support of the activities of the Militia be implemented immediately.

(2) That such a programme be financially supported by federal funds and centrally controlled.

(3) That initially, the establishment and organization of such a programme be placed in the hands of an agency, national in character and competent in its field.

(4) That the present system of one PRO per unit be abandoned as being costly and ineffective. Public relations should be co-ordinated at Area and one regimental officer per unit should be detailed to keep the Area PRO advised of unit activities."

(b) *DND Position*

The Department agrees that a positive public relations programme is necessary and that it should be centrally organized and co-ordinated, however, it does not feel that a national agency is necessary or advisable. The Department's Director of Information Services will be charged with the overall responsibility for developing such a programme with the Militia itself. As recommended by the Commission this programme will be co-ordinated in the field at Area level and one regimental officer per unit will be detailed to assist the commanding officer in this function. Area co-ordination will be provided by the appointment within the Militia of two public relations advisers per Area whose task it will be to advise on and co-ordinate public relations activities.

2. *Authority of Commanding Officers* Reference—Part 1 Pages 4-7

(a) *Commission Recommendations*

(1) "That authority be delegated to a Militia commanding officer consistent with his responsibilities to his unit and to his community."

(2) In the body of the report the Commission recommended that a commanding officer should be the final authority in decision making in the following areas: Training Programmes; Training Budget; Write-offs of Deficiencies; Special Training and Use of Armouries.

(b) *DND Position*

The Department agrees in principle with the Commission on training programmes, write-offs of deficiencies and special training. The regulations regarding use of armouries are also being studied with a view to giving the local commanders increased authority in this connection.

3. *Training* Reference—Part I Pages 7-9

(*a*) *Commission Recommendations*

(1) "That training programmes be designed consistent with the stated objectives and full support in equipment, training areas and personnel be provided by the Regular Forces."

(2) "That weekend training be encouraged in principle, but carried out at the discretion of the commanding officer, who is fully conversant with local conditions."

(*b*) *DND Position*

The Department agrees in principle with this recommendation to the extent that priorities and funds will permit.

4. *Equipment* Reference—Part I Pages 9-11

(*a*) *Commission Recommendations*

(1) "That the possibility of using commercial-type equipment and vehicles be vigorously explored.

(2) That efforts be made to obtain surplus tanks from other NATO countries."

(*b*) *DND Position*

(1) The use of commercial-type equipment by the Militia is being thoroughly studied with a view to improving our position. However, the factors of maintenance, spare parts, cost/effectiveness and life expectancy of commercial equipment have a bearing on the extent to which non-military pattern items can be provided.

(2) The purchase of surplus tanks from NATO countries presents some disadvantages which cannot be properly resolved. Spare parts are usually not available in any quantities for tanks declared surplus; the cost of maintenance and tooling would be prohibitive; Regular Army RCEME tradesmen mechanics would have to be specially trained to carry out repairs on non-standard equipment.

(3) As the new equipment needs of the Regular Army are met, and with a smaller Militia, it is felt that it will be possible to provide more adequate equipment.

5. *Training Aids* Reference—Part I Page 12

(*a*) *Commission Recommendations*

"That the pursuit of an imaginative programme for the development of training aids be fully supported by the Department."

(*b*) *DND Position*

The Department supports the Commission's recommendation.

6. *Training Manuals* Reference—Part I Page 13

(*a*) *Commission Recommendation*

"That great care be given to the preparation of new training manuals."

(*b*) *DND Position*

The Department supports the Commission's recommendation. A programme for increased production of manuals in the French language has also been initiated.

7. *Corps Schools* Reference—Part I Pages 13-14

(*a*) *Commission Recommendations*

(1) "That a concerted effort be made to revive the role of Corps Schools for both officers and NCOs.

(2) That course schedules be promulgated with firm dates at the beginning of the training year and that each unit receive a copy of the course manual."

(*b*) *DND Position*

Militia courses will be conducted at Corps Schools whenever there is a requirement and a sufficient number of candidates can attend. A system will be initiated to notify all units, well in advance, of all such courses.

8. *Regular Army Increments* Reference — Part I Pages 15-16
Part II Pages 10-11

Regular Army Support

(*a*) *Commission Recommendations*

(1) "That a system of Regular Force personnel attached to Militia units replace the present Regular Army instructional pools and call-outs under CAO 94-2. This would require approximately 197 majors and/or capts, 274 WO 1s and/or WO 2s, and 274 s sgts and/or sgts."

(2) "That Regular units should be responsible for providing courses and attachments for Militia personnel."

(*b*) *DND Position*

(1) The Department agrees that the Militia should receive Regular Force training and administrative support and this will be achieved in the following way:

(*a*) Militia units are to have an affiliation to the extent possible with the nearest Regular Army unit for advice and assistance.

(*b*) Officers, warrant officers and non-commissioned officers of the Instructional Cadre are to be based on Regular units, schools or depots with the responsibility of conducting courses, examinations and summer training for the Militia.

(*c*) Trained orderly room and stores personnel of the Regular Army are to support Militia units and the present Call-outs will be gradually phased out of Militia units.

(*d*) Administrative staff officers are to be appointed on a full time basis in Areas to assist units in organizing their administration and to ensure that a high standard is maintained. It should be made clear that these officers would not merely "advise" but would help units in solving administrative problems.

9. *Physical Fitness* Reference — Part I Pages 16-17

(*a*) *Commission Recommendation*

"That more emphasis be placed on physical standards and militiamen be stimulated to take a personal interest in their own physical fitness."

(*b*) *DND Position*

The Commission's proposal is supported.

10. *Suggested Promotion Ages* Reference—Part 1 Page 18
Part II Page 14

(*a*) *Commission Recommendation*

(1) As stated in Parts I and II of the Commission's Report, officers and NCOs serving in combatant units should be qualified for and promoted to the respective ranks prior to attaining the following suggested ages:

Lieutenants	Age 26	Junior NCO	Age 26
Captains	Age 29	Senior NCO	Age 32
Majors	Age 34	WO 2	Age 37
Lieutenant-Colonels	Age 37	WO 1	Age 40

(2) The retirement age for officers and NCOs in technical and service units should conform with Regular Army practice.

(*b*) *DND Position*

(1) The Commission recommendation is agreed with in principle. The ages proposed for combatant units are being revised to the following:

Lieutenants	Age 26	Junior NCO	Age 26
Captains	Age 29	Senior NCO	Age 32
Majors	Age 36	WO 2	Age 37
Lieutenant-Colonels	Age 40	WO 1	Age 40

(2) The Commission proposal that the retirement age for officers and NCOs in technical and service units should conform to Regular Army practice is agreed with.

(3) Implementation of this recommendation will be carried out in such a manner as to avoid undue disorganization within Militia units.

11. *Recognition Badges* Reference—Part I Pages 18-19

(*a*) *Commission Recommendation*

"That badges marking significant achievement should be awarded to all militiamen on obtaining the requisite qualifications."

(*b*) *DND Position*

The advent of trades and specialty training will mean that Militia personnel may qualify to wear the appropriate trade badges as worn in the Regular Army.

12. *Uniforms* Reference—Part I Pages 19-20

(*a*) *Commission Recommendations*

(1) "That there should be no distinction between the Regular Force uniform and those issued to the Militia.

(2) That recovery of kit procedures be simplified and costed at a depreciated value to eliminate its obvious evils."

(*b*) *DND Position*

(1) The Department already issues uniforms identical to those of the Regular Army to the Militia, except for those items which either could not be issued or were issued on a restricted basis for budgetary reasons.

(2) Recovery of kit procedures are under continuous review, to keep them as simple as possible consistent with public property accounting requirements. Review will continue in an endeavour to simplify recovery as recommended by the Commission.

13. *Employment as Cadet Training officers* Reference—Part I Page 22

(a) *Commission Recommendations*

"That those officers who have demonstrated ability as instructors be employed as cadet training officers, where possible."

(b) *DND Position*

The Commission's recommendation is supported.

14. *Administration* Reference—Part I Pages 23-24

(a) *Commission Recommendations*

(1) "That a complete review of the present administrative procedures be carried out with a view to eliminating costly practices and give commanding officers more authority.

(2) That units as far as their involvement with administration is concerned, be on a modified field return basis."

(b) *DND Position*

(1) The Department agrees that a review of present administrative procedures is necessary. Steps are being taken with a view to streamlining pay procedures and giving the commanding officer more authority in the matter of allocation of training time.

(2) When the results of current studies on personnel and pay accounting are known and implemented it is expected that the procedures will be greatly simplified

(3) In addition, the appointment of Administrative Staff Officers in each Area to help Militia units maintain sound administrative practices will go a long way towards eliminating costly practices.

15. *Attestation* Reference—Part I Pages 24-26

(a) *Commission Recommendations*

(1) "That the system of re-engagement every second year be abolished.

(2) That a simple enrolment document be introduced and processed entirely within the unit."

(b) *DND Position*

(1) The department is studying the effects of longer periods of engagement in the reserves.

(2) A simplified enrolment document, to be processed within the unit, is to be adopted.

16. *Boards of Inquiry* Reference—Part I Pages 26-27

(a) *Commission Recommendations*

(1) "That Boards of Inquiry for minor losses, injuries, and the like are not necessary and a commanding officer's certificate should suffice.

(2) That commanding officers be authorized to write off minor losses.

(3) That Regular Army officers, attached to units, be responsible for any necessary Boards of Inquiry being completed in an acceptable form."

(b) *DND Position*

Injuries have potential compensation implications, and seemingly minor losses can have far reaching financial result. Proper investigation is therefore essential for protection of public funds, and militia officers must be trained in this necessary function. Powers of write-off for Militia commanding officers are being studied.

17. *Accounting* Reference—Part I Pages 28-30

(*a*) *Commission Recommendations*

(1) "That the accounting requirements of the Militia unit should be reduced to a reasonable level consistent with funds involved and the rate of turnover.

(2) That Area inspections should be revised to be less frequent and more realistic by a proper balance between inspection costs and the likelihood of serious deficiencies. Sampling with a scheduled number of detailed inspections should satisfy the requirements.

(3) That annual depreciation should be recognized and a system established whereby the percentage of depreciation becomes the write-off authority of the commanding officer."

(*b*) *DND Position*

(1) Studies are being made within the Department to streamline procedures and simplify unit accounting.

(2) Ordnance inspections are designed to balance units accounts and provide advice on QM matters rather than to merely count stores. They will continue to be held at regular intervals, but the possibility of reducing their frequency will be regularly reviewed.

(3) The write-off system is still under review with a view to its improvement.

18. *Pay* Reference—Part I Pages 30-32

(*a*) *Commission Recommendations* Part II Pages 15-16

"The Commission recommends a new Militia pay system based on a "bonus" rather than a "per diem" rate with the idea that it would provide incentive for parade attendance and would substantially reduce administrative paperwork."

(*b*) *DND Position*

(1) The bonus system of pay is an interesting proposal which appears to have considerable merit. There are advantages and disavantages in the system and the Department is studying the proposal with a view to its possible adoption as standard for the Royal Canadian Navy Reserves, the Royal Canadian Air Force Auxiliaries as well as the Militia.

(2) In the meantime everything is being done to streamline pay procedures to relieve the commanding officer of the administrative work load.

19. *Special Expenses* Reference—Part I Pages 32-33

(*a*) *Commission Recommendation*

"That reasonable expenses related to purchase of required kit appropriate to officers, warrant officers and senior NCOs be an allowable income tax deduction."

(*b*) *DND Position*

Under current regulations clothing expense is not an allowable deduction within the Income Tax Act.

20. *Contingency Allowance* Reference—Part I Pages 33-34

(*a*) *Commission Recommendation*

"That Contingency Allowance entitlement should be altered to consist of two payments:

(1) a basic amount payable to major and minor units at the beginning of the training season; and

(2) payment of a bonus in addition, to be determined by over-all efficiency of the unit."

(*b*) *DND Position*

The Contingency Allowance entitlement will be more closely related to unit strength, participation in training activities and administrative efficiency. Although the allowance is payable in arrears, advances against the allowance are permitted.

21. *Armouries* Reference—Part I Pages 6 and 34
Part II Pages 30-33

(*a*) *Commission Recommendations*

(1) "That authority for the non-military use of armouries be delegated to a Militia commanding officer consistent with his responsibilities to his unit and to his community.

(2) That the present administrative system for control of armouries be revised with a view to making it more efficient and that a greater degree of authority be delegated to commanding officers in the sphere of public use of these facilities.

(3) That a study of Militia accommodation be made in Vancouver, Kimberley, Sudbury, Arvida, Matane and St-Georges de Beauce, with a view to improving the accommodation situation by building a new armoury in each of these localities."

(*b*) *DND Position*

(1) The present administrative system for control of armouries is currently under study to determine the extent and latitude of authority Militia commanding officers may be given.

(2) Armoury construction programs will be studied in conjunction with the Commission's recommendations and the overall priorities respecting allocation of funds.

(3) After reorganization of the Militia has been completed, the whole accommodation situation within the Services will be reexamined with a view to achieving maximum effectiveness.

22. *Composite Stores, Orderly Rooms and Messes* Reference—Part I Page 15

(*a*) *Commission Recommendation*

"That, where savings in space and personnel are required, composite stores, orderly rooms and messes be established."

(*b*) *DND Position*

The Department supports this recommendation.

23. *Disposal of Surplus Army Buildings* Reference—Part I Pages 35-36

(*a*) *Commission Recommendations*

(1) "That, where practicable, facilities declared surplus be leased to communities at a nominal rate with the understanding that they become immediately available in the event of an emergency.

(2) That, in the case of facilities declared surplus to requirements and disposed of by sale, the monies resultant remain under the control of the Department."

(*b*) *DND Position*

Retention of surplus buildings and arranging to lease them would create a considerable administrative burden. The Department therefore considers it advisable to dispose of any property for which there is no foreseeable need.

24. *The Defence Association of Canada* Reference—Part I Pages 37-38

(*a*) *Commission Recommendations*

(1) "That the present Conference of Defence Associations be re-designated the Defence Association of Canada and function as such after the annual conference of Defence Associations in January, 1965.

(2) That delegates to the Defence Association of Canada be appointed on a representational basis from existing units of the reorganized Reserves and that this representation be limited to serving officers or to honorary colonels or honorary lieutenant colonels, or equivalent appointments, and to serving presidents and secretaries of Corps Associations.

(3) That Corps Associations be self-supporting.

(4) That the re-designated Defence Association of Canada be the recipient of the present total allocation of funds and that it assume the control and responsibility for its disbursement."

(*b*) *DND Position*

This recommendation is being referred to the Conference of Defence Associations for study and comment.

25. *Major and Minor Units* Reference—Part I Pages 20-21
Part II Pages 6-7

(*a*) *Commission Recommendation*

(1) "That classification of units as major or minor will provide inherent incentive advantages."

(2) In the body of the report the Commission recommends at Part II Page 6, that the designation of units as major or minor be dependent on effective strengths as determined on change of command.

(*b*) *DND Position*

The Department agrees with the Commission's recommendations.

26. *Militia Headquarters and Militia Advisers* Reference—Part II Pages 7-10

(*a*) *Commission Recommendation*

"That the present 27 Militia Group Headquarters be replaced by 15 Militia Headquarters and five militia advisers."

(*b*) *DND Position*

The closer relationship between the Regular Army and the Militia after organization will eliminate the need for Militia headquarters. Nineteen militia advisers (four brigadiers and 15 colonels) will be appointed across the country.

27. *Call-Outs* Reference—Part II Pages 11-12

(*a*) *Commission Recommendation*

"That, as the Regular Army increment will make the appointment of Call-outs, redundant, personnel affected should, on termination of

employment, be given terminal leave equal to one month's pay for each year of service."

(*b*) *DND Position*

(1) All Call-outs under CAO 94-2 and Permanent Orderly Room and Quartermaster Assistants will be phased out as trained Regular Army personnel become available. Phasing out of Call-outs will take several months.

(2) Call-outs will be given a minimum of three months notice including 30 days of terminal leave.

28. *Qualifications* Reference—Part II Pages 12-14

(*a*) *Commission's Views* (Not carried forward into recommendations). Their views detail qualifications for officers, WOs, NCOs and Militiamen, excluding trades qualifications.

(*b*) *DND Position*

The Department agrees with the commission on qualifications.

29. *Trades Qualifications* Reference—Part II Page 15

(*a*) *Commission Recommendation*

"That similar civilian trade qualifications be recognized for Militia Trades-pay."

(*b*) *DND Position*

The Commission's recommendation is supported, subject to regulations already in effect permitting such recognition.

30. *The Young Militiamen Programme* Reference—Part II Pages 16-18

(*a*) *Commission Recommendation*

"That the Young Soldiers Training Programme be re-designated the Young Militiaman Programme and that the potential advantages inherent in the Programme, both to the Militia and the Youth of the country, be vigorously pursued."

(*b*) *DND Position*

The Department agrees that this Programme will continue. Inasmuch as three of the four commands use the term "Student Militia", and as it best describes the type of individual wanted in the programme, its use is agreed as the standard designation. Actual training methods will be decided at the local command level and more stringent selection of candidates will be made.

31. *Manning Depots and Personnel Selection Units* Reference—Part II Pages 18-20

(*a*) *Commission Recommendation*

"That Manning Depots and Personnel Selection Units be disbanded."

(*b*) *DND Position*

The Commission's recommendation is agreed to and will be implemented.

32. *Canadian Officers' Training Corps* Reference—Part II Page 21

(*a*) *Commission Recommendation*

(1) "That university students, before being accepted as COTC candidates, should be accepted by a Militia unit.

(2) That, when commissioned, they should fulfil a voluntary commitment to serve with a Militia unit.

(3) That, unless there exists a satisfactory flow from COTC to Militia units, the COTC plan be abolished."

(*b*) *DND Position*

(1) A closer relationship between the COTC and the Militia will be fostered to facilitate and encourage a greater flow of graduates to Militia units.

(2) COTC graduates are required to sign a commitment for Militia service after graduation. The present follow-up system is being improved.

33. *Canadian Women's Army Corps* Reference—Part II Pages 22-23

(*a*) *Commission Recommendation*

(1) "That the CWAC be continued and their recruitment in units be encouraged.

(2) That promotion of CWAC personnel be a unit responsibility.

(3) That before promotion to Senior NCO rank and again before being commissioned, CWAC personnel be required to attend at least one summer concentration of their Corps."

(*b*) *DND Position*

The Department agrees with this recommendation. Certain positions within the unit establishment may be filled by CWAC personnel at the commanding officer's discretion.

34. *Medical Units* Reference—Part II Pages 22-24

(*a*) *Commission Recommendation*

(1) "That, where applicable, medical units should continue and form part of the Service Battalion.

(2) That medical advisory staff comprising one colonel and a clerk on the basis of one per Command should be authorized and located in Command Headquarters."

(*b*) *DND Position*

Medical units will form part of the Service Battalion. The Regular Force senior medical officer at Command Headquarters will assume advisory responsibilities on behalf of the Medical Services.

35. *Royal Canadian Dental Corps* Reference—Part II Pages 24-25

(*a*) *Commission Recommendation*

(1) "That a Dental Headquarters be established in each Command.

(2) That a dental officer and one dental assistant be attached to each major unit.

(3) That dental officers now serving who become surplus to requirements be posted to the Special List."

(*b*) *DND Position*

(1) Dental needs will be met by a dental officer and dental assistant carried on the establishment of each major unit.

(2) The Regular Force senior dental officer at Command Headquarters will assume advisory responsibility on behalf of the dental services.

36. *Le Régiment de Hull* Reference—Part II Page 25

(a) *Commission Recommendation* (Not carried forward into summary of recommendations).

"That for administrative and training purposes this unit should come under Eastern Ontario Area."

(b) *DND Position*

There does not appear to be any material advantage to placing this unit under Eastern Ontario Area, therefore Le Regiment de Hull will remain under command of Quebec Command.

37. *Supplementary Order of Battle* Reference—Part II Page 26

(a) *Commission Recommendation*

"That units removed from the current Order of Battle should be transferred and held in the listing to be known as the Supplementary Order of Battle."

(b) *DND Position*

This recommendation will be implemented.

38. *Special List* Reference—Part I Pages 21-22
Part II Page 27

(a) *Commission Recommendation*

(1) "That efficient officers retired for age only should be posted to a Special List, where they will be held available for assignment to static units and staff positions related to Internal Security and Survival, if required.

(2) That officers, especially those with specialist or technical qualities, retired for reasons of age, be encouraged to transfer to the Special List."

(b) *DND Position*

The Department agrees with this recommendation and is implementing it in conjunction with the supplementary reserve.

39. *Service Battalions* Reference—Part II Page 28

(a) *Commission Recommendation*

"That Service Battalions be constituted in larger cities and that these bear the name of the city."

(b) *DND Position*

This recommendation will be implemented in conjunction with the reorganization of the Militia.

40. *Special Units* Reference—Part II Pages 28-30

(a) *Commission Recommendation*

(1) "That experimental sub-units be formed in selected units to train in guerilla warfare and related activities as a special force in the Militia.

(2) That the formation of an emergency reserve similar to British "Ever Readies" should be initiated when it is apparent that Regular Army resources are overextended."

(b) *DND Position*

This recommendation will be considered after the reorganization has been completed.

41. *Transportation* Reference—Part II Pages 33-34

(*a*) *Commission Recommendation*

"That where necessary and advantageous, transportation should be provided to carry Militiamen to and from parades."

(*b*) *DND Position*

This recommendation will be implemented wherever suitable public transportation is not available. The authority will rest with the General Officer Commanding.

42. *Control* Reference—Part II Page 34

(*a*) *Commission Remarks* (Not carried forward into summary of recommendations).

"The Commission hopes that the Militia as reorganized will be found to be a flexible organization which can be increased or decreased in size and cost as prevailing conditions require. The instrument of control will be found in the size of establishments of major or minor units rather than in the disbandment and organization of units. The requirement of allowing each community in the country to make its proportionate contribution makes the proposed system imperative. As reorganized, by controlling the size of establishments, the Militia can be expanded to meet almost any foreseen requirements or can be reduced to minimum requirements without hardship to any community."

(*b*) *DND Position*

The Department agrees in principle with the Commission's remarks, subject to the stipulations that unproductive units may have to be disbanded and/or new units formed when required.

43. *Establishments—Present and Reorganized Militia Order of Battle* Reference—Part I Pages 20-21 Part II Appendices 1, 2 & 3 to Annex A

(*a*) *Commission Recommendation*

"That Militia unit establishments be reduced to a reasonably obtainable total."

(*b*) *DND Position*

The Department agrees with this recommendation.

44. *Summary of Cost Reduction* Reference—Part II Page (lxxxiii)

(*a*) *Commission Remarks*

(Not carried forward into summary of recommendations).

(1) The present system of reporting Militia costs by categories does not permit the accurate isolation of costs elements within categories. To re-cast the accounts would be a major operation and impossible to undertake because of time limitations. Accordingly the only approach open was to synthesize the Militia Personnel and Maintenance Costs for the Militia giving full effect to the proposed reorganization and compare with the firm figures provided by the Comptroller General for the year 1963-64. Similarly, the rent and maintenance reductions were calculated and compared with the Accommodation Costs for the year 1963-64. The remaining cost categories, i.e. Other Personnel Costs, Other Maintenance, Capital Expenditures and Canadian Army Support of Militia have been as-

sumed to be the same as given for the year 1964. Since cost reductions will also occur in these areas the estimate given below is conservatively stated and will undoubtedly be exceeded:

(*a*) Reductions in Militia Pay	$7,108,000
(*b*) Reductions in Militia Rent	330,573
(c) Reductions in Militia Accommodation Cost Other than Rent ..	747,976
TOTAL	$8,186,549

(*b*) *DND Position*

After reorganization is complete, savings in an average fiscal year on personnel and operating costs should be $8,776,639, broken down as follows:

	1963–64	Proposed	Estimated Savings	Remarks
Militia Pay	$14,863,113	$9,161,184	$5,701,929	Based on present per diem system with recommended bonus system still under study.
Other Personnel Costs (grants, allowances, clothing, food, medical and transportation)	3,169,000	2,554,500	614,500	
Rentals	492,000	139,813	352,187	Reflects decisions to date closing accommodation. Remainder is still under study.
Other Accommodation Costs (including owned property)	4,727,620	4,166,597	561,023	
Other Maintenance Costs (stationery, barrack stores, miscellaneous stores, spare parts, repairs, gas, oil, ammunition, etc)	2,919,000	2,122,000	797,000	
Canadian Army Regular Support Costs	8,669,000	7,919,000	750,000	
Total	34,839,733	26,063,094	8,776,639	

APPENDIX "C"

REORGANIZATION
of the
CANADIAN ARMY (MILITIA)

Glossary of Terms

1. AMALGAMATION	The combining of two or more units or sub-units to form one entity.
2. CONVERSION	Transfer of a unit from one corps to another, ie, from RCA to RCAC, or change of role of a unit within its corps, ie, to change an armoured regiment RCAC to a reconnaissance regiment RCAC.
3. DISBANDMENT	Action whereby a headquarters or unit ceases to exist as an entity of the Militia.
4. RELOCATION	To change the geographical location of a unit or sub-unit.
5. ORDER OF BATTLE	List of active units of the Militia grouped by Comd, Area, Location or Corps.
6. TRANSFER TO SUPPLEMENTARY ORDER OF BATTLE	Transfer of a unit or sub-unit from the list of active units to the list of inactive units.

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

BRITISH COLUMBIA AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
ABBOTSFORD	152 Company RCASC	Transfer to Supplementary Order of Battle	Agreed
PORT ALBERNI	D Company, The Canadian Scottish Regiment (Princess Mary's) RCIC	Relocate to parent unit in Victoria	Agreed
ARMSTRONG	Platoon, C Company, The Rocky Mountain Rangers RCIC	Relocate to Salmon Arm with C Company	Agreed
CAMPBELL RIVER	Platoon, C Company, The Canadian Scottish Regiment (Princess Mary's) RCIC	Relocate to parent unit at Courtenay	Will relocate to parent unit at Victoria
CHILLIWACK	22 Field Squadron RCE	Transfer to Supplementary Order of Battle	Agreed
COURTENAY	C Company, The Canadian Scottish Regiment (Princess Mary's) RCIC	Remains in Order of Battle	Agreed and will relocate to parent unit in Victoria
DUNCAN	A Company, The Canadian Scottish Regiment (Princess Mary's) RCIC	Relocate to parent unit at Victoria	Agreed
KAMLOOPS	The Rocky Mountain Rangers RCIC (less A, B, C and D Companies)	Remains in Order of Battle	Agreed
KELOWNA	The British Columbia Dragoons RCAC (less Headquarters, A and C Squadrons)	Headquarters relocate to Vernon. B Squadron remains at Kelowna	Agreed and to train in the reconnaissance role
LADNER	85 Field Battery RCA	Remains in Order of Battle	Agreed
MERRITT	Mortar Platoon, The Rocky Mountain Rangers RCIC	Remains in Order of Battle	Agreed
MISSION CITY	B Company, The Westminster Regiment RCIC	Relocate to Abbotsford	Agreed
NANAIMO	B Company, The Canadian Scottish Regiment (Princess Mary's) RCIC	Remains in Order of Battle	Agreed
	C Squadron The British Columbia Regiment RCAC	Relocate to parent unit at VANCOUVER	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

BRITISH COLUMBIA AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
NELSON	111 Battery RCA	Transfer to Supplementary Order of Battle	Agreed
NEW WESTMINSTER	The Westminster Regiment RCIC (less one Company)	Remains in Order of Battle	Agreed
PENTICTON	C Squadron The British Columbia Dragoons RCAC	Remains in Order of Battle	Agreed
POWELL RIVER	C Company, Irish Fusiliers of Canada (The Vancouver Regiment) RCIC	Relocate to parent unit at VANCOUVER	Agreed and will transfer to Supplementary Order of Battle
PRINCE GEORGE	A Company, The Rocky Mountain Rangers RCIC	Remains in Order of Battle	Agreed
PRINCE RUPERT	D Company, Irish Fusiliers of Canada (The Vancouver Regiment) RCIC	Relocate to parent unit at VANCOUVER	Agreed and will transfer to Supplementary Order of Battle
QUESNEL	Platoon, B Company, The Rocky Mountain Rangers RCIC	Relocate to KAMLOOPS with parent B Company	Agreed
REVELSTOKE	D Company, The Rocky Mountain Rangers RCIC	Remains in Order of Battle	Agreed
SALMON ARM	C Company, The Rocky Mountain Rangers RCIC	Remains in Order of Battle	Agreed
TRAIL	24 Field Artillery Regiment RCA with 109 Field Battery (less 111 Field Battery)	Transfer to Supplementary Order of Battle	Agreed
	44 Field Squadron	Remains and relocate one troop to NELSON	Agreed
VANCOUVER	The British Columbia Regiment (Duke of Connaught's Own) RCAC (less C Squadron)	Remains in Order of Battle (to train in reconnaissance role)	Agreed
	15 Field Artillery Regiment RCA with 31, 158, 209 and 210 Field Batteries (less 85 Field Battery)	Remains in Order of Battle	Agreed but 210 Battery will transfer to Supplementary Order of Battle
	156 Company RCASC	Remains in Order of Battle	Agreed and will be a part of the VANCOUVER Service Battalion

VANCOUVER	7 Field Engineer Regiment RCE (less 6, 22 and 44 Field Squadron)	Transfer to Supplementary Order of Battle	Agreed
	West Coast Signal Regiment RC Sigs	Regiment less one squadron (3 Area Signal Squadron) transfer to Supplementary Order of Battle	Agreed
	8 Ordnance Battalion RCOC	8 Ordnance Battalion less one company, transfer to Supplementary Order of Battle	Agreed and will be a part of the VANCOUVER Service Battalion
	8 Technical Regiment RCEME	8 Technical Regiment less one squadron transfer to Supplementary Order of Battle	Agreed and will be a part of the VANCOUVER Service Battalion
	8 Provost Company C PRO C	Remains in Order of Battle	Agreed and will be a part of the VANCOUVER Service Battalion
	111 Manning Depot	Disband	Agreed
	24 Militia Group Headquarters	Disband. To be replaced by British Columbia Militia Headquarters at VANCOUVER	24 Militia Group Headquarters will disband and will be replaced by one Militia Adviser in the rank of Colonel
	The Seaforth Highlanders of Canada RCIC	Remains in Order of Battle	Agreed
	Irish Fusiliers of Canada (The Vancouver Regiment) RCIC (less C and D Companies)	Remains in Order of Battle	The Irish Fusiliers of Canada (The Vancouver Regiment) RCIC will transfer to Supplementary Order of Battle
	24 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be a part of the Vancouver Service Battalion VANCOUVER Service Battalion
	61 Dental Unit RCDC	Disband	Agreed
	4 Intelligence Training Company C INT C	Remains in Order of Battle	Agreed
NORTH VANCOUVER	6 Field Squadron RCE	Remains in Order of Battle	Agreed
VERNON	27 Militia Group Headquarters	Disband. To be replaced by British Columbia Area Interior Militia Adviser	Agreed, one British Columbia Area Interior Militia Adviser will be appointed in the rank of Colonel
	Headquarters Squadron The British Columbia Dragoons RCAC	Remains in Order of Battle	Agreed
	A Squadron, The British Columbia Dragoons RCAC	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

BRITISH COLUMBIA AREA (Concluded)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
VICTORIA	5 Independent Medium Battery RCA	Convert to 5 Field Battery of 15 Field Artillery Regiment RCA	Agreed
	25 Militia Group Headquarters	Disband	Agreed
	5 Area Signal Squadron RC Sigs	Transfer to Supplementary Order of Battle	Agreed
	The Canadian Scottish Regiment (Princess Mary's) RCIC (less A, B, C, and D Companies)	Remains in Order of Battle	Agreed
	155 Company RCASC	Remains in Order of Battle	Agreed
	40 Technical Squadron RCEME	Transfer to Supplementary Order of Battle	Agreed
	Army Photo Intelligence Section	Transfer to Supplementary Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

ALBERTA AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
BANFF	23 Medium Battery of 19 Medium Artillery Regiment RCA	Transfer to Supplementary Order of Battle	Agreed
BASSANO	Troop of 13 Field Squadron RCE	Relocate with parent unit at Brooks	Agreed
BEAUMONT	Troop of 95 Medium Battery of 20 Medium Artillery Regiment RCA	Relocate to 20 Field Artillery Regiment at Edmonton	Agreed
BLAIRMORE	31 Technical Squadron RCEME	Transfer to Supplementary Order of Battle	Agreed
BOW ISLAND	1 and 2 Troops of C Squadron The South Alberta Light Horse RCAC	Relocate to parent unit in Medicine Hat	Agreed
BROOKS	13 Field Squadron RCE (less two troops)	Remains in Order of Battle and to be an independent squadron	Agreed
CALGARY	A Squadron, 9 Technical Regiment RCEME	Transfer to Supplementary Order of Battle	Agreed
	Troop of 13 Field Squadron RCE	Relocate with parent squadron at Brooks	Agreed
	The King's Own Calgary Regiment (RCAC)	Remains. B Squadron to be located at High River	Agreed to remain in the Order of Battle, B Squadron to remain in Calgary
	22 Militia Group Headquarters	Disband. To be replaced by Calgary Militia Headquarters	Agreed and to be replaced by one Militia Adviser in the rank of Colonel for the Area
	19 Medium Artillery Regiment RCA with 91 Medium Battery (less 23 and 78 Medium Batteries)	Transfer to Supplementary Order of Battle	Agreed
	7 Independent Signal Squadron	Remains in Order of Battle	Agreed
	The Calgary Highlanders RCIC (less A, C and D Companies)	Remains in Order of Battle	Agreed and to locate a company at High River
	Headquarters 7 Column RCASC	Transfer to Supplementary Order of Battle	Agreed
	150 Company RCASC	Remains in Order of Battle	Agreed and will be a part of the Calgary Service Battalion

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

ALBERTA AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
CALGARY	21 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be a part of the Calgary Service Battalion
	Alberta Detachment of Western Command Dental Advisery Staff	Dental headquarters remains in Order of Battle and to be located according to availability of personnel	Dental Advisery Staff will not be included in the Reorganized Militia
	59 Dental Unit RCDC	Disband	Agreed
	6 Ordnance Company RCOC	Remains in Order of Battle	Agreed and will be a part of the Calgary Service Battalion
	14 Provost Company C Pro C	Remains in Order of Battle	Agreed and will be a part of the Calgary Service Battalion
	110 Manning Depot	Disband	Agreed
CAMROSE	Troop of 19th Alberta Dragoons RCAC	Remains in Order of Battle	This troop will be transferred to the Supplementary Order of Battle
CRESTON	Troop of 17 Field Squadron RCE	Relocate with parent unit at Kimberley	Agreed
DAWSON CREEK, BC	Machine Gun Platoon, The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC	Relocate with parent unit at Edmonton	Agreed
DELIA	Platoon of The Calgary Highlanders RCIC	Relocate with parent unit at Hanna	Agreed
DEVON	Troop of D Squadron, 19th Alberta Dragoons RCAC	Relocate to parent squadron at Wetaskawin	This troop will be transferred to the Supplementary Order of Battle
DRUMHELLER	C Company, The Calgary Highlanders RCIC	Remains in Order of Battle	Agreed
EDMONTON	19th Alberta Dragoons RCAC	Remains In Order of Battle	To be transferred to Supplementary Order of Battle
	8 Independent Signal Squadron RC Sigs	Remains in Order of Battle	Agreed
	38 Technical Squadron RCEME	Remains in Order of Battle	Agreed and to be a part of the Edmonton Service Battalion

EDMONTON	20 Medium Artillery Regiment RCA with 95 and 96 Medium Batteries (less one troop)	Converts to Field Regiment and remains in Order of Battle	Agreed
	23 Militia Group Headquarters	Disband. To be replaced by Edmonton Militia Headquarters	Agreed to disband. One Militia Adviser will be appointed in the rank of Brigadier from within the Command
	25 Field Squadron RCE	Remains in Order of Battle and to be an independent squadron	Agreed
	The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC (less A, D and E Companies)	Remains in Order of Battle	Agreed
	154 Company RCASC	Remains in Order of Battle	Agreed and will be a part of the Edmonton Service Battalion
	23 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be a part of the Edmonton Service Battalion
	60 Dental Unit RCDC	Disband	Agreed
	One company of 7 Ordnance Battalion RCOC	7 Ordnance Battalion less one company transfer to Supplementary Order of Battle. One company remains in Order of Battle in Edmonton	Agreed and will be a part of the Edmonton Service Battalion
	15 Provost Company C Pro C	Remains in Order of Battle	Agreed and will be a part of the Edmonton Service Battalion
	6 Intelligence Training Company C INT C	Remains in Order of Battle	Agreed
	Western Command Chaplain Unit RCAChC	Remains in Order of Battle	Agreed
	Western Command Personnel Selection Unit	Disband. To be replaced by Alberta Area Personnel Selection Unit	Agreed to disband but Personnel Selection Detachment will not be organized
	116 Manning Depot	Disband	Agreed
	Alberta Detachment of Western Command Medical Advisery Staff	To consist of one Colonel and a clerk. Located according to availability	Medical Advisery Staffs will not be included in the Reorganized Militia
FORT MACLEOD	93 Field Battery RCA	Remains in Order of Battle	Agreed
FORT SASKATCHEWAN	Troop of 19th Alberta Dragoons RCAC	Relocate with parent unit at Edmonton	This troop will be transferred to the Supplementary Order of Battle
FORT SMITH NWT	E Company, The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC	Relocate with parent unit at Edmonton	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

ALBERTA AREA (Concluded)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
GLEICHEN	A Squadron, The King's Own Calgary Regiment (RCAC)	Remains in Order of Battle	Agreed
GRANDE PRAIRIE	D Company, The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC	Remains in Order of Battle	Agreed
HANNA	D Company, The Calgary Highlanders RCIC	Remains in Order of Battle	Agreed
HIGH RIVER	153 Company RCASC (less two platoons)	Transfer to Supplementary Order of Battle	Agreed. A Company of The Calgary Highlanders will be located here.
INNISFAIL	Troop of The King's Own Calgary Regiment (RCAC)	Relocate to parent unit at Calgary	Agreed
KIMBERLEY and CRANBROOK, BC	17 Field Squadron RCE	Remains in Order of Battle and to locate one troop in Blairmore	Agreed but a troop will not be organized in Blairmore
LETHBRIDGE	Headquarters, 8 Field Engineer Regiment RCE	To become 8 Field Engineer Regiment RCE and remain in Order of Battle	To remain as a Headquarters
	33 Field Squadron RCE	To remain in Order of Battle at Lethbridge with 8 Field Engineer Regiment RCE	Agreed and to be under command of Headquarters 8 Field Engineer Regiment RCE
	18 Field Artillery Regiment with 20 and 39 Field Batteries RCA	Remains in Order of Battle	Agreed
	32 Technical Squadron RCEME	Remains in Order of Battle	To transfer to the Supplementary Order of Battle
MEDICINE HAT	The South Alberta Light Horse RCAC	Remains in Order of Battle	Agreed
	Two platoons CWAC of 153 Company RCASC	Relocate to parent unit High River and transfer to Supplementary Order of Battle	Agreed
OLDS	Troop, The King's Own Calgary Regiment (RCAC)	Remains in Order of Battle	Agreed

PEACE RIVER	Anti-tank platoon, The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC	Relocate with parent unit at Edmonton	Agreed
PONOKA	22 Medical Company RCAMC	Transfer to Supplementary Order of Battle	Agreed
RED DEER	C Squadron, The King's Own Calgary Regiment (RCAC)	Relocate to parent unit at Calgary	Agreed
	78 Medium Battery RCA	Convert to Field Artillery and remain at Red Deer as part of 20 Field Artillery Regiment	Agreed
RED DEER	151 Company RCASC	Transfer to Supplementary Order of Battle	Agreed
STRATHMORE	Troop, The King's Own Calgary Regiment (RCAC)	Relocate to parent squadron at Gleichen	Agreed
VEGREVILLE	Platoon, The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC	Relocate with parent company at Vermilion	Agreed
VERMILION	A Company, The Loyal Edmonton Regiment (3rd Battalion Princess Patricia's Canadian Light Infantry) RCIC	Remains in Order of Battle	Agreed
VULCAN	A Company, The Calgary Highlanders RCIC	Remains in Order of Battle	Agreed
WETASKIWIN	D Squadron, 19th Alberta Dragoons RCAC	Remains in Order of Battle	To transfer to the Supplementary Order of Battle
	Operating Troop, 8 Independent Signal Squadron RC Sigs	Relocate with parent unit at Edmonton	Agreed
WHITEHORSE	The Yukon Regiment RCIC	Not considered by the commission	To remain in the Order of Battle as a Minor Unit

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

SASKATCHEWAN AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
CANORA	B Troop, 202 Field Battery of 53 Field Artillery Regiment RCA	Relocate to parent unit in Yorkton and transfer to Supplementary Order of Battle	Agreed
ESTEVAN	The South Saskatchewan Regiment RCIC (less A Company)	Remains in Order of Battle as a Minor unit	Agreed
FORT QU'APPELLE	B Company, The Regina Rifle Regiment RCIC	Remains in Order of Battle	Agreed
GRENFELL	65 Field Battery of 10 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
INDIAN HEAD	76 Field Battery RCA	Remains in Order of Battle	Agreed
KAMSACK	B Troop, 64 Field Battery RCA of 53 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
KINDERSLEY	D Company, 2nd Battalion, The North Saskatchewan Regiment (The Saskatoon Light Infantry) RCIC	Relocate to parent unit at Saskatoon	To remain in Order of Battle in Kindersley
LLOYDMINSTER	C Company, 1st Battalion, The North Saskatchewan Regiment (The Prince Albert and Battleford Volunteers) RCIC	Remains in Order of Battle	Agreed
MAPLE CREEK	B Squadron, 14th Canadian Hussars RCAC	Remains in Order of Battle	Agreed
MELFORT	B Company, 1st Battalion The North Saskatchewan Regiment (The Prince Albert and Battleford Volunteers) RCIC	Remains in Order of Battle	Agreed
MELVILLE	162 Field Battery of 53 Field Artillery Regiment RCA	Remains in Order of Battle	To relocate to parent unit at Yorkton and transfer to Supplementary Order of Battle
MOOSE JAW	The Saskatchewan Dragoons RCAC	Remains in Order of Battle	Agreed
	Two platoons of 19 Medical Company RCAMC	Remains in Order of Battle	Agreed

MOOSE JAW	Transport Platoon of 142 Company RCASC	Remains in Order of Battle	Agreed
MOOSOMIN	K Troop, 76 Field Battery RCA	Relocate to parent battery at Grenfell	Agreed
NORTH BATTLEFORD	A Company, 1st Battalion, The North Saskatchewan Regiment (The Prince Albert and Battleford Volunteers) RCIC	Remains in Order of Battle	Agreed
PRINCE ALBERT	1st Battalion, The North Saskatchewan Regiment (The Prince Albert and Battleford Volunteers) RCIC (less A, B and C Companies)	Remains in Order of Battle	Agreed
	44 Independent Medium Artillery Battery RCA	Remains in Order of Battle	Agreed, and to convert to Field Artillery
RADISSON	Recovery Troop, 37 Technical Squadron RCEME	Relocate to parent squadron at Saskatoon	Agreed
	20 Militia Group Headquarters	Disband. To be replaced by Saskatchewan Militia Headquarters	Agreed and to be replaced by one Militia Adviser for Saskatchewan Area in the rank of Colonel
	10 Field Artillery Regiment RCA with 18 Field Battery RCA (less 65 and 76 Field Batteries RCA)	Remains in Order of Battle	Agreed
	14 Field Squadron RCE	Remains in Order of Battle	Agreed
	2 Independent Signal Squadron RC Sigs (less one Operating Troop)	Remains in Order of Battle	Agreed
	The Regina Rifle Regiment RCIC (less B Company)	Remains in Order of Battle	Agreed
	142 Company RCASC (less one Transport Platoon)	Remains in Order of Battle	Agreed and will be a part of the Regina Service Battalion
	19 Medical Company RCAMC (less two platoons)	Remains in Order of Battle	Agreed and will be a part of the Regina Service Battalion
	58 Dental Unit RCDC	Disband	Agreed
	5 Ordnance Company RCOC	Remains in Order of Battle	Agreed and will be a part of the Regina Service Battalion
	109 Manning Depot	Disband	Agreed
ROSETOWN	C Company, 2nd Battalion, The North Saskatchewan Regiment (The Saskatoon Light Infantry) RCIC	Relocate to parent unit at Saskatoon	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

SASKATCHEWAN AREA (Concluded)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
SASKATOON	21 Militia Group Headquarters	Disband. To be replaced by Northern Saskatchewan Militia Adviser	Agree to disband. One Militia Adviser only will be appointed for Saskatchewan Area
	21 Independent Medium Artillery Battery RCA	Transfer to Supplementary Order of Battle	Agreed
	Operating Troop of 2 Independent Signal Squadron RC Sigs	Relocate to parent unit at Regina	Agreed
	2nd Battalion, The North Saskatchewan Regiment (The Saskatoon Light Infantry) RCIC (less C and D Companies)	Remains in Order of Battle	Agreed
	20 Medical Company RCAMC	Remains in Order of Battle	Agreed
	37 Technical Squadron RCEME	Remains in Order of Battle	Agreed and will be a part of the Service Battalion
SHAUNAVON	C Squadron, 14th Canadian Hussars RCAC	Relocate to parent unit at Swift Current	Agreed
SWIFT CURRENT	14th Canadian Hussars RCAC (less B and C Squadrons)	Remains in Order of Battle	Agreed
WEYBURN	A Company, The South Saskatchewan Regiment RCIC	Relocate to parent unit at Estevan	Agreed
YORKTON	53 Field Artillery Regiment RCA with 64 Field Battery RCA (less B Troop and 162 Field Battery RCA)	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

MANITOBA AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
BRANDON	26 Field Artillery Regiment (Self Propelled) RCA (less 38 and 70 Field Batteries (Self Propelled)	Remains. 71 Field Battery to be located at Brandon also	Agreed and "Self Propelled" to be deleted from unit title
	141 Company RCASC	Transfer to Supplementary Order of Battle	Agreed
DAUPHIN	70 Field Battery (Self Propelled) RCA	Remains in Order of Battle	Agreed
EMERSON	D Troop of 17 Field Battery (Self Propelled) RCA	Relocate to parent unit at Winnipeg and transfer to Supplementary Order of Battle	Agreed
FLIN FLON	21 Field Squadron RCE	Remains in Order of Battle	Agreed
MINNEDOSA	A Squadron, 12th Manitoba Dragoons (RCAC)	Transfer to Supplementary Order of Battle. To be replaced by Field Battery of 26 Field Artillery Regiment (Self Propelled) RCA	Agreed. A Field Battery of 26 Field Regiment is to be organized to be split between Minnedosa and Neepawa
NEEPAWA	C Squadron, 12th Manitoba Dragoons (RCAC)	Transfer to Supplementary Order of Battle To be replaced by 38 Field Battery of 26 Field Artillery Regiment (Self Propelled) RCA	Agreed. A Field Battery of 26 Field Regiment is to be organized to be split between Minnedosa and Neepawa
PINE FALLS	46 Field Squadron RCE	Remains in Order of Battle	Agreed
PORTAGE LA PRAIRIE	38 Field Battery (Self Propelled) RCA	Relocate to Neepawa	To remain in Portage La Prairie
VIRDEN	12th Manitoba Dragoons (RCAC) (less A and C Squadrons)	Transfer to Supplementary Order of Battle To be replaced by a Field Battery of 26 Field Artillery Regiment (Self Propelled) RCA	Agreed
WINNIPEG	6 Column RCASC (less three companies)	Transfer to Supplementary Order of Battle	Agreed
	140 Company RCASC	Remains in Order of Battle	Agreed and will be a part of the Winnipeg Service Battalion
	143 Company RCASC	Transfer to Supplementary Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

MANITOBA AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
WINNIPEG	5 Intelligence Training Company C Int C	Remains in Order of Battle	Agreed
	13 Provost Company C Pro C	Remains in Order of Battle	Agreed and will be a part of the Winnipeg Service Battalion
	6 Field Engineer Regiment RCE (less 12, 21 and 46 Field Squadrons)	Transfer to Supplementary Order of Battle	Agreed
	12 Field Squadron RCE	Transfer to Supplementary Order of Battle	Agreed
	10 Independent Signal Squadron RC Sigs	Remains in Order of Battle	Agreed
	The Royal Winnipeg Rifles RCIC	Remains in Order of Battle	Agreed
	39 Field Artillery Regiment (Self Propelled) RCA with 13, 17 and 19 Field Batteries RCA (less one troop)	Transfer to Supplementary Order of Battle	Agreed
	The Winnipeg Grenadiers RCIC	Transfer to Supplementary Order of Battle	Agreed
	The Queen's Own Cameron Highlanders of Canada RCIC	Remains in Order of Battle	Agreed
	18 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be a part of the Winnipeg Service Battalion
	57 Dental Unit RCDC	Disband	Agreed
	6 Ordnance Battalion RCOC	6 Ordnance Battalion RCOC less one company transfer to Supplementary Order of Battle	Agreed and company will be a part of the Winnipeg Service Battalion
	7 Technical Regiment RCEME	7 Technical Regiment RCEME less one squadron transfer to Supplementary Order of Battle	Agreed and squadron will be a part of the Winnipeg Service Battalion
	108 Manning Depot	Disband	Agreed
	19 Militia Group Headquarters	Disband. To be replaced by the Manitoba Militia Headquarters	Agreed. To be replaced by one Militia Adviser in the rank of Colonel
	The Fort Garry Horse (Militia) RCAC	Remains. One squadron to be located at Portage La Prairie	To remain in Order of Battle but a squadron is not to be located at Portage La Prairie

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

WESTERN ONTARIO AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
BRANTFORD	56 Field Artillery Regiment (Dufferin and Haldimand Rifles) RCA (less 69 and 169 Field Batteries)	Remains in Order of Battle	Agreed
CHATHAM	2nd Battalion, The Essex and Kent Scottish RCIC (less D Company)	To remain and organize a company at Sarnia	1st and 2nd Battalions The Essex and Kent Scottish will amalgamate and be located at Chatham and Windsor. Battalion Headquarters will be located at Windsor.
FERGUS	16 Field Battery RCA	Relocate with parent unit at Guelph	Agreed
GALT	The Highland Light Infantry of Canada RCIC	Transfer to Supplementary Order of Battle. Infantry Battalion to be formed from amalgamation of The Highland Light Infantry of Canada RCIC and The Scots Fusil of Canada RCIC. New battalion to be located at Galt with two companies in Kitchener	Amalgamation agreed
GUELPH	11 Field Artillery Regiment RCA (less 16 Field Battery RCA)	Remains in Order of Battle	Agreed
	C, D and G Sections of 6 Provost Company C Pro C	Commission did not consider	Remain in Order of Battle
INGERSOLL	One platoon of 3rd Battalion, The Royal Canadian Regiment (London and Oxford Fusiliers) RCIC	Relocate to parent company at Woodstock	Agreed
KITCHENER	48 Field Squadron RCE	Relocate to Galt	To remain in Kitchener
	137 Company RCASC	Transfer to Supplementary Order of Battle	Agreed
	12 Medical Company RCAMC	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

WESTERN ONTARIO AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
KITCHENER	The Scots Fusiliers of Canada RCIC	Transfer to Supplementary Order of Battle. Infantry Battalion to be formed from amalgamation of The Highland Light Infantry of Canada RCIC and The Scots Fusiliers of Canada RCIC. New battalion to be located at Galt with two companies at Kitchener	Amalgamation agreed
LEAMINGTON	D Company, 1st Battalion The Essex and Kent Scottish RCIC	Relocate with parent unit at Windsor	Agreed
LISTOWEL	100 Field Battery RCA	Remains in Order of Battle	Agreed
LONDON	1st Hussars RCAC	Remains in Order of Battle	Agreed and to locate one squadron in Sarnia
	3rd Battalion The Royal Canadian Regiment (London and Oxford Fusiliers) RCIC (less A and B Companies)	Remains and to organize a company at Stratford	Agreed
	12 Field Battery RCA	Transfer to Supplementary Order of Battle	Agreed
	4 Column RCASC (less 137 Company)	4 Column RCASC less one company transfer to Supplementary Order of Battle. Company remains at London	Agreed and will be a part of the London Service Battalion
	6 Provost Company C Pro C (less C, D and G Sections)	Remains in Order of Battle	Agreed and will be a part of the London Service Battalion
	107 Manning Depot	Disband	Agreed
	18 Militia Group Headquarters	Disband. To be replaced by Western Ontario Militia Headquarters	Agreed and will be replaced by one Militia Adviser in the rank of Colonel for the Area
	15 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be part of the London Service Battalion
	55 Dental Unit RCDC	Disband	Agreed

LONDON	9 Signals Regiment RC Sigs	9 Signal Regiment RC Sigs less one squadron transfer to Supplementary Order of Battle; squadron to remain in London	Agreed
	5 Ordnance Battalion RCOC	5 Ordnance Battalion RCOC less one company transfer to Supplementary Order of Battle. Company to remain in London	Agreed and will be a part of the London Service Battalion
	7 Field Squadron RCE	Remains in Order of Battle	Agreed
	11 Field Engineer Regiment RCE (less 7, 11 and 48 Field Squadrons)	Transfer to Supplementary Order of Battle	Agreed
PARIS	169 Field Battery RCA	Relocate with parent unit at Brantford	Agreed
SARNIA	7 Field Artillery Regiment RCA (less 12 and 48 Field Batteries)	Transfer to Supplementary Order of Battle	Agreed
	11 Field Squadron RCE	Transfer to Supplementary Order of Battle	Agreed
SIMCOE	69 Field Battery RCA	Remains in Order of Battle	Agreed
STRATFORD	The Perth Regiment RCIC (less Support Company)	Transfer to Supplementary Order of Battle	Agreed
ST MARY'S	Support Company, The Perth Regiment RCIC	Transfer to Supplementary Order of Battle	Agreed
ST THOMAS	The Elgin Regiment (RCAC)	Remains in Order of Battle	Agreed and will train in the reconnaissance role
WALKERTON	97 Field Battery RCA	Remains in Order of Battle	Agreed
WALLACEBURG	D Company, 2nd Battalion The Essex and Kent Scottish RCIC	Relocate with parent unit at Chatham	Agreed
WATFORD	48 Field Battery RCA	Transfer to Supplementary Order of Battle	Agreed
WINDSOR	39 Technical Squadron RCEME	Remains in Order of Battle	Agreed
	26 Militia Group Headquarters	Disband	Agreed
	14 Medical Company RCAMC	Transfer to Supplementary Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

BRITISH COLUMBIA AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
WINDSOR	The Windsor Regiment (RCAC)	Remains in Order of Battle	Agreed
	1st Battalion, The Essex and Kent Scottish RCIC (less D Company)	Remains in Order of Battle	1st and 2nd Battalions The Essex and Kent Scottish RCIC will amalgamate and be located at Chatham and Windsor. Battalion Headquarters will be located at Windsor
WINGHAM	21 Field Artillery Regiment RCA (less 97 and 100 Field Batteries)	Remains in Order of Battle	Agreed
WOODSTOCK	A and B Companies, 3rd Battalion The Royal Canadian Regiment (London and Oxford Fusiliers) RCIC	Remains in Order of Battle	Agreed
		Western Ontario Personnel Selection Detachment to be organized at London	Personnel Selection Detachment will not be organized

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

CENTRAL ONTARIO AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
ANCASTER	A Company, The Royal Hamilton Light Infantry (Wentworth Regimant) RCIC	Relocate with parent unit at Hamilton	Agreed
ATIKOKAN	C Company, The Lake Superior Scottish Regiment RCIC	Remains in Order of Battle	Relocate to Port Arthur
AURORA	C Squadron, The Queen's York Rangers (1st American Regiment) (RCAC)	Remains in Order of Battle	Agreed
BARRIE	B Squadron, The Grey and Simcoe Foresters (RCAC)	Remains in Order of Battle	Agreed
BRAMPTON	The Lorne Scots RCIC (less four companies)	Remains in Order of Battle	Agreed
CAMP BORDEN	G and H Sections of 2 Provost Company C Pro C	Remains in Order of Battle	Agreed
COLLINGWOOD	One troop of A Squadron The Grey and Simcoe Foresters (RCAC)	Relocate with parent unit at Owen Sound	Agreed
DUNDAS	102 Field Battery of 8 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
	17 Militia Group Headquarters	Disband. Replace by Hamilton Militia Headquarters	Agreed. Two Area Militia Advisers to be appointed in rank Colonel and one Brigadier as Command Adviser
DURHAM	One troop of A Squadron, The Grey and Simcoe Foresters (RCAC)	Relocate with parent unit at Owen Sound	Agreed
ESPANOLA	Two troops of 33 Technical Squadron RCEME	Remains in Order of Battle	Agreed
FORT ERIE	C Company, The Lincoln and Welland Regiment RCIC	Remains in Order of Battle	Agreed but to relocate to St. Catharines
FORT ERIE	171 Field Battery of 57 Field Artillery Regiment RCA	Remains in Order of Battle. To be part of 8 Field Artillery Regiment RCA	Agreed but as a sub-unit of 57 Field Artillery Regiment RCA
FORT FRANCIS	121 Medium Battery of 40 Medium Artillery Regiment RCA	Transfer to Supplementary Order of Battle	Agreed

REORGALIZATION OF THE CANADIAN ARMY (MILITIA)

CENTRAL ONTARIO AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
FORT WILLIAM	A Company, The Lake Superior Scottish Regiment RCIC	Remains in Order of Battle	Agreed but to relocate to Port Arthur
GEORGETOWN	Company, The Lorne Scots RCIC	Remains in Order of Battle	Agreed
GRIMSBY	D Company, The Argyll and Sutherland Highlanders of Canada (Princess Louise's) RCIC	Relocate with parent unit at Hamilton	Agreed
HAILEYBURY	C Squadron, The Algonquin Regiment (RCAC)	Remains in Order of Battle	Agreed but as a company of infantry
HAMILTON	8 Field Artillery Regiment RCA (less one battery)	Remains in Order of Battle)	Agreed
	18 Field Squadron RCE of 2 Field Engineer Regiment RCE	Transfer to Supplementary Order of Battle	Agreed
	1 Independent Signal Squadron RC Sigs	Remains in Order of Battle	Agreed
	The Royal Hamilton Light Infantry (Wentworth Regiment) RCIC (less two companies)	Remains in Order of Battle	Agreed
	The Argyll and Sutherland Highlanders of Canada (Princess Louise's) RCIC (less one company)	Remains in Order of Battle	Agreed
	16 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be part of the Hamilton Service Battalion
	133 Company RCASC	Remains in Order of Battle	Agreed
	4 Ordnance Company RCOC	Remains in Order of Battle	Agreed and will be part of the Hamilton Service Battalion
	5 Technical Regiment RCEME	5 Technical Regiment less one squadron transfer to Supplementary Order of Battle. One squadron remains in Hamilton	Agreed and will be part of the Hamilton Service Battalion

KAPUSKASING	A Squadron, The Algonquin Regiment (RCAC)	Remains in Order of Battle. Convert to infantry	Agreed
KENORA	40 Medium Artillery Regiment RCA (less two batteries)	40 Medium Artillery Regiment RCA transfer to Supplementary Order of Battle	Will remain in the Order of Battle as a Minor Unit
KIRKLAND LAKE	One troop of B Squadron, The Algonquin Regiment (RCAC)	Remains in Order of Battle as part of B Squadron	Agreed but as a company of infantry
LAKEVIEW (LONG BRANCH)	2 Signal Squadron of 2 Signal Regiment RC Sigs	Relocate with parent unit at Toronto	Agreed
	A Company, The Lorne Scots (Peel Dufferin and Halton Regiment) RCIC	Remains in Order of Battle	Agreed but to relocate to Brampton
MIDLAND	C Squadron, The Grey and Simcoe Foresters (RCAC)	Remains in Order of Battle	Agreed
MILTON	One platoon of C Company, The Lorne Scots (Peel Dufferin and Halton Regiment) RCIC	Relocate with parent company at Georgetown	Agreed
NEWMARKET	B Squadron, The Queen's York Rangers (1st American Regiment) (RCAC)	Remains in Order of Battle	Agreed
NIAGARA FALLS	172 Field Battery of 57 Field Artillery Regiment RCA	Remains in Order of Battle. To be a part of 8 Field Artillery Regiment RCA	Agreed but as a sub-unit of 57 Field Artillery Regiment RCA
	D Company, The Lincoln and Welland Regiment RCIC	Remains in Order of Battle	Agreed but to relocate to St Catharines
NIAGARA ON THE LAKE	A Company, The Lincoln and Welland Regiment RCIC	Relocate with parent unit at St Catharines	Agreed
NORTH BAY	The Algonquin Regiment (RCAC) (less four squadrons)	Remains in Order of Battle. Convert to Infantry	Agreed
	8 Field Squadron of 2 Field Engineer Regiment RCE	Remains in Order of Battle	Agreed
OAKVILLE	B Company, The Lorne Scots (Peel Dufferin and Halton Regiment) RCIC	Remains in Order of Battle	Agreed
	Central Ontario Area Detachment of Central Command Medical Advisery Staff	To be organized as Central Command Medical Advisery Staff (one Colonel and one clerk)	Medical Advisery Staff will not be included in the Reorganized Militia
	Central Ontario Area Detachment of Central Command Dental Advisery Staff	Disband. Replace by Central Command Dental Headquarters	Agreed but Dental Headquarters will not be included in the Reorganized Militia

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

CENTRAL ONTARIO AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
OAKVILLE	Central Command Chaplain Unit	Remains in Order of Battle	Agreed
ORANGEVILLE	D Company, The Lorne Scots (Peel Dufferin and Halton Regiment) RCIC	Remains in Order of Battle	Agreed but to relocate to Brampton
ORILLIA	One troop of C Squadron, The Grey and Simcoe Foresters (RCAC)	Relocate with parent squadron at Midland	Agreed
OSHAWA	The Ontario Regiment (RCAC)	Remains in Order of Battle	Agreed
OWEN SOUND	The Grey and Simcoe Foresters (RCAC) (less two squadrons)	Remains in Order of Battle	Agreed
	One platoon of 136 Company RCASC of 5 Column RCASC	Relocate with parent company at Toronto	Agreed
	13 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be a part of the 1st Toronto Service Battalion
PORT ARTHUR	118 Medium Battery of 40 Medium Artillery Regiment RCA	Transfer to Supplementary Order of Battle	Agreed
	The Lake Superior Scottish Regiment RCIC (less two companies)	Remains in Order of Battle	Agreed
	138 Company RCASC	Remains in Order of Battle	Agreed and will be part of the Port Arthur Service Battalion
	17 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be part of the Port Arthur Service Battalion
	35 Technical Squadron RCEME	Remains in Order of Battle	Agreed and will be part of the Port Arthur Service Battalion
	115 Manning Depot	Disband	Agreed
SAULT ST MARIE	49 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
	34 Technical Squadron RCEME	Remains in Order of Battle	Agreed

ST CATHARINES	44 Field Artillery Regiment RCA	44 Field Artillery Regiment RCA less 10 Field Battery transfer to Supplementary Order of Battle. 10 Field Battery RCA remains at St Catharines as part of 8 Field Artillery Regiment RCA	Agreed but 10 Field Battery will remain in St Catharines as a sub-unit of 57 Field Artillery Regiment
	The Lincoln and Welland Regiment RCIC (less four companies)	Remains in Order of Battle	Agreed
	30 Technical Squadron RCEME	Remains in Order of Battle	Agreed
SUDBURY	58 Field Artillery Regiment RCA	Transfer to Supplementary Order of Battle. Replace by a new infantry battalion	58 Field Artillery Regiment RCA will convert to an Infantry Battalion and remain in Sudbury
	33 Technical Squadron RCEME	Remains in Order of Battle	Agreed
TIMMINS	D Squadron, The Algonquin Regiment (RCAC)	Remains in Order of Battle	Agreed, and to convert to infantry
TORONTO	5 Column RCASC	5 Column RCASC less two companies transfer to Supplementary Order of Battle	Agreed and one company will be a part of the 1st Toronto Service Battalion and the other company will be a part of the 2nd Toronto Service Battalion
	The Queen's York Rangers (1st American Regiment) RCAC (less two squadrons)	Remains in Order of Battle	Agreed
	2 Field Engineer Regiment RCE (less two squadrons)	Remains in Order of Battle	Agreed
	The Royal Regiment of Canada RCIC	Remains in Order of Battle	Agreed
	48th Highlanders of Canada RCIC	Remains in Order of Battle	Agreed
	The Toronto Scottish Regiment RCIC	Remains in Order of Battle	Agreed
	The Irish Regiment of Canada RCIC	Remains in Order of Battle	The Irish Regiment of Canada RCIC will be transferred to the Supplementary Order of Battle
	42 Medium Artillery Regiment RCA	Transfer to Supplementary Order of Battle	Agreed
	1 Artillery Locating Regiment RCA	Transfer to Supplementary Order of Battle	Agreed
	4 Technical Regiment RCEME	4 Technical Regiment RCEME less two squadrons transfer to Supplementary Order of Battle. Two squadrons remain.	Agreed and one squadron will be a part of the 1st Toronto Service Battalion and the other squadron will be a part of the 2nd Toronto Service Battalion

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

CENTRAL ONTARIO AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
TORONTO	2 Signal Regiment RC Sigs (less one signal squadron) 8 Signal Regiment RC Sigs	Remains in Order of Battle. Signal troop to be organized at Newmarket Transfer to Supplementary Order of Battle	2 and 8 Signal Regiments RC Sigs to be amalgamated as Toronto Signal Regiment RC Sigs and one Signal Troop to be organized at Newmarket
	29 Field Artillery Regiment (Self Propelled) RCA	Remains in Order of Battle	Agreed and "Self Propelled" will be deleted from unit title
	14 Militia Group Headquarters	Disband. Replace by Toronto Militia Headquarters	Agreed. Two Area Militia Advisers to be appointed in rank Colonel and one Brigadier as Command Adviser
	15 Militia Group Headquarters	Disband. A Northern Ontario Militia Adviser to be appointed at Sault Ste Marie	
	16 Militia Group Headquarters	Disband	
	3rd Battalion, The Queen's Own Rifles of Canada RCIC	Remains in Order of Battle	Agreed
	26 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be a part of the 2nd Toronto Service Battalion
	56 Dental Unit RCDC	Disband	Agreed
	4 Ordnance Battalion RCOC	4 Ordnance Battalion RCOC less two companies transfer to Supplementary Order of Battle. Two companies remain in Toronto	Agreed and one company will be a part of the 1st Toronto Service Battalion and the other company will be a part of the 2nd Toronto Service Battalion
	2 Provost Company C Pro C	Remains in Order of Battle. One platoon to be organized at Markham	Agreed and elements of 2 Provost Company will be a part of the 1st and 2nd Toronto Service Battalions. A platoon will not be organized at Markham
	2 Intelligence Training Company C Int C	Remains in Order of Battle	Agreed
	Central Command Personnel Selection Unit	Disband. Replace by Central Ontario Area Personnel Selection Detachment	Agreed but a Personnel Selection Detachment will not be organized
	106 Manning Depot	Disband	Agreed

TORONTO	The Governor General's Horse Guards RCAC	Remains in Order of Battle	Agreed and to train in the reconnaissance role
VIRGINIATOWN	B Squadron, The Algonquin Regiment (RCAC)	Relocate to Kirkland Lake	Agreed, and to convert to infantry
WATERDOWN	B Company, The Royal Hamilton Light Infantry (Wentworth Regiment) RCIC	Relocate with parent unit at Hamilton	Agreed
WELLAND	57 Field Artillery Regiment RCA (less two batteries)	Transfer to Supplementary Order of Battle	57 Field Artillery Regiment RCA will relocate to Niagara Falls and remain in the Order of Battle
	B Company and Pioneer Platoon, The Lincoln and Welland Regiment RCIC	Relocate at Fort Erie	B Company and Pioneer Platoon will remain in Welland

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

EASTERN ONTARIO AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
ALEXANDRIA	D Company, Stormont Dundas and Glengarry Highlanders RCIC	Relocate with parent unit at CORNWALL	Agreed
BELLEVILLE	The Hastings and Prince Edward Regiment RCIC (less A, B, C, and D Companies)	Remains in Order of Battle. To organize one company in NAPANEE.	Agreed however, a company will not be formed in NAPANEE
BROCKVILLE	The Brockville Rifles RCIC	Remains in Order of Battle	Agreed
CARLETON PLACE	C Company, The Lanark and Renfrew Scottish Regiment RCIC	Remains in Order of Battle	Agreed
COBOURG	33rd Medium Artillery Regiment RCA (less 47 Medium Battery)	Transfer to Supplementary Order of Battle	To remain in COBOURG as a Battery of 50 Field Artillery Regiment RCA
CORNWALL	Stormont Dundas and Glengarry Highlanders RCIC (less D Company)	Remains in Order of Battle	Agreed
	9 Medical Company RCAMC	Transfer to Supplementary Order of Battle	Agreed
GANANOQUE	3 Independent Medium Artillery Battery RCA	Transfer to Supplementary Order of Battle	Agreed
KEMPTVILLE	Troop, 25 Field Battery of 30 Field Artillery Regiment RCA	Relocate with parent unit at OTTAWA. Replace with Signal Squadron of 3 Signal Regiment RC Sigs	To remain in Order of Battle as a Battery of 30 Field Artillery Regiment RCA
KINGSTON	The Prince of Wales Own Regiment RCIC	Remains in Order of Battle	Agreed
	55 Field Squadron RCE	Transfer to Supplementary Order of Battle	Agreed
KINGSTON	D Platoon 130 Company RCASC	Relocate with parent unit at OTTAWA	Agreed
	11 Medical Company RCAMC	Transfer to Supplementary Order of Battle	Agreed
LINDSAY	45 Field Battery RCA	Transfer to Supplementary Order of Battle	To remain in Order of Battle as battery of 50 Field Artillery Regiment RCA

MADOC	B Company, The Hastings and Prince Edward Regiment RCIC	Remains in Order of Battle	To remain in Order of Battle and to be relocated to BELLEVILLE
MILLBROOK	7 Platoon, C Company The Hastings and Prince Edward Regiment RCIC	Relocate with parent unit a (BELLEVILLE	Agreed
NAPANEE	47 Medium Battery of 33 Medium Artillery Regiment RCA	Transfer to Supplementary Order of Battle. To be replaced by a company, The Hastings and Prince Edward Regiment RCIC	Agreed to transfer to Supplementary Order of Battle. However a company of The Hastings and Prince Edward Regiment will not be formed in NAPANEE
NORWOOD	5 Platoon, B Company, The Hastings and Prince Edward Regiment RCIC	Relocate with parent company at MADOC	To relocate to parent unit at BELLEVILLE
OTTAWA	12 Militia Group Headquarters	Disband. To be replaced by Eastern Ontario Militia Headquarters at OTTAWA or KINGSTON	Agreed, one Militia Adviser in the rank of Colonel will be appointed for Eastern Ontario Area
	Governor General's Foot Guards (5th Battalion, The Canadian Guards) RCIC	Remains in Order of Battle	Agreed
	The Cameron Highlanders of Ottawa RCIC	Remains in Order of Battle	Agreed
	3 Signal Regiment RC Sigs	Remains in Order of Battle To organize a squadron at KEMPTVILLE	Agreed. However a squadron will not be formed at KEMPTVILLE
	3 Field Squadron RCE	Transfer to Supplementary Order of Battle	To remain in Order of Battle in OTTAWA
	4th Princess Louise Dragoon Guards RCAC	Transfer to Supplementary Order of Battle	Agreed
	130 Company RCASC (less D Platoon)	Remains in Order of Battle	Agreed and will be part of the Ottawa Service Battalion
	10 Medical Company RCAMC	Remains in Order of Battle	Agreed and will be part of the Ottawa Service Battalion
	54 Dental Unit RCDC	Disband	Agreed
	3 Ordnance Company RCOC	Remains in Order of Battle	Agreed and will be part of the Ottawa Service Battalion
	113 Manning Depot	Disband	Agreed
	30 Field Artillery Regiment RCA (less one Troop)	Remains in Order of Battle	Agreed
PEMBROKE	The Lanark and Renfrew Scottish Regiment RCIC (less A, C and D Companies)	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

EASTERN ONTARIO AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
PERTH	D Company, The Lanark and Renfrew Scottish Regiment RCIC	Relocate with parent unit in PEMBROKE	Agreed
PETERBOROUGH	13 Miltia Group Headquarters	Disband	Agreed
	50 Field Artillery Regiment RCA	Transfer to Supplementary Order of Battle. To be replaced by new Infantry Battalion Prince of Wales Rangers with Headquarters at PETERBOROUGH and one company each at LINDSAY and COBOURG	To remain in Order of Battle with Batteries located at LINDSAY and COBOURG
PETERBOROUGH	28 Technical Squadron RCEME	Remains in Order of Battle	Agreed and will be part of the Ottawa Service Battalion
PICTON	D Company, The Hastings and Prince Edward Regiment RCIC	Remains in Order of Battle	To be relocated to BELLEVILLE
PORT HOPE	C Company, The Hastings and Prince Edward Regiment RCIC	Relocate with parent unit at BELLEVILLE	Agreed
PRESCOTT	C Squadron, 4th Princess Louise Dragoon Guards RCAC	Transfer to Supplementary Order of Battle	Agreed
RENFREW	A Company, Lanark and Renfrew Scottish Regiment RCIC	Remains in Order of Battle	Agreed
SMITHS FALLS	D Squadron, 4th Princess Louise Dragoon Guards RCAC	Transfer to Supplementary Order of Battle	Agreed
TRENTON	A Company, The Hastings and Prince Edward Regiment RCIC	Relocate with parent unit at BELLEVILLE	Agreed
		To organize a platoon of Provost Corps at Ottawa	Platoon will not be organized at Ottawa
		To organize Eastern Ontario Area Personnel Selection Detachment at Ottawa or Kingston	Personnel Selection Detachment will not be organized
		R DE HULL to be placed under command of Central Command (Eastern Ontario Area)	R DE HULL to remain under Quebec Command

REORGANIZATION OF THE CANADIAN (ARMY MILITIA)

QUEBEC COMMAND LESS EASTERN QUEBEC AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
ACTONVALE	A Company 6e Bataillon Royal 22e Regiment RCIC	Relocate with parent unit at ST HYACINTHE	Agreed
ASBESTOS/DANVILLE	A Squadron 7/11 Hussars RCAC	Transfer to Supplementary Order of Battle	A Squadron 7/11 Hussars remains in Order of Battle in ASBESTOS as part of the unit resulting from the amalgamation of 7/11 Hussars and The Sherbrooke Regiment (RCAC)
ASBESTOS	58 Field Squadron RCE	Transfer to Supplementary Order of Battle	Agreed
BURY	C Squadron 7/11 Hussars RCAC	Transfer to Supplementary Order of Battle	C Squadron 7/11 Hussars RCAC remains in the Order of Battle in BURY as part of the unit resulting from the amalgamation of 7/11 Hussars and The Sherbrooke Regiment (RCAC)
CAP DE LA MADELEINE	22 Technical Squadron RCEME	Remains in Order of Battle	Agreed
COATICOOK	72 Field Battery of 46 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
COWANSVILLE	27 Field Artillery Regiment RCA (less two Batteries)	Remains in Order of Battle	Agreed
DRUMMONDVILLE	46 Field Artillery Regiment RCA (less two Batteries)	Remains in Order of Battle	Agreed
	101 Provost Platoon C PRO C	Transfer to Supplementary Order of Battle	Agreed
FARNHAM	35 Field Battery of 27 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
GRANBY	24 Field Battery of 27 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
	C Company 4e Bataillon Royal 22e Regiment RCIC	Relocate to St Jerome	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

QUEBEC COMMAND LESS EASTERN QUEBEC AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
HULL	Le Regiment de Hull (RCAC)	Remains in Order of Battle. To be placed under Command of Central Command (Eastern Ontario Area)	Agreed but will remain under command of Quebec Command
JOLIETTE	Le Regiment de Joliette RCIC (less three Companies)	Transfer to Supplementary Order of Battle	Agreed
LACHUTE	131 Field Battery of 37 Field Artillery Regiment RCA	Transfer to Supplementary Order of Battle	Agreed
L'EPIPHANIE	C Company Le Regiment de Joliette RCIC	Transfer to Supplementary Order of Battle	Agreed
LONGUEUIL	B Squadron The Royal Canadian Hussars (Montreal) RCAC	Remains in Order of Battle	Agreed
MAGOG	D Company les Fusiliers de Sherbrooke RCIC	Relocate with parent unit at SHERBROOKE	Agreed
MONTREAL	3 Column RCASC (less two Companies)	3 Column RCASC less two companies transfer to Supplementary Order of Battle	Agreed and one company will be part of the 1st Montreal Service Battalion and the other a part of the 2nd Montreal Service Battalion
	3 Ordnance Battalion RCOC (less one Company)	3 Ordnance Battalion less one company transfer to Supplementary Order of Battle	Agreed and company will be a part of the 1st Montreal Service Battalion
	3 Provost Company C PRO C (less two Platoons)	3 Provost Company less two platoons transfer to Supplementary Order of Battle	Agreed and one platoon will be part of the 1st Montreal Service Battalion and the other a part of the 2nd Montreal Service Battalion
	Victoria Rifles of Canada RCIC	Transfer to Supplementary Order of Battle	Agreed
	104 Manning Depot	Disband	Agreed
	1 Intelligence Training Company C INT C	Remains in Order of Battle	Agreed
	Quebec Command Personnel Selection Unit	Disband. To be replaced by Quebec Area Personnel Selection Detachment	Agreed but Personnel Selection Detachment will not be formed

3rd Battalion The Black Watch (Royal Highland Regiment of Canada) RCIC	Remains in Order of Battle	Agreed
The Royal Canadian Hussars (Montreal) RCAC (less two Squadrons)	Remains in Order of Battle	Agreed
34 Field Artillery Regiment RCA	34 Field Artillery Regiment less 5 Field Battery transfer to Supplementary Order of Battle	Agreed
37 Field Artillery Regiment RCA (less one Battery)	Transfer to Supplementary Order of Battle	Agreed
2 Medium Artillery Regiment RCA	2 Medium Artillery Regiment less one Battery transfer to Supplementary Order of Battle	Agreed. The remaining battery will convert to Field Artillery.
3 Artillery Locating Battery RCA	Transfer to Supplementary Order of Battle	Agreed
Le Regiment de Maisonneuve RCIC	Transfer to Supplementary Order of Battle	To remain in Order of Battle
1 Medical Battalion RCAMC	1 Medical Battalion RCAMC less two companies transfer to Supplementary Order of Battle	Agreed and one company will be part of 1st Montreal Service Battalion and the other will be part of 2nd Montreal Service Battalion
53 Dental Unit RCDC	Disband	Agreed
Quebec Command Dental Advisory Staff	Disband, replace by Quebec Command Dental Headquarters	Agreed but no Dental Headquarters will be formed
The Canadian Grenadier Guards RCIC	Remains in Order of Battle	Agreed
Les Fusiliers Mont-Royal RCIC	Remains in Order of Battle	Agreed
11 Signal Regiment RC Sigs	Transfer to Supplementary Order of Battle. To be replaced by 15 Independent Signal Squadron RC Sigs	Agreed
3 Field Engineer Regiment RCE	Remains in Order of Battle	Agreed
4e Bataillon Royal 22e Regiment (Chateauguay) RCIC (less three Companies)	Remains in Order of Battle. To be renamed 4e Bataillon Royal 22e Regiment (Chateauguay-Maisonneuve) RCIC	Agreed but name will not be changed
The Royal Montreal Regiment RCIC (less one Company)	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

QUEBEC COMMAND LESS EASTERN QUEBEC AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
MONTREAL	2 Technical Regiment RCEME	2 Technical Regiment RCEME less two squadrons, transfer to Supplementary Order of Battle	Agreed and one squadron will be part of 1st Montreal Service Battalion and the other will be part of 2nd Montreal Service Battalion
	10 Militia Group Headquarters	Disband. Replace by Montreal Militia Headquarters	Agreed to disband. One Militia Adviser will be appointed in the rank of Brigadier from within the Command.
	A and B Companies Le Regiment de Maisonneuve RCIC	Transfer to Supplementary Order of Battle. To be absorbed by 4e Bataillon Royal 22e Regiment	To remain in Order of Battle
	Quebec Command Chaplain Unit RCAChC	Remains in Order of Battle	Agreed
NORANDA	9 Field Squadron RCE	Remains in Order of Battle	Agreed
RICHMOND	7/11 Hussars RCAC (less three Squadrons)	Transfer to Supplementary Order of Battle	7/11 Hussars RCAC will relocate to SHERBROOKE and amalgamate with The Sherbrooke Regiment RCAC and will train in the reconnaissance role
SHAWINIGAN	62 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
SHERBROOKE	Les Fusiliers de Sherbrooke RCIC (less one Company)	Remains in Order of Battle	Agreed
	14 Independent Signal Squadron RC Sigs	Remains in Order of Battle	Agreed
	9 Militia Group Headquarters	Disband. Replace by Sherbrooke Militia Headquarters	Agreed. One Colonel only to be appointed as Militia Adviser for Western Quebec
	125 Company RCASC	Transfer to Supplementary Order of Battle	Agreed
	8 Medical Company RCAMC	Remains in Order of Battle	Agreed
	24 Technical Squadron RCEME	Transfer to Supplementary Order of Battle	Agreed

	The Sherbrooke Regiment RCAC	Transfer to Supplementary Order of Battle	The Sherbrooke Regiment RCAC and 7/11 Hussars will amalgamate and will train in the reconnaissance role. Headquarters to be located in SHERBROOKE
STE ANNE DE BELLEVUE	D Company The Royal Montreal Regiment RCIC	Remains in Order of Battle	Agreed
ST HILAIRE	57 Field Squadron RCE	Remains in Order of Battle	To be transferred to Supplementary Order of Battle
ST HYACINTHE	6e Bataillon Royal 22e Regiment RCIC (less two Companies)	Remains in Order of Battle	Agreed
ST JEAN	A Company 4e Bataillon Royal 22e Regiment (Chateauguay) RCIC	Relocate to MONTREAL NORTH	To remain in present location in St Jean
	A Squadron The Royal Canadian Hussars (Montreal) RCAC	Remains in Order of Battle	Agreed
ST JEROME	D Company Le Regiment de Joliette RCIC	Transfer to Supplementary Order of Battle. C Company 4e Bataillon Royal 22e Regiment (Chateauguay) to relocate to St Jerome	Agreed
ST PAUL L'ERMITE	B Company Le Regiment de Joliette RCIC	Transfer to Supplementary Order of Battle	Agreed
THREE RIVERS	11 Militia Group Headquarters	Disband. Replace by Three Rivers Militia Adviser	Agreed but only one Militia Adviser in the rank of Colonel will be appointed for Western Quebec
	15 Independent Signal Squadron RC Sigs	Relocate to WESTMOUNT	Agreed
	126 Company RCASC	Transfer to Supplementary Order of Battle	Agreed
	102 Provost Platoon C PRO C	Transfer to Supplementary Order of Battle	Agreed
	Le Regiment de Trois Rivieres (RCAC)	Remains in Order of Battle	Agreed
STE THERESE (BOUCHARD)	8 Company of 3 Ordnance Battalion RCOC	Remains in Order of Battle	Agreed and will be a part of the 2nd Montreal Service Battalion
TRACY	D Company 6e Bataillon Royal 22e Regiment RCIC	Relocate with parent unit at ST HYACINTHE	Agreed
VALLEYFIELD	D Company 4e Bataillon Royal 22e Regiment (Chateauguay) RCIC	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

QUEBEC COMMAND LESS EASTERN QUEBEC AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
VICTORIAVILLE	73 Field Battery of 46 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
WINDSOR MILLS	B Squadron 7/11 Hussars RCAC	Transfer to Supplementary Order of Battle	Relocate to SHERBROOKE as part of unit resulting from the amalgamation of 7/11 Hussars and The Sherbrooke Regiment RCAC
		Quebec Command Medical Advisery Staff of one Colonel and one clerk to be organized	Medical Advisery Staff will not be included in the Reorganized Militia

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
EASTERN QUEBEC AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
ARVIDA	187 Field Battery of 6 Field Artillery Regiment RCA	Transfer to Supplementary Order of Battle	Agreed
	25 Technical Squadron RCEME	Relocate to Jonquiere	Agreed
BEAUCEVILLE	A Company Le Regiment de la Chaudiere RCIC (less one Platoon)	Remains in Order of Battle	Agreed
BEAUPORT	A Company 2 Ordnance Battalion RCOC	Remains in Order of Battle	Agreed and will be a part of the Quebec City Service Battalion
	4 Provost Company C PRO C	Remains in Order of Battle	Agreed and will be a part of the Quebec City Service Battalion
CABANO	One Platoon of A Company Les Fusiliers du St-Laurent RCIC	Remains in Order of Battle	Agreed
CHICOUTIMI	Le Regiment du Saguenay RCIC (less two Companies)	Remains in Order of Battle	Agreed
GASPE	82 Field Battery of 6 Field Artillery Regiment RCA	Relocate to BEAUPORT, replace by B Company of Les Fusiliers du St-Laurent RCIC	Agreed
JONQUIERE	C Company Le Regiment du Saguenay RCIC	Remains in Order of Battle	Agreed
LEVIS	59 Field Battery of 6 Field Artillery Regiment RCA	Remains in Order of Battle	Agreed
	8 Militia Group Headquarters	Disband	Agreed
	Le Regiment de la Chaudiere RCIC (less three Companies)	Remains in Order of Battle	Agreed
MATANE	D Company Les Fusiliers du St-Laurent RCIC	Remains in Order of Battle	Agreed
LAC MEGANTIC	B Company Le Regiment de la Chaudiere RCIC	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)

EASTERN QUEBEC AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
MONT JOLI	C Company Les Fusiliers du St-Laurent RCIC	Remains in Order of Battle	Agreed
MONTMAGNY	B Company Les Fusiliers du St-Laurent RCIC	Relocate to GASPE and one platoon relocate to NEW RICHMOND	Agreed
NEW RICHMOND	80 Field Battery of 6 Field Artillery Regiment RCA	Relocate to MONTMAGNY. One platoon of B Company Les Fusiliers du St-Laurent RCIC to replace 80 Field Battery RCA	Agreed
PORT ALFRED	B Company Le Regiment du Saguenay RCIC	Relocate with parent unit at CHICOUTIMI	Agreed
QUEBEC CITY	6 Field Artillery Regiment RCA with 58 Field Battery (less four Batteries)	Relocate to LEVIS	Agreed
	57 Artillery Locating Battery RCA	Transfer to Supplementary Order of Battle	Agreed
	3 Independent Signal Squadron RC Sigs	Remains in Order of Battle	Agreed
	The Royal Rifles of Canada RCIC	Transfer to Supplementary Order of Battle	The Royal Rifles of Canada RCIC and Les Voltigeurs de Quebec RCIC will amalgamate to form one Infantry Battalion located in Quebec City
	Les Voltigeurs de Quebec RCIC	Transfer to Supplementary Order of Battle. Name to be retained for Service Battalion Battle	
	2 Column RCASC	2 Column RCASC less one company transfer to Supplementary Order of	Agreed and company will be a part of the Quebec City Service Battalion
QUEBEC CITY	10 Field Squadron RCE	Remains in Order of Battle	Agreed
	42 Technical Squadron RCEME	Remains in Order of Battle	Agreed and will be a part of the Quebec City Service Battalion
	103 Manning Depot	Disband	Agreed
RIMOUSKI	Les Fusiliers du St-Laurent RCIC (less four Companies)	Remains in Order of Battle	Agreed

RIVIERE DU LOUP	A Company Les Fusiliers du St-Laurent RCIC	Remains in Order of Battle	Agreed
ST GEORGES DE BEAUCE	D Company Le Regiment de la Chaudiere RCIC	Remains in Order of Battle	Agreed
ST JOSEPH DE BEAUCE	Platoon of A Company Le Regiment de la Chaudiere RCIC	Relocate with parent company at BEAUCEVILLE	Agreed
STE FOY	7 Medical Company RCAMC	Relocate to Quebec City	Agreed and will be a part of the Quebec City Service Battalion
	7 Militia Group Headquarters	Disband. Replace by Eastern Quebec Militia Headquarters	Agreed and will be replaced by one Militia Adviser in the rank of Colonel for Eastern Quebec Area
THETFORD MINES	15 Field Squadron RCE	Remains in Order of Battle	Agreed
		Eastern Quebec Area Personnel Selection Detachment to be organized at Quebec City	Personnel Selection Detachment will not be organized in the Militia

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
NEW BRUNSWICK AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
BATHURST	2nd Battalion The Royal New Brunswick Regiment (North Shore) RCIC (less four companies)	Remains in Order of Battle	Agreed
CAMPBELLTON	C Company, 2nd Battalion The Royal New Brunswick Regiment (North Shore) RCIC	Remains in Order of Battle	Agreed
CHATHAM	A Company, 2nd Battalion The Royal New Brunswick Regiment (North Shore) RCIC	Relocate with Support Company at Newcastle	Agreed
DALHOUSIE	D Company, 2nd Battalion The Royal New Brunswick Regiment (North Shore) RCIC	Relocate with C Company at Campbellton	Agreed
EDMUNSTON	D Company, 1st Battalion Royal New Brunswick Regiment (Carleton and York) RCIC	Remains in Order of Battle	Agreed
FREDERICTON	12 Field Regiment RCA with 90 Field Battery RCA (less one battery)	12 Field Regiment RCA less two batteries to transfer to Supplementary Order of Battle. 90 Field Battery to be a part of 3 Field Regiment	Agreed
	6 Independent Signal Squadron RC Sigs	Transfer to Supplementary Order of Battle	Agreed
	1st Battalion, The Royal New Brunswick Regiment (Carleton and York) RCIC	Remains in Order of Battle	Agreed
GRAND FALLS	C Company, 1st Battalion The Royal New Brunswick Regiment (Carleton and York) RCIC	Remains in Order of Battle	Agreed
HAMPTON	Headquarters Squadron, 8th Canadian Hussars (Princess Louise's) RCAC	Relocate with parent unit in Sussex	Agreed
MONCTON	4 Independent Signal Squadron RC Sigs	Transfer to Supplementary Order of Battle	Agreed

	5 Militia Group Headquarters	Disband	Agreed
	113 Company RCASC	Remains in Order of Battle	Agreed and to be a part of the Moncton Service Battalion
	3 Medical Company RCAMC	Transfer to Supplementary Order of Battle	Agreed
	21 Technical Squadron RCEME	Remains in Order of Battle	Agreed and to be a part of the Moncton Service Battalion
	16 Provost Company C Pro C	Remains in Order of Battle	Agreed and to be a part of the Moncton Service Battalion
NEWCASTLE	Support Company of 2nd Battalion The Royal New Brunswick Regiment (North Shore) RCIC	Remains in Order of Battle	Agreed
PETITCODIAC	A Squadron of 8th Canadian Hussars (Princess Louise's) RCAC	Relocate with parent unit in Sussex	Agreed
PLASTER ROCK	One Platoon of C Company, 1st Battalion The Royal New Brunswick Regiment (Carleton and York) RCIC	Relocate with parent unit at Grand Falls	Agreed
SACKVILLE	C Squadron, 8th Canadian Hussars (Princess Louise's) RCAC	Remains in Order of Battle	Agreed
SAINT JOHN	6 Militia Group Headquarters	Disband. To be replaced by New Brunswick Militia Headquarters located in Fredericton—Saint John	Agreed to disband. One Militia Adviser in the rank of Colonel will be appointed for the Area
SAINT JOHN	3 Field Regiment RCA	Remains in Order of Battle	Agreed
	1 Field Squadron RCE	Transfer to Supplementary Order of Battle	Agreed
	5 Independent Signal Squadron RC Sigs	Remains in Order of Battle	Agreed
	Headquarters, Support and F Companies of 1st Battalion The Royal New Brunswick Regiment (Carleton and York) RCIC	Relocate to parent unit at Fredericton. To be replaced by B Company	Agreed
	112 Company RCASC	Remains in Order of Battle	Agreed
	4 Medical Company RCAMC	Remains in Order of Battle	Agreed
	51 Dental Unit	Disband	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
NEW BRUNSWICK AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
SAINT JOHN	102 Manning Depot	Disband	Agreed
ST STEPHEN	B Company, 1st Battalion The Royal New Brunswick Regiment (Carleton and York) RCIC	Relocate to Fredericton	B Company will relocate to Saint John
SUSSEX	8th Canadian Hussars (Princess Louise's) RCAC (less three squadrons)	Remains in Order of Battle	Agreed
WOODSTOCK	89 Field Battery of 12 Field Regiment RCA	To be a part of 3 Field Regiment RCA	Agreed
		New Brunswick Area Personnel Selection Detachment to be organized in Fredericton or Saint John	No Personnel Selection Detachment to be organized in the Militia

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
NOVA SCOTIA AND PRINCE EDWARD ISLAND AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
ALDERSHOT	The West Nova Scotia Regiment RCIC (less three companies)	Remains in Order of Battle and to organize "A" Company at Windsor	Agreed
AMHERST	1st Battalion The Nova Scotia Highlanders (North) RCIC with F Company (less five companies)	Remains in Order of Battle	Agreed
ANTIGONISH	E Company, 1st Battalion The Nova Scotia Highlanders (North) RCIC	Relocate with parent unit at Amherst	E Company will be relocated to New Glasgow
BRIDGETOWN	B Company, The West Nova Scotia Regiment RCIC	Relocate to Middleton	Agreed
BRIDGEWATER	D Company, The West Nova Scotia Regiment RCIC	Remains in Order of Battle	Agreed
CHARLOTTETOWN	5 Signals Regiment RC Sigs	Remains in Order of Battle	Agreed
	The Prince Edward Island Regiment (RCAC) (less two squadrons)	Remains in Order of Battle	Agreed
	2 Militia Group Headquarters	Disband. To be replaced by PEI Militia Adviser	Agreed. One Colonel will be appointed as PEI Militia Adviser
	Food Service Platoon of 110 Company RCASC	Relocate with parent company at Halifax	Agreed
	Transport Platoon of 110 Company RCASC	Relocate with parent company at Halifax	Agreed
	5 Medical Company RCAMC	Remains in Order of Battle	Agreed
DEEP BROOK	C Company, The West Nova Scotia Regiment RCIC	Remains in Order of Battle	Agreed
DARTMOUTH	87 Field Battery RCA of 1 Field Regiment RCA	Remains in Order of Battle	Agreed
	201 Field Battery RCAF of 1 Field Regiment RCA	Remains in Order of Battle	201 Field Battery RCA will relocate to its parent unit 1 Field Regiment in Halifax

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
NOVA SCOTIA AND PRINCE EDWARD ISLAND AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
GLACE BAY	A and C Companys, 2nd Battalion The Nova Scotia Highlanders (Cape Breton) RCIC	A Company to remain. C Company to relocate to parent unit in Sydney	Agreed
HALIFAX	1 Column RCASC	Transfer to Supplementary Order of Battle	Agreed
	110 Company RCASC	Remains in Order of Battle	Agreed and will form a part of the Halifax Service Battalion
	The Halifax Rifles RCAC	Transfer to Supplementary Order of Battle. Name to be carried as a Service Battalion	The Halifax Rifles RCAC will amalgamate with The Princess Louise Fusiliers RCIC to form an infantry battalion in Halifax
	1 Field Regiment RCA with 51 and 52 Field Batteries RCA (less two batteries)	Remains in Order of Battle	Agreed
	6 Signals Regiment RC Sigs	6 Signals Regiment less one squadron to transfer to Supplementary order of Battle. The active squadron to remain in Halifax	Agreed
	The Princess Louise Fusiliers RCIC	Remains in Order of Battle	The Princess Louise Fusiliers RCIC will amalgamate with The Halifax Rifles RCAC to form an infantry battalion in Halifax
	2 Medical Company RCAMC	Remains in Order of Battle	Agreed and will form a part of the Halifax Service Battalion
	50 Dental Unit RCDC	Disband	Agreed
	5 Provost Company C Pro C	Remains in Order of Battle	Agreed and will form a part of the Halifax Service Battalion
	3 Intelligence Training Company C Int C	Remains in Order of Battle	Agreed
	101 Manning Depot	Disband	Agreed
	4 Militia Group Headquarters	Disband. To be replaced by Nova Scotia and Prince Edward Island Militia Headquarters at Halifax	Agreed to disband. One Militia Adviser will be appointed in the rank of Brigadier from within the Command

	5 Field Engineer Regiment RCE	HQ transfer to Supplementary Order of Battle. 30 Field Squadron remains	Agreed
	A Company, 1 Ordnance Battalion RCOC	Remains in Order of Battle	Agreed and to be a part of the Halifax Service Battalion
	20 Technical Squadron RCEME	Remains in Order of Battle	Agreed and to be a part of the Halifax Service Battalion
	Eastern Command Dental Advisery Staff	Disband. To be replaced by Eastern Command Dental Headquarters	Agreed to disband however Dental Headquarters are not to be organized in the Militia
	Eastern Command Personnel Selection Unit	Disband. To be replaced by Nova Scotia and Prince Edward Island Personnel Selection Detachment	Agreed to disband but Personnel Selection Detachments are not to be organized in the Militia
	Eastern Command Chaplain Unit	Remains in Order of Battle	Agreed
	Eastern Command Medical Advisery Staff	Remains. One colonel and one clerk	Medical Advisery Staffs are not to be organized in the Militia
LIVERPOOL	133 Field Battery RCA of 14 Field Regiment RCA	Remains in Order of Battle	Agreed
LUNENBURG	Two Platoons of D Company The West Nova Scotia Regiment RCIC	Remains in Order of Battle	Agreed
MONTAGUE, PEI	B Squadron, The Prince Edward Island Regiment (RCAC)	Remains in Order of Battle	Agreed
NEW GLASGOW	Support and D Companies of 1st Battalion The Nova Scotia Highlanders (North) RCIC	D Company remains in New Glasgow	Agreed. D Company ot remain and Support Company to relocate ot parent unit at Amherst
NORTH SYDNEY	B Company, 2nd Battalion The Nova Scotia Highlanders (Cape Breton) RCIC	Remains in Order of Battle	Agreed
PICTOU	A Company, 1st Battalion The Nova Scotia Highlanders (North) RCIC	Remains in Order of Battle	Agreed
RIVER HEBERT	Platoon of F Company, 1st Battalion The Nova Scotia Highlanders (North) RCIC	Relocate with parent unit in Amherst	Agreed
SPRINGHILL	B Company, 1st Battalion The Nova Scotia Highlanders (North) RCIC	Remains in Order of Battle	Agreed
SUMMERSIDE, PEI	C Squadron, The Prince Edward Island Regiment (RCAC)	Remains in Order of Battle	Agreed

REORGALIZATION OF THE CANADIAN ARMY (MILITIA)
NOVA SCOTIA AND PRINCE EDWARD ISLAND AREA (Continued)

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
SYDNEY	3 Militia Group Headquarters	Disband. To be replaced by Nova Scotia and Prince Edward Island Militia Headquarters at Halifax	Agreed to disband. One Colonel will be appointed as NS Militia Adviser
	6 Independent Field Battery RCA	Transfer to Supplementary Order of Battle	Agreed
	45 Field Squadron RCE	Remains in Order of Battle	Agreed
	111 Company RCASC	Remains in Order of Battle	Agreed
	6 Medical Company RCAMC	Remains in Order of Battle	Agreed
	2nd Battalion, The Nova Scotia Highlanders (Cape Breton) RCIC (less two companies)	Remains in Order of Battle	Agreed
TRURO	C Company, 1st Battalion The Nova Scotia Highlanders (Cape Breton) RCIC	Relocate with parent unit at Amherst	C Company will remain in Truro
WINDSOR	88 Field Battery RCA of 14 Field Regiment RCA	Transfer to Supplementary Order of Battle. To be replaced by "A" Company of The West Nova Scotia Regiment RCIC	Agreed
YARMOUTH	14 Field Regiment RCA with 84 Field Battery (less two batteries)	Remains in Order of Battle	Agreed

REORGANIZATION OF THE CANADIAN ARMY (MILITIA)
NEWFOUNDLAND AREA

LOCATION	UNIT DESIGNATION	SUTTIE COMMISSION RECOMMENDATION	DEPARTMENT OF NATIONAL DEFENCE DECISION
CORNER BROOK	A Company, The Royal Newfoundland Regiment RCIC	Remains in Order of Battle	Agreed
	One Platoon of 1 Medical Company RCAMC	Remains in Order of Battle	Agreed
GRAND FALLS	B Company, The Royal Newfoundland Regiment RCIC	Remains in Order of Battle	Agreed
ST JOHN'S	1 Militia Group Headquarters	Disband. To be replaced by Newfoundland Militia Adviser	One Militia Adviser will be appointed in the rank of Colonel
	56 Field Squadron RCE	Remains in Order of Battle	Agreed
	The Royal Newfoundland Regiment RCIC (less three companies)	Remains in Order of Battle	Agreed
	Two Platoons of 111 Company RCASC	Relocate with parent unit at Sydney N.S.	Agreed
	1 Medical Company RCAMC	Remains in Order of Battle	Agreed
	Newfoundland Area Detachment of Eastern Command Medical Advisory Staff	Disband	Agreed
	112 Manning Depot	Disband. Newfoundland Area Personnel Selection Detachment to be formed	Agreed to disband 112 Manning Depot. A Personnel Selection Detachment will not be formed
WABANA, BELL ISLAND	C Company, The Royal Newfoundland Regiment RCIC	Relocate with parent unit at St John's	C Company will remain in Wabana, Bell Island

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 19

THURSDAY, NOVEMBER 5, 1964

RESERVE FORCES

WITNESSES:

Honourable Paul T. Hellyer, Minister of National Defence; and Colonel C. P. McPherson, Director of Militia and Cadets.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21428—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de Grâce*),	Langlois,	Martineau,
Béchard,	Laniel,	Matheson,
Brewin,	Lessard (*Lac-Saint-Jean*),	McMillan,
Deachman,	Lloyd,	McNulty,
Fane,	MacInnis,	Pilon,
Groos,	MacLean,	Smith,
Harkness,	MacRae,	Temple,
		Winch—(24).

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, November 5, 1964.
(33)

The Special Committee on Defence met at 11:40 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Deachman, Fane, Hahn, Harkness, Lambert, Laniel, Lessard (*Lac Saint-Jean*), MacLean, MacRae, McMillan, McNulty, Pilon, Smith, Temple and Winch—(18).

In attendance: Honourable Paul T. Hellyer, Minister of National Defence; Honourable Lucien Cardin, Associate Minister of National Defence; and Colonel C. P. McPherson, Director of Militia and Cadets.

The Committee resumed its consideration of the *Reserve Forces*. Messrs. Hellyer and McPherson were questioned on the contents of the statements and documents, respecting Reserve Forces, submitted to the Committee on Tuesday, November 3, 1964.

Ot 1:15 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

21428—1½

EVIDENCE

THURSDAY, November 5, 1964.
11.40 a.m.

The CHAIRMAN: We now have a quorum, gentlemen.

First of all I wish to apologize for not being here on Tuesday, but I gather the meeting proceeded very well. We will continue today with questioning the Minister on his statement and the information that was provided to the committee last Tuesday.

There are no initial statements today, so we will proceed immediately to the questioning.

We have as witnesses the Minister of National Defence, the Associate Minister of National Defence and Col. C. P. McPherson, the Director of Militia and Cadets. The first questioner I have noted is Mr. MacRae.

Mr. MACRAE: Mr. Chairman, the first question I have deals with the advisers.

On page 9 of the recommendations of the Commission, with regard to the Department of National Defence the Commission recommended that instead of the present militia groups there should be 15 militia headquarters and 15 militia advisers. The Department of National Defence and the minister did not accept that, and it is said there will be 19 advisers, four brigadiers and 15 colonels.

What will be the actual authority of these officers?

If I were to put my whole question I think this will come into context. Will these officers have any type of staff whatsoever?

Will the officers be permanent force or militia officers? I take it they will be militia, but I would appreciate an answer to that question.

That is my first question.

Hon. PAUL HELLYER (*Minister of National Defence*): First of all, their responsibilities will be to advise the general officer commanding or the area commander in respect to militia matters. This is a rather broad responsibility so that it depends to a considerable extent on the area commander or the general officer commanding as to the specifics of the advice that he requires from time to time.

In answer to your second question, they will have no staffs.

The answer to your third question is that they will be militia officers.

Mr. MACRAE: Then I have a small supplementary question.

Do these colonels have any real command authority at all? You mention that the colonel is an adviser, and of course that is perhaps what he is.

Mr. HELLYER: He would not ordinarily have any command responsibility, but it is possible that he might be given some command responsibility by the area or general officer commanding, say, at a summer training camp or something of this kind; but this would be a specific term of reference.

Mr. MACRAE: Where would his real loyalty lie, then? I know you cannot split loyalty in a service, but does it lie towards the militia or towards the area commander? Perhaps that is not a fair question.

Mr. HELLYER: He is really there to provide a liaison between the two.

Mr. MACRAE: The second question I have refers to the attachment of permanent force personnel, regular army, to the militia. I would like a few figures, but of course I do appreciate that you perhaps do not have them.

What is the total of instructional pools that are now working with the Canadian militia?

Mr. HELLYER: If you have that information, Col. McPherson, would you be good enough to give it?

Col. C. P. MCPHERSON (*Director of Militia and Cadets*): At the present time we have a total of 332 call outs.

Mr. MACRAE: That is in all Canada?

Mr. MCPHERSON: In all Canada, yes.

Mr. MACRAE: How many are considered to be on attachment from the regular army to the militia.

Mr. MCPHERSON: The instructional staff establishment is 854 all ranks for the whole of Canada.

Mr. MACRAE: So that would be roughly 1,200?

Mr. MCPHERSON: Yes.

Mr. MACRAE: According to the recommendations there will be 750 from the rank of major down to the rank of sergeant who will be attached from the regular army to the militia. Where are you going to find, for example, 250 majors or captains, which is what will be actually attached? Are they going to come from area and command headquarters? Are they going to come from the permanent force, the regular force units? From where will you get these people?

Mr. MCPHERSON: Mr. Chairman, in answer to this question may I say that we accepted only part of the commission's recommendation. The part we accepted was the recommendation that we should provide the militia units with support by attaching non-commissioned officers to run their orderly rooms and their quartermaster stores, but we did not feel that we could afford to provide each of these units with a regular officer complement.

However, we are providing in each area one or two administrative officers whose task it will be to help each unit establish itself on a sound administrative basis, and to keep it there. They will not be there to advise; they will be there to help.

The remainder of the instructional staff will be grouped in increments and will be attached to regular units, regular schools or regular depots.

The responsibility of these incremental staffs will be to provide courses of instruction, to set and mark examinations for militia officers and N.C.O.s, and to provide instruction at summer camps.

Mr. MACRAE: May I turn to the part of my question which I do not think you answered? Where do you find these officers, especially the officers of field rank, the captains and so on? Are they now available?

Mr. MCPHERSON: Yes, they are now available in the present instructional staff.

Mr. MACRAE: They are already there?

Mr. MCPHERSON: Yes. We feel that by attaching them to regular units, we will be able to provide better support and a higher calibre of instruction to militia units.

Mr. MACRAE: What do you mean by regular units now, Colonel? For example, take northern New Brunswick where the nearest unit would be, Camp Gagetown or area headquarters there. Do you mean they are on the strength of the Royal Highlanders of Canada, the Black Watch, or are they on the strength of area headquarters?

Mr. McPHERSON: That is right.

Mr. SMITH: Which is right? Will they be on the strength of the Black Watch?

Mr. McPHERSON: They will be carried as an increment to the Black Watch, for example.

Mr. MACRAE: My final question in this particular group is this. I notice the retirement ages were raised by the Department of National Defence and by the minister. The Suttie Commission report, for example, recommended that a colonel could not be appointed to a command after he was 37 years of age, and that was raised by the department to 40.

Perhaps I should ask the minister this. Did the minister give any serious thought to raising it even higher than that? It is my opinion—though it is not my place to give opinions but rather to ask questions—that it is still too low at this particular point.

Mr. HELLYER: I wonder if you are confusing two things—the age at which they have to be promoted to rank, and retirement age.

Mr. MACRAE: Do the two not run together? They must assume command and be promoted by the time they are 40 or they do not stand any chance of commanding militia units?

Mr. HELLYER: That is correct in so far as promotion to rank and command is concerned, but this is not comparable to the retirement ages which are the same as for the regular army, namely, 51 years for a colonel, and then 49, 47 and 45.

Mr. MACRAE: Thank you for that answer.

I have half a dozen more questions on specific units, but I realize there are a great many questions the members wish to ask, and if you will put me back on your list I will ask further questions later.

The CHAIRMAN: Thank you, Mr. MacRae.

Mr. WINCH: I have two questions to put at this time, and in order to expedite questioning and answering perhaps I may put them at the same time.

May I first of all state that my English blood is roused by the fact that the Irish Fusiliers in Vancouver and Toronto—very famous names and regiments—are to be transferred to "supplementary order of battle."

I think, sir, that that is not understandable in view of the record over so many years of the Irish and the fact that they followed a most famous regiment in the first world war.

I have to say that, sir, because I think it is correct. Also, of course, I served with the Irish Fusiliers, the Second Battalion Vancouver Regiment, for a number of years.

My first question, which I will tie in with another, is to ask you if we can have an explanation of the basis upon which the Suttie Commission recommended that the Irish Fusiliers, the Second Battalion Vancouver Regiment, remain in order of battle yet the Department of National Defence has decided not to accept the recommendation of the Suttie Commission and to transfer it to supplementary order of battle. This automatically leads into the second question.

Could we have an exposition as to the real meaning of "supplementary order of battle."—a most unusual selection of terminology. If my information is correct from reading and from inquiry, supplementary order of battle means a method whereby the name and the battle honours of a regiment will have an official status. However, as far as the existing enrolment of the Irish Fusiliers in Vancouver and Toronto, and all others who are coming under supplementary order of battle are concerned, it strictly means a paper record—a paper record, Mr. Chairman, of the entire enrolment.

If that is correct—and I would like that explained—what is a supplementary order of battle beyond the maintenance of the name and battle honours? How could you in any way call them back in the event of emergency, national or international, when they will no longer be members of the militia and will have no training whatsoever?

This is a phase that has not been detailed yet, and I think it is one that should be most fully explained.

Mr. HELLYER: Mr. Winch, first of all in respect to the broad picture, I think the commission headed by Brigadier Suttie did an excellent job of carrying out the task that was assigned to them. They examined very carefully the many factors which were taken into consideration and they reached judgments on that basis. There were, however, owing to the limitations of time and personnel available to them, some recommendations which upon examination we felt required further consideration.

Among the additional factors was the national picture. We felt it was essential that the ultimate recommendations adopted be applied as fairly and equally in all parts of the country as was possible.

Because of the limitations of time and personnel in the commission, the individual members of the commission had done a considerable amount of detailed work in their own areas, and the application of the factors, we felt, was just a shade different in some parts of the country from others. These are matters of judgment. So we reviewed all the decisions and came to the conclusion that in the great majority of cases—I cannot give you a percentage but I would say broadly 80 or 90 per cent—we would have no hesitation in supporting their recommendation as it was put forward. In a few other cases, however, in the interests of what we felt to be an even greater uniformity in the application of the standards across the country, some of the decisions had to be reversed and some were reversed in each direction. It was the application of our review that resulted in some different recommendations from those that had originally been put forward.

In respect to the supplementary order of battle, Mr. Winch, you are quite right in saying this is an unusual terminology. It was recommended by the commission in order to do just what you have suggested; that is, to permit the names of famous units to remain while at the same time permitting the strength to be reduced to nil. Obviously the commission must have felt this was a desirable recommendation and that it would preserve in an official record the names, histories and traditions of these great units.

Mr. WINCH: May I ask, then, if that means that apart from the one factor which you have just mentioned, the Irish Fusiliers—and I am going to refer to them because I know them best—in Vancouver and Toronto are for all official purposes disbanded and that there are no members of those units?

Mr. HELLYER: That is correct.

Mr. WINCH: There is no way, therefore, of calling them back or giving any training to them or any consideration? They are out?

Mr. HELLYER: Unless, as was stated in the statement, there was a re-establishment of one of the units at some time in the future.

Mr. WINCH: How are you going to re-establish a unit except in name without completely reorganizing and re-establishing it?

Mr. HELLYER: Mr. Winch, this has been done many times before; units have been disbanded and units have been dis-established and re-established. This is not without precedent.

Mr. WINCH: I am still speaking of the Irish Fusiliers. In your decision not to accept the report of the Suttie commission, did you find it impossible to retain that famous regiment either in Vancouver or in Toronto? How is

it that it so happens you have to remove them completely as a unit in both cities?

Mr. HELLYER: It was merely a coincidence that brought about this result.

Mr. WINCH: I say it is a very unfortunate coincidence.

Mr. SMITH: Mr. Hellyer, on the disposal of armouries, I believe it is said that they will be sold. I think that in a lot of centres the armouries that may become surplus are built on parks or close to parks or, in some instances, close to other recreational facilities. I would hope that the department would take a very careful look at the sale of these armouries and, if possible, in some instances would try to make arrangements to lease them to the municipal authorities for two purposes: one, that they may at some future date be used again, and second, that they be kept in being for public purposes, and that this should not be treated completely as a commercial transaction such as the ones dealing with other government surplus property. This is hardly a question but I would ask that consideration be given to this point. Would you like to deal with that proposition, sir?

Mr. HELLYER: Do I want to comment on it? Not really. I will do so briefly, if you would like me to. This question will have to be given careful study. The departmental policy has been not to retain lands and buildings when they are no longer required but to declare them surplus, and then the law clearly provides as to the method of their disposal.

Mr. SMITH: We are familiar with that.

Mr. HELLYER: I think this is a good policy and one which we should adhere to.

Mr. SMITH: It is a good policy in its general application.

Mr. HELLYER: At the same time I think we should be sure, before disposition of properties, that there is not likely to be a requirement within the foreseeable future, and we should be very careful in the application of this judgment.

Mr. SMITH: I think there is a further point here, and that is that for instance there is a series of figures on the cost of lands. In many instances the armouries are built on land that was donated or sold to the government at a very small cost, and it is close to park facilities.

Mr. HELLYER: I think this is true in some cases. I think it is also true that of late there has been a disposition on the part of the municipalities to expect payment in lieu of taxes, and it is very difficult to set out the intangibles of the previously established contractual relationship.

Mr. SMITH: A great many of the administrative and training functions of the militia are now being taken over by permanent force officers and soldiers. Is that not so in the case of call-outs? You mentioned that there would be some centralization on pay and records. Has any estimate been made of the number of regular officers and soldiers who would be involved on a full time basis or an almost full time basis in serving the militia?

Mr. MCPHERSON: Mr. Chairman, the strength of the present staff is 854. That 854 will continue to support the militia.

Mr. WINCH: Even the reduced militia? Will the same number be now available?

Mr. MCPHERSON: That is correct. That is our present plan.

Mr. SMITH: Except that there will no longer be call-outs and short service.

Mr. MCPHERSON: That is correct.

Mr. MACRAE: So that in addition there are these 750 that are added, 250 majors or captains roughly and 150 W.O.'s.

Mr. McPHERSON: Two hundred and fifty is what the commission recommended. Is that what you refer to?

Mr. MACRAE: You said it is 854.

Mr. McPHERSON: That is the size of our present instructional staff, out of which we intend to provide the close administrative support to the militia, as I have already described, plus instructional support.

Mr. SMITH: So there will be no increase?

Mr. McPHERSON: No increase.

Mr. SMITH: How quickly do you anticipate getting to the new age levels of militia officers and other ranks?

Mr. HELLYER: We are careful not to be too specific about that for the reason that it has to be applied with discretion, but at the same time it should not be used as an excuse for not improving the quality and effectiveness of the units.

Mr. SMITH: I wonder if you are not going to be able to keep some of the older ones as a nucleus for some considerable time?

Mr. HELLYER: I think the colonel may agree that there may be cases where young officers are not immediately available where this would have to be considered.

Mr. LANIEL: I have three or four questions. First of all I would like to refer to your statement at page 7 where you speak about reducing accommodation costs. You mention that some saving would be realized by releasing buildings held by lease or rental agreement. Do you mean by this that you will try and establish local units on a more permanent basis in permanent buildings in accordance with the position of the department regarding the establishment of an armouries construction program?

Mr. HELLYER: I will try to answer what I believe to be your question. First of all, we will be giving up, due to the reorganization, a number of properties including a number of leased properties. There is also the additional question that in some major urban areas, the big cities, it may be possible to use other existing facilities in such a way that this will permit us to give up some of the properties presently used, including some of those that are being leased and rented. This, for example, is what we plan to do in the long run in Toronto. However, some of these plans will have to be worked out in the course of the reorganization, and only the ones that we are giving up due to the change in the order of battle can be referred to specifically at this time.

Mr. LANIEL: You will take into account some of the advantages of the present set-up even though it might be under a rental basis as far as availability to people is concerned?

Mr. HELLYER: All of these factors will be taken into consideration.

Mr. LANIEL: You mentioned that under the present plan the basis of an establishment will be 300 all ranks. Does this mean that all units will have to meet this standard?

Mr. HELLYER: No, it is an establishment which gives them their maximum. At the same time we have said that it is realistic target in many areas and we would not expect major units in urban centres, for example, to be too far below establishment over a long period of time and still be as effective as we would like to see them.

Mr. LANIEL: Will you permit them to go over that number?

Mr. HELLYER: No, this is the maximum, except where there there are sub units of a battalion, say in towns outside an urban centre.

Mr. LANIEL: In this I imagine you will have to take into account the question of the age limit and also the preparation of these new officers to serve the reserve well. How long do you expect it might take to have a much younger reserve with a forward looking attitude and an up to date outlook by renewing these officers and actually giving them a job to do and trying to build up that spirit of participation of the reserve as a support to the regular army?

Mr. HELLYER: I think it is very dangerous to make predictions in respect to dates, but we will commence this task at once and it will be pressed just as quickly as we can press it.

Mr. LANIEL: As far as training is concerned, the position of the department leaves me with some doubts as to where this will end. Let us first take the week end training, which is one of the recommendations. I think that strong emphasis should be given to week end training, maybe a stronger emphasis than has been placed on it by the department. The same thing applies to the corps schools for the preparation of officers. If you look at the position of the department, it is said that militia courses will be conducted at corps schools wherever there is a requirement. I think the department should take a stronger initiative in that field if they really want to build up the reserve.

Mr. HELLYER: We agree in principle but there are limitations in practice. Maybe Colonel McPherson could amplify.

Mr. MCPHERSON: With respect to corps schools conducting courses for the militia, it has been our experience in the past where we provide courses for the militia that we get very few individuals attending, by virtue of their employment and other factors. We find that the corps school has to phase these courses into their normal programmes and it is a little discouraging to find that only one or two candidates turn up. That is why we say that if we can get a sufficient number of people interested in taking the course, we will certainly run one at the corps school.

Mr. SMITH: Could I ask a supplementary question? Is it proposed now to take a harder line with the militia units who do not require their officers to get to these courses, and that they will have to get out?

Mr. MCPHERSON: Let me put it this way, that if an officer does not wish to attend a course to qualify, then he becomes dead-wood within the militia.

Mr. SMITH: And you are going to take a hard line on this type of officer?

Mr. MCPHERSON: Yes.

Mr. LANIEL: I have another short question. It is said here that C.O.T.C. graduates are required to sign a commitment for militia service after graduation. Is that in existence now?

Mr. MCPHERSON: Yes, that provision exists now. Our intention is to emphasize it to the candidate.

Mr. LANIEL: To what point does it exist? What are the results?

Mr. MCPHERSON: I would say the results have not been as good as I would expect, and there are several reasons for this: one is that, by virtue of movement and employment, the militia loses touch with the C.O.T.C. graduates. Let me give you an example. An individual might come from northern Ontario where his home town is located, take his university training in Toronto, and then move to Halifax to earn his living. It is a question of trying to identify the individual's movement and to encourage him to join the local militia unit. This we are going to do.

Mr. LANIEL: My line of questioning has merely led me to say that it is very important to increase the standards in the reserves and to increase their

efficiency if you wish to establish a program of public relations. I do not see how you can establish a program of public relations unless you have efficient, capable men, doing training which the population will see, doing week end exercises so that the population can see the young officers going to corps schools and generally see some movement in the reserve, because otherwise we will go back to the present system.

Mr. McNULTY: Mr. Chairman, have these various units been notified of the decision by the Department of National Defence?

Mr. HELLYER: They were all notified in advance of the public announcement.

Mr. McNULTY: How soon will these units be transferred to supplementary lists?

Mr. HELLYER: Perhaps the colonel could answer that, but I would suspect starting from now and phased over the period between now and March 31st.

Mr. McNULTY: What happens to the armouries where there are two or more units using them as well as the separate messes? What happens to the physical properties of the messes, the mess funds, and so on?

Mr. McPHERSON: This will have to be gone into, of course. There are regulations in effect on the disposal of mess property and mess funds.

Mr. McNULTY: What about the commissioned officers? I was thinking of my own unit, the 44th Field Artillery Regiment at St. Catharines. Will they automatically retire or are they transferred to a list? What about their commissions?

Mr. McPHERSON: If there is another unit in the locality, these officers may, of course, if they are acceptable, join that unit. If not, they will be transferred to the supplementary reserve.

Mr. McNULTY: This again would be a matter of the complement such as transferring an artillery regiment like the 44th. I believe the 57th would be picking up the 10th Field Battery from St. Catharines so that there will be too many officers to transfer, would there not?

Mr. McPHERSON: I have to agree that some of them would have to be transferred to the supplementary reserve.

Mr. McNULTY: In regard to transportation, and keeping in mind that the 44th Field Regiment is attached to the 57th in Niagara Falls, how often do you contemplate they would be required to participate in training with the parent unit?

Mr. McPHERSON: The regiment should get together at summer camps. There should be liaison between the commanding officer and the battery commander in that area; the battery commander will be getting direction from the commanding officer.

Mr. McNULTY: This would not entail a great deal of moving back and forth? It would be possibly once or twice a year when transportation would really be required? They would do their training in the batteries locally?

Mr. McPHERSON: Yes, locally.

The CHAIRMAN: Does that complete your questioning, Mr. McNulty?

Mr. McNULTY: Yes.

The CHAIRMAN: Mr. Fane.

Mr. FANE: I would like to ask the Minister whether the Unit Commanders or Battalion Commanders were consulted about relocation of outlying units in their command, or was it done entirely by the commission?

Mr. HELLYER: I think, subject to correction, it was done by the commission plus the reconsideration that was given by the department when area commanders, general officers commanding, and others were consulted.

Mr. FANE: The Commanding Officer of the unit was consulted, I presume, in each case about relocation of an outlying company?

Mr. HELLYER: I do not imagine he would have been in each case. He may have been in some cases.

Mr. FANE: May I be specific, Mr. Chairman?

I would like to refer to the Loyal Edmonton Regiment, which I think is now the Third Battalion of the Princess Patricia's Light Infantry. There was a company of that division located in the town of Vegreville. It later became a platoon. This is being relocated. In Vegreville there is an armoury that was built some 12 or 15 years ago which cost somewhere between $150,000 and $250,000. That will become surplus now. I may say that when I was in command of the unit in Vegreville I always had a waiting list. Why should a unit, even a platoon, be moved out of a town when it has a record second to very few in Canada for recruiting during wars and in the reserve army?

Mr. HELLYER: I think the factors which were applied in all situations were applied there, Mr. Fane.

Mr. FANE: Meaning what?

Mr. HELLYER: I gave a list of them the other day and I am sure you would admit that the waiting list has shrunk quite considerably since you were commanding the unit.

The CHAIRMAN: Does that complete your questioning, Mr. Fane?

Mr. FANE: Yes, thank you.

The CHAIRMAN: Dr. McMillan.

Mr. MCMILLAN: Would disbanded armouries and other equipment come under the War Crown Assets Disposal Corporation for disposal?

Mr. HELLYER: If the department comes to the conclusion that they are surplus, Dr. McMillan, then by law they have to be transferred to the Crown Assets Disposal Corporation for disposal.

Mr. MCMILLAN: In other words, the municipalities would have to deal with them?

Mr. HELLYER: That is correct.

Mr. MCMILLAN: I was interested in units. You say that the maximum number in any one unit was 300. Suppose you had two subunits; would you exceed the 300?

Mr. MCPHERSON: I think it might help if I were to explain our contemplated plan with respect to the strength of each unit. Where we have a regiment or a battalion with outlying sub-units—that is squadrons or companies in, say, two other locations or more—the unit commander would have to first use up his strength of 300. Then he would apply for additional strength in blocks of 100.

Mr. MCMILLAN: How are the assets of the department carried on the books? Has there been any write-off; is there a write-off of arms because of their increase in age, and so on, or is everything carried at 100 per cent?

Mr. HELLYER: This is a very complicated question which might be directed elsewhere. Under our system we do not have a balance sheet which shows capital assets and provides for depreciation. We operate our governmental system on a cash basis.

In respect of accounting procedures within the department, as was explained, these are done by law on the basis of cash. If a unit commander, for example, has to account for equipments which have been provided to him, these have to be accounted for on the basis of the initial costs rather than on the basis of a depreciated value.

Mr. MCMILLAN: If, for instance, you buy an automobile, is that written off each year or is it all on a cash basis?

Mr. HELLYER: It is all on a cash basis when we need new cars, if we have money we buy them. When they wear out, we should get rid of them and get new ones.

Mr. MCMILLAN: The assets as they might appear in the books do not mean much.

Mr. HELLYER: We do not have an accounting of our capital assets.

Mr. LAMBERT: In connection with the naval reserve and the deactivating of training ships, what plan has been evolved for the continued training of naval cadets and navy league cadets?

Mr. HELLYER: I am not sure I can answer the question specifically, but in most cases accommodation is being provided by one means or another in the Department of National Defence buildings, and in some cases in other buildings belonging to municipal governments or private organizations.

Mr. LAMBERT: May we get specific, and as I am intruding in a discussion of the militia here, perhaps the minister could take this as notice.

I am primarily concerned with H.M.C.S. *Nonsuch*. It is the decision of the Department of National Defence to integrate with it some of the militia organizations which are scattered over the city of Edmonton where there are some engineers, ordnance people, and what have you, who are housed in a conglomerate situation; and in order to maintain the *Nonsuch* as a training base, you would do away with these conglomerate accommodations and bring in these other militia units.

Mr. HELLYER: The tentative plan, if you will accept it, is to use the facilities for army reserve units and continue to make accommodation available for the sea cadets.

Mr. LAMBERT: Thank you.

The CHAIRMAN: Does that complete your question?

Mr. LAMBERT: Yes.

The CHAIRMAN: Now, Mr. Harkness.

Mr. HARKNESS: I wonder if you have a summary to show the number of units by corps which are being in fact disbanded, going under, that is, the supplementary order of battle. We got started on this at the last meeting, when you gave us some figures for the artillery and the armoured corps inventory. I think it would give us a better picture of what is happening on the whole if we could have a list showing the number of units by corps.

Mr. HELLYER: I think we have one here.

Mr. MCPHERSON: The Royal Canadian Armoured Corps is reduced by six.

Mr. HARKNESS: Would you please do the same with the others?

Mr. MCPHERSON: The Royal Canadian Armoured Corps from 26 major units to 20. The Royal Canadian Artillery from 36 major and 8 minor to 22 major and 4 minor. The Royal Canadian Engineers from 7 major and 14 minor to 3 major and 16 minor. The Royal Canadian Signals from 8 major and 11 minor to 3 major and 12 minor. The Royal Canadian Infantry Corps had 60 major, and it has been reduced to 51 major units and two minor units.

The Royal Canadian Army Service Corps had eight major units and 12 minor units. They will now have 19 minor units.

The Canadian Forces Medical Service had one major unit and 25 minor units. They will now have 22 minor units.

The Royal Canadian Ordnance Corps had five major units and 7 minor units. They will now have 14 minor units.

The Royal Canadian Electrical and Mechanical Engineers had five major units and 18 minor units. It will now have 20 minor units.

The Royal Canadian Provost Corps had 10 minor units, and will now have 11 platoons.

The Intelligence Corps had six minor units, and will continue to have six minor units.

Mr. HARKNESS: That is the entire list. Now, what about the commanding depots, all of which have been disbanded. Were they counted as major, minor or what?

Mr. MCPHERSON: No, sir, we do not put them in that category, but they have been disbanded. The personnel selection units and dental units have also been disbanded. There were 14 manning depots.

Mr. HARKNESS: One of the reasons I put this question was I noticed in a newspaper account that something like 58 major units were being disbanded and I wondered whether or not manning depots were included in that figure?

Mr. MCPHERSON: No, these were not included in the number given in the press.

Mr. HARKNESS: So, this number of 58 is made up of the corps units which you have mentioned there, which have been reduced as indicated.

Mr. MCPHERSON: Yes.

Mr. HARKNESS: Now, in this connection it would appear that the chief units which have been reduced are the artillery, the engineers, the signallers and the service corps. With this reduction does it leave anything like a reasonable balance of these units compared with the others in respect of the balance which exists in the regular army?

Mr. MCPHERSON: I would say yes, sir. I think it is generally recognized that we would have a greater requirement on mobilization for infantry than some of the other arms and, in respect of the artillery, we have a requirement on mobilization for the training brigades of three regiments in addition to a certain number of reinforcements for the regular army, and we feel that in leaving 22 major units and four minor units for the artillery this would meet our mobilization requirements.

Mr. HARKNESS: What about the case of the engineers, where you have a reduction of considerably over 50 per cent, and in the case of signallers where you have a reduction of somewhat over 60 per cent or up to two thirds? It would seem to me you are going to be very deficient in the militia and, therefore, the basis from which you can draw off reinforcements, or for these three brigades so far as engineers and signallers are concerned.

Mr. MCPHERSON: As you can see we have reduced the engineers by two and the signallers by four.

Mr. HARKNESS: From the figures you have given me I can see this would result in a reduction of over 50 per cent.

Mr. MCPHERSON: I wonder if we are using the same factor.

Mr. MACRAE: Colonel Harkness means the major units.

Mr. HARKNESS: If you take the two combined, I think it would run to 50 per cent.

Mr. MCPHERSON: In the case of signallers, we have eight, but we are now organized in the regular army not on a regimental basis but on a squadron basis, so we have to have them organized as squadrons. In one or two instances we kept regiments.

Mr. HARKNESS: It struck me that your proportion of engineers and signallers in particular is reduced way out of proportion to any other arms, and as you are well aware they are both extremely important corps.

Mr. HELLYER: I think one factor that should be mentioned is due to the experience that we have had. Colonel McPherson will correct me if I am

wrong, but there has been some reinforcement in the signal capability of the Canadian army regular, and this provides a certain amount of redundancy in peacetime which would be available on mobilization.

Mr. HARKNESS: In that connection I think all experience in the past has shown that one of the types of personnel which was always in particularly short supply was the signallers. This is one of the reasons why I am concerned about this very big reduction of signallers. Throughout the last war we were in difficulties as far as signallers were concerned.

Mr. MCPHERSON: We reckon that with three regiments and twelve squadrons we would get the required number.

Mr. HELLYER: Also, if we get some up to date equipment, this will have an even more important effect because with equipment they now have they will not be well prepared for emergency circumstances, and if we can get a smaller number more adequately prepared, this would be quite an achievement.

Mr. HARKNESS: It is always highly desirable to get everybody as well trained as you can, and no doubt the better equipment you have the better your chances of doing that. Nevertheless, I do not think that is what we are talking about, at least what I am talking about is whether the balance here is a proper balance or not. This is very much open to question.

I have another question in connection with these service battalions. I have not had time to go over it and to make any compilation. How many of the people that would normally make up a service battalion, ordnance, medical service, medical people, army service corps people, and so on, how many units which are not in these service battalions will be left in existence?

Mr. MCPERSON: There will be some, sir. I do not know whether I have the figure at hand immediately but there are some that, by virtue of their location, cannot be grouped conveniently into the service battalion organization.

Mr. HARKNESS: This is the point I am getting to. The service battalions are in large cities, and I was wondering to what extent you were going to have people in these corps in smaller towns.

Mr. MCPHERSON: There will be some.

Mr. HARKNESS: You do not know how many?

Mr. MCPHERSON: It will be worked out in a minute, sir.

Mr. HARKNESS: As far as these people that are not in the service battalion are concerned, is it planned when they go to camp that they will work in a service battalion or will there be an ad hoc arrangement just for camp purposes?

What I am really getting at is will all these people be trained in the service battalion set up?

Mr. MCPHERSON: This is perhaps the best way to do it; the service battalion commander would be responsible for summer camp training of the service units. In all cases this cannot be done because of the location of an isolated service company.

Mr. HARKNESS: So far as their summer camp training is concerned, would these people who are not in the service battalion nevertheless be trained at summer camp as part of the service battalion?

Mr. MCPHERSON: Yes, sir.

Mr. HARKNESS: I think this would be highly desirable.

Mr. HELLYER: They would have to be trained in this concept, because this concept is for the future of the Canadian army, and it would be difficult for us to coordinate militia with Canadian army training if it was not the same type of training.

Mr. HARKNESS: I am all in favour of it, because I instituted it myself.

Mr. HELLYER: We have no disagreement here. I think it is an excellent thing.

Mr. HARKNESS: My concern was whether units which are not presently in a service battalion who would be operating with one, will get the same training along with the others?

Mr. HELLYER: That which you have so well and duly initiated will be carried out vigorously and efficiently.

The CHAIRMAN: Does that complete your questions, Mr. Harkness? If so, Mr. MacRae.

Mr. MACRAE: I have a question supplementary to the one which was asked by Mr. McNulty, when he asked about the officers who would be in excess of the establishment. Is there any provision under this new plan for supernumerary officers to be picked up as ordinary officers? Is there any provision whereby, when a unit is being struck off the supplementary order of battle, other remaining units may pick up the good officers as supernumeraries?

Mr. MCPHERSON: No. If we have to keep a supply of supernumerary officers, our costs would increase. There is provision now that officers who are on supplementary reserve may take training.

Mr. MACRAE: You mean at a summer camp?

Mr. MCPHERSON: Yes, and that provision will continue.

Mr. MACRAE: What we can do is to cut off the officers in some cases who will have to be struck off the supplementary list of officers, even though they are of age and so on. I wanted to deal with one or two specific units. I refer to page LXXVI of the "The Commission on the Reorganization of the Canadian Army (Militia), Part II". The units are the first and second battalions of the Royal New Brunswick Regiment, and where according to the eighth line down the headquarters of the first battalion are to be at Fredericton, while the other companies are in Saint John, Grand Falls, and Edmundston. Is it envisaged that there will be any change at all in the establishment of these units? To be specific, will the other companies that you know, such as "A" company, the support company, and the headquarters company, be in Fredericton? Is that included in the plan? I realize there are so many units that you may not wish to answer at this time, but rather to make a note of my question and advise me later.

Mr. MCPHERSON: I shall have an answer for you in a minute, Mr. MacRae. You will notice that you mentioned the headquarters support and "F" company.

Mr. MACRAE: There is an "E" company and an "F" company now, but as you know, there was only an "E" company. An "F" company which is not normal with an infantry battalion, but because of the amalgamation of the Carleton and York and Scottish some years ago, an arrangement was made in order to pacify the people who are interested in keeping the militia alive. Of course, there is no necessity for that now because, as you and I know, there are four rifle companies in an infantry battalion. No mention is made here of "A" company, support company and headquarters company, which are the other three necessary companies of a battalion other than those three which are listed there. Are they all to be in Fredericton?

Mr. MCPHERSON: To explain our method of applying the establishment, a concentrated unit would have to work within a ceiling of 300. We are making provision for the kind of unit you referred to in order to permit an establishment greater than 300.

Mr. MACRAE: You mean a total establishment. We are getting away from the question I put, but I will ask a question on that. Will the full establishment of officers be permitted to an infantry battalion in a 300 total unit? It

used to be 36 officers, give or take one or two, but if the ceiling is 300 will it be entitled to have 36 officers, one lieutenant colonel, six majors and so on?

Mr. McPHERSON: The figure of 36 which you mentioned, is very substantially the one I always use. That is infantry officers excluding the doctor, the paymaster and that sort of thing.

Mr. MACRAE: Yes.

Mr. McPHERSON: Well, the figure in an infantry battalion establishment is 41. In the new organization we will have 29 officers.

Mr. MACRAE: That is the total, instead of 41?

Mr. McPHERSON: Yes.

Mr. MACRAE: Then, I take it, Colonel, what you are saying is that the establishment will be, say, 300 all ranks with 29 officers, but it is not contemplated there will be any change whatsoever in the composition of an infantry battalion; there will be four rifle companies, a headquarters and support companies, and I presume that has not changed?

Mr. McPHERSON: Perhaps I should explain how the 300 is going to be made up.

Mr. MACRAE: That is what I am trying to get at.

Mr. McPHERSON: Our feeling is if this re-organization is to have any meaning and if the militia is to be tied into the role of reinforcement or provision of a training force it would become incumbent upon the commanding officer to ensure that he has a group of individuals in his unit that are organized in such a way they can be both trained and used when they are required on mobilization. A concentrated infantry battalion would be required to maintain one rifle company at a strength of approximately 100 at all times. An infantry battalion would also have to maintain one support weapons platoon at all times and keep them trained. In addition, again talking about a concentrated battalion, there would be a training company which would look after training of recruits and of student militia. Also, it would have to carry on strength those officers or N.C.O.'s away on course and any of the miscellaneous personnel in the unit. In addition, of course, there will be the normal headquarters company, signals and other corps people. But, the object is to ensure that the battalion commander has in being this rifle company and a support weapons platoon, and I think the militia units can do it. To a greater or lesser extent this principle would be applied to the other corps. For a battalion that is decentralized, shall we say, with a greater establishment than 300 it might have three companies each of which would have one full establishment platoon trained at all times. That is the system we hope to introduce.

Mr. MACRAE: Of course, that is all down on paper somewhere now.

Mr. McPHERSON: Yes.

Mr. MACRAE: That is, it is a directive.

Mr. McPHERSON: Yes, it is ready to be commenced.

Mr. MACRAE: But it has not been commenced up to date?

Mr. McPHERSON: No.

Mr. MACRAE: In other words, you are not following in your establishment a battalion in the field. But again, using the name of the Black Watch, it is not the same thing at all as operating as they are at this moment. The Carleton and York militia will be on a different footing altogether. I will not disagree with what you told me. It is a new concept. It is not quite what we have been trying to do over the years. However it certainly is very different from what we have been doing. Do you not agree?

Mr. McPHERSON: Yes, indeed, I agree. We hope that by the summer of 1966 to have the militia commander take his operational company and support weapons platoon into summer camp for training, and to put three or four of these restricted establishment units together in order to form one, for battalion training. I think this is preferable and a feasible method of conducting collective training in the militia.

Mr. MACRAE: Thank you. I think this takes care of my question.

Mr. HARKNESS: May I ask a question? How would this thing work out as far as the artillery is concerned?

Mr. McPHERSON: Because an artillery regiment has no headquarters company, it could have two or three batteries in a centralized location. So we would expect to have each battery produce one operational troop. Therefore two batteries in a concentrated region would produce two troops to make one battery, and in addition there would be a training battery to look after the courses and to do the training of recruits and student militia.

Mr. HARKNESS: In cases where you have batteries in towns other than where there are regimental headquarters, would they operate as regular batteries?

Mr. McPHERSON: Yes sir. Where they are separated, we are making the necessary adjustments to the establishment.

Mr. HARKNESS: In order to make certain that you are going to go to the older or the pre-1939 war, when the battery commander in effect was to a large extent commanding a unit rather than a regiment.

Mr. McPHERSON: Where the battery is isolated, this probably would be the case, although the regimental commander would still have command over that outlying battery.

The CHAIRMAN: May I interrupt? It is now 1 o'clock. I have on my list Mr. Winch and Mr. Lambert.

Mr. LAMBERT: No, I have finished.

The CHAIRMAN: Very well. I have Mr. Winch, Mr. McNulty, and Mr. MacLean still wishing to ask questions. Perhaps if we might remain for a few minutes we could conclude with them now, rather than meeting again this afternoon. Does that meet with the agreement of the committee?

Agreed.

Now, Mr. Winch.

Mr. WINCH: Mr. MacRae led up to one phase which I would like to explore further. I understand from the answer to the question he received last Tuesday that when the new establishment is in operation, there will be one officer to 8 decimal something other ranks, let us say, one to 9—am I correct on that? Whereas as from Mr. MacRae's question it would appear to be one to 10.

Mr. McPHERSON: Prior to reorganization the establishment ratio was one to 13. But following the reorganization it would be one to 9.3.

Mr. WINCH: I cannot quite put these figures together. I have been trying to cast my mind back in my own service, as a member, knowing that in my platoon there was an officer, and a sergeant, with three sections of 11; in each section you had a corporal or a lance corporal; and it was quite likely that in a rifle battalion you had one officer to 34 all other ranks, or one officer out of 30 privates. I admit, of course, that there were three platoons to a commander. In addition, you had other personnel at headquarters, such as one N.C.O., and two other ranks. You can go all the way through headquarters where you had your paymaster, and so on; but basically it was one officer to 34 other ranks, or one officer to 30 privates. That is how it was.

But under the new regime policy, there will be one officer to nine. I presume there must be a good reason for this ratio, but I think the logical question

is: What is the basic reasoning? Let us go back to my own experience of one officer to 34 all other ranks, and one officer to 30, where now you will have one officer to nine. Just what is the basic reasoning for all these many chiefs with these few Indians? This is an extraordinary ratio.

Mr. McPHERSON: The ratio you had experience with has changed over the years.

Mr. WINCH: You are going to make an officer now the same as a lance corporal in charge of a section.

Mr. McPHERSON: I do not think you can relate the general ratio of officers and men of any unit to the ratio of officers to a platoon commanding 30 men. A platoon commander has 37 other ranks under his command. But when you apply it ratiowise to officers and men in a unit, it works out to the one I have given.

Mr. WINCH: If you are going to have them, I take it to be one to 35 and one to 37. But if you are going to bring it down to one to nine or one to ten, you are not going to break up basically the ratio of the platoon. Are you not going to have a top heavy brass staff in order to take care of nine other ranks?

Mr. McPHERSON: The new militia platoon will be much smaller. It will be something in the order of a platoon commander, with about 20 to 25 men.

Mr. WINCH: If you are going to have one platoon to a commander of 20 to 25 men, where are you going to keep the ratio of one officer to nine? How many are you going to take into your company at battalion headquarters?

Mr. McPHERSON: The rifle company still requires a second in command. The battalion headquarters staff must be taken into consideration. The doctor, the dentist, the paymaster, the quartermaster, the signal officer, and all these must be taken into consideration.

Mr. WINCH: Do they not come under your headquarters company?

Mr. McPHERSON: They are all related. That is why the ratio was, as we have said, for an infantry battalion, one to 13. Now it will be one to 9.3. It is interesting to note that the ratio was one to 8.9 of the effective strength. It is generally recognized that militia officers have a problem in commanding a full establishment. Militia units do not have a full establishment, but we still need this kind of leadership. I will cite an example. If a militia officer today had in an armoury 37 men to look after, and you multiplied this by 12 platoons the armoury would be chock-full of people and you would not be able to do any training. So, there was really a limit on the number of other ranks a militia officer could train, administer and look after.

Mr. WINCH: I am still confused. I know the four years I was in I was expected to be able to handle 35 to 37.

Mr. McPHERSON: That was during the war years.

Mr. WINCH: As I said, this was during the war when I was in.

Mr. McPHERSON: That is correct. It was a fact that the officer had to look after a full platoon of men.

The CHAIRMAN: Does that complete your questioning Mr. Winch?

Mr. WINCH: Yes.

The CHAIRMAN: Would you proceed, Mr. McNulty.

Mr. McNULTY: I have just a short question in respect of the second page of the minister's statement in regard to the air force auxiliary. Forty light transport aircraft are mentioned as becoming available for disposal. Have you had any nibbles or any one showing any interest in these aircraft?

Mr. HELLYER: We should take that question as notice. There are quite a few Expediters that have been in surplus but I could not tell you offhand what the actual sales record has been.

The CHAIRMAN: Would you proceed, Mr. MacLean.

Mr. MacLEAN (*Queens*): I would like to put a general question in order to clear my own thinking in certain respects. I would like to have some clarification of the chronological sequence of the documents we have before us. I would like to know which are overriding. I have put this question because it seems, by inference, that the Hendy report which was presented in committee some time ago was acted upon by national defence headquarters and their decisions made known before the commission on the reorganization of the Canadian army militia, part II, was decided. Presumably, the commission in respect of the militia knew what the government decision with regard to the reserve navy was going to be before they completed their studies. Am I correct in this assumption?

Mr. HELLYER: I will try to be careful because I do not want to confuse the chronology of this. First of all, the three reserves were handled differently at the outset. As you recall, the government took decisions in respect of the naval reserve and the air force reserve, and referred the militia reorganization to the commission. Subsequently, at a meeting of the conference of defence associations, the associate minister and I agreed that we would have a committee set up to review what, in fact, we had announced in respect of the naval reserve and the air force reserve. This was done, and they reported. The associate minister announced we would not put the final stamp on those actions until part II of the Suttie Commission was in hand—that is, until they had reported to us. And, this was done. So actually, although, particularly in the air force, the units had been reduced to nil strength, the final decisions were not announced until Tuesday in accordance with the undertaking that had been given.

Mr. MacLEAN (*Queens*): I realize that and that is how I understood it was being done. But, the query I have is that in certain cases at least, so far as appendix 3 of the commission on the Canadian army, part II is concerned, they list where certain remaining militia units are going to be housed, and they comfortably house them in naval unit establishments. So, they must have had some prior knowledge that these naval establishments were down the drain, although the navy committee had recommended in some cases that they be retained. To be specific, I am talking about my own constituency, where all the remaining militia units in Charlottetown are listed as being housed in *Queen Charlotte,* although this defence committee was unaware until Tuesday what the decision of the government finally was to be with respect to *Queen Charlotte.*

Mr. HELLYER: I think they were merely putting this forward by way of suggestion because actually the final decisions in respect of the naval reserves were not taken by the government until last week. So, they certainly could not have had prior information because we had not finally concluded what we were going to do.

Mr. MacLEAN (*Queens*): But, I think it would be a matter of courtesy for them to stay in their own ship until the decision was made. To put it another way, I think it puts a tremendous weight on one side of the balance with regard to whether or not a navy reserve unit was going to be retained. It may be that someone else conveniently decided how their surplus facilities were going to be comfortably used after they were disbanded.

Mr. HELLYER: I assure you this was not taken into consideration in our final judgment in respect of naval reserves. There were the other factors.

Mr. MacLEAN (*Queens*): I think there has been a factor on one side of the balance and I think this is unfortunate. I think those interested in the naval reserves could feel that this was unfortunate in that regard. However, this brings me to another question, and I do not want to prolong this discussion.

There is a section in this report with regard to armouries and accommodation in some areas. For example, they give an argument for the need of additional armoury accommodation in Vancouver, and one of the arguments they advance—and, I have not the information right here at my finger tips—is that the Irish Fusiliers are badly housed.

Mr. HARKNESS: They are not going to be housed at all now.

Mr. MACLEAN (*Queens*): In my opinion, this argument now falls to the ground. In other words, this section on accommodation is no longer entirely valid owing to subsequent decisions made by the government.

Mr. HELLYER: That is correct.

Mr. LAMBERT: I have a supplementary question. Would the fact that the Irish Fusiliers were reported to be occupying substandard accommodation be a factor in determining whether or not they should get the axe.

Mr. HELLYER: It was one in that long list of factors I gave the committee on Tuesday.

Mr. MACLEAN (*Queens*): I have one further supplementary question in respect of this. In appendix 3 the Irish Fusiliers accommodation is listed as being the Seaforth armouries—that is, sharing their accommodation with the Seaforth Highlanders. Now, since they have gone out of existence to all intents and purposes and all they need, as the recommendation says, is a logical repository, I presume that some other militia unit will be put in the armouries with the Seaforth Highlanders, as a result of which there will be a shuffle in respect of the remaining militia units. As a result, the arguments put forth in the report will not be entirely valid with regard to Jericho beach and others.

Mr. HELLYER: The question of accommodation, particularly in large urban centres will be thoroughly studied on its own merits now that the reorganization will go forward so that we can make the best use of the facilities available.

Mr. MACLEAN (*Queens*): I suppose it is fair to assume in the case of militia units listed in the appendix, and in the decisions agreed to in the document dated October, that where they coincide and where there is no requirement shown for existing armouries, these armouries now are considered surplus.

Mr. HELLYER: Each one will have to be considered on its merits, but I think your assumption in most cases will prove to be true.

Mr. MACLEAN (*Queens*): I hope it does not, but if my assumption proves to be true in the case of some of these armouries, I would hope very careful consideration would be given to the ownership status of the property involved because in some of these cases these armouries go back a long way; they are very historic sites, so to speak, so far as the army is concerned. I am not concerned so much with armouries which have been provided in recent years entirely by the federal government, but in the case of the Charlottetown armouries, for example, that building and its site were transferred to the federal government in 1873 for $1. I hope it will not be handed over to the Crown Assets Disposal Corporation in the ordinary way, because I think some of these are more in a special category.

Mr. HELLYER: Your remarks will be noted, Mr. MacLean.

The CHAIRMAN: Colonel McPherson would like to make a statement in answer to a question.

Mr. MCPHERSON: Mr. Harkness asked for the number of service units which were not a part of a service battalion by virtue of their location. The answer is there are 13 which are not part of a service battalion.

The CHAIRMAN: That completes our questioning. We probably will be meeting next week again. I will be meeting this afternoon or evening with the Steering Committee to plan our future meetings.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 20

TUESDAY, NOVEMBER 17, 1964

DEPARTMENT OF DEFENCE PRODUCTION

WITNESS:

The Honourable Charles M. Drury, Minister of Defence Production.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21430—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—(24).

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, November 17, 1964.
(34)

The Special Committee on Defence met at 11.15 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Fane, Hahn, Harkness, Lambert, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, MacRae, Matheson, McMillan, Pilon, Smith and Winch. (14)

In attendance: Honourable Charles M. Drury, Minister of Defence Production; Mr. Gordon W. Hunter, Deputy Minister; Mr. William Huck, Assistant Deputy Minister; and Mr. Robert Keith, Financial Adviser.

The Chairman presented the Tenth Report of the Steering Subcommittee as follows:—

Your subcommittee recommends:

1. That the Committee meet on Tuesday, November 17th to hear a Statement from the Minister of Defence Production, the Honourable C. M. Drury, and Departmental officials.
2. That on Thursday, November 19th the Committee further consider the operational practices of the Department of Defence Production—dealing with specific programs.
3. That on Tuesday, November 24th the Committee consider the paper "Defence Expenditure and its Influence on the Canadian Economy", with officials from the Department of Defence Production in attendance.
4. That on Thursday, November 26th the Committee receive and consider a submission from the Air Industries Association of Canada, with Mr. David Golden the President in attendance.

On motion of Mr. Edmund Asselin, seconded by Mr. McMillan,

Resolved,—That the abovementioned report be concurred in.

The Minister of Defence Production, Mr. Drury, was called, and he presented a statement respecting the responsibilities and activities of that Department. The Minister was questioned on his statement and on related matter.

Agreed,—That a "Staff Summary" of the Department of Defence Production, copies of which were distributed to Committee members, be printed in the record. (See *Appendix "A"* to this day's Proceedings.)

At 1.00 p.m. the Committee adjourned until 11.00 a.m., Thursday, November 19, 1963.

E. W. Innes,
Clerk of the Committee.

21430—1½

EVIDENCE

TUESDAY, November 17, 1964.

The CHAIRMAN: Gentlemen, we now have our quorum. We are starting today, a series of meetings dealing with the Department of Defence Production. I have a Steering Subcommittee Report which I would like to present for your approval. The report is as follows:

1. That the committee meet on Tuesday, November 17th to hear a statement from the Minister of Defence Production, the Honourable C. M. Drury, and departmental officials.
2. That on Thursday, November 19th the committee further consider the operational practices of the Department of Defence Production—dealing with specific programs—(Bobcat and Provider).
3. That on Tuesday, November 24th the committee consider the paper "Defence Expenditure and its Influence on the Canadian Economy", with officials from the Department of Defence Production in attendance.
4. That on Thursday, November 26th the committee receive and consider a submission from the Air Industries Association of Canada, with Mr. David Golden, the President, in attendance.

Can I have a motion for the acceptance of the report?

It is agreed.

We have as our witness today the Minister of Defence Production, the Honourable C. M. Drury, and Mr. G. W. Hunter, the Deputy Minister. The Minister will begin with a statement, after which we will proceed to the questioning.

Hon. C. M. DRURY (*Minister of Defence Production*): I am very pleased indeed to have this opportunity to meet again with the committee and to try and throw some further light on the activities and responsibilities of the Deparment of Defence Production.

The last time that I had the opportunity of discussing the role of this department was on July 30, 1963, when, as I then mentioned, I had only had a relatively short period of time to go into departmental activities. However, I expressed my view that I had inherited a very efficient department. In the intervening 16 months my view as to the efficiency of the department has not changed but, on the other hand, the responsibilities and activities of the Department of Defence Production have changed and are continuing to change most significantly.

Unfortunately, I regret that it seems apparent that neither the primary responsibilities of the Department of Defence Production nor the additional responsibilities that have been placed upon the department during recent years and, in particular the past sixteen months, are fully aprpeciated.

I would, therefore, like to take this opportunity to underline that there were, in my opinion, the very best reasons for the establishment of the department in 1951 and that there are equally valid reasons for the continued maintenance of the department and the extension of its scope of activity at this time.

In my first statement to this Committee I stated that the Department of Defence Production was the "purchasing agent" of the Department of National Defence and, as such, was responsible for the procurement of goods and services for Canada's armed forces and the defence research board. The items purchased by my department include both the sophisticated and complex weapons systems that are fund in such fields as aircraft, electronics and communications, and ships and a wide range of goods and services that in many cases are not too different from those required by civilian departments.

During recent years as weapons systems have become more specialized, the problems of procurement have become more complex and these developments have necessitated a particularly close working relationship between my department, the services and our potential suppliers. This important part of the defence procurement program does not involve standard or routine procedures and those who are responsible for the carrying out of these activities must be not only skilled purchasing agents but also officials who are capable of appreciating the present and future potential of our economy in the fields of research, development and technology which can be proper assistance, support Canada's economic strength and future growth. It is important that we recognize these considerations and their importance in the execution of Canada's defence procurement policies.

It is my view that this distinctively Canadian approach, under which consideration is given to the matters that I have just outlined and where trained and expert civilian personnel are given the responsibility for handling procurement, is the best possible way to ensure that our defence purchasing will be as efficient and as economic as possible.

I think we should also remember that the Department of Defence Production was the subject of detailed scrutiny by the royal commission on government organization which not only concurred in the policy of a separate defence procurement agency but further recommended that the department should be made a central purchasing agency for all departments of the federal government—both civil and military. I shall refer to these recommendations at greater length later in my statement.

Under the provisions of the Defence Production Act, as Minister of Defence Production, I am also responsible for the organization and mobilization of the resources of Canada to meet the current and prospective needs of defence. This responsibility involves the development and maintenance of production capabilities and the assurance of the availability of the materials that are required for the defence production program. Accordingly, the Department of Defence Production not only purchases defence supplies but also assists the production of such items where appropriate. In addition, the department is responsible for defence development sharing and defence production sharing with the United States, defence export activities with other friendly countries and the coordination of Canadian activities in connection with the research, development and production program of the North Atlantic Treaty Organization.

I would now like to make some comments on the Canada-United States defence development and production sharing program. As I mentioned in my previous statement to this committee, this program, in essence, aims at the optimum utilization of the Canadian and United States defence industrial capability by providing equal opportunity for Canadian industry to compete with United States industry on the basis of price, delivery and technical competence to meet North American defence requirements.

The broad objectives of the Canada-United States program have been mutually agreed to be:

(*a*) To increase participation by Canadian industry in the production and support of North American weapons and equipment, and

(b) To co-ordinate the defence requirements, development, production and procurement of the two countries in order to achieve the best use of their respective production resources for common defence in line with the concept of interdependence and the integration of military arrangements.

Our joint program was one of the subjects discussed at the meeting of the Canada-United States ministerial committee on defence which took place in Washington last summer and I am most pleased that the full support of both governments was reaffirmed for continuation of the program with the agreed objective of assuring maintenance of a long term balance at the highest practical level in reciprocal procurement of items of mutual defence interest by the United States and Canada in accordance with the principles established by agreement with Mr. McNamara in 1963. A special study of the factors affecting this cross-border procurement is now being undertaken with a view to assuring maintenance of the rough balance over the next few years.

A very significant aspect of the program is the defence development sharing agreement. A memorandum of understanding on development sharing has recently been concluded between the United States and Canada which provides arrangements for participation by Canadian industry in United States defence development projects on a cost sharing basis. The projects being undertaken under this agreement are conducted in private industry with costs being shared by United States and Canadian governments and the Canadian firms concerned in appropriate case by case arrangements.

In addition to our Canada-United States program there has been increased emphasis on extending our efforts toward collaboration with our European NATO allies and other friendly countries in the field of defence research, development and production. Officials of my department are developing appropriate arrangements with the United Kingdom, France, Germany, Belgium, The Netherlands, Sweden, Norway and Denmark in this connection. In fact, at this moment members of a departmental team are abroad discussing specific projects under these arrangements.

In technical areas covered by these departmental activities Canadian defence export sales in calendar years 1962 and 1963 approximated $500 million and included such defence equipment items as Caribou aircraft, PHI and Doppler air navigation equipment, flight simulators, torpedoes, military pattern vehicles and a broad range of airframe, electronic and aero engine components and spares.

The international programs branch has been established to consolidate the activities of the Canadian commercial corporation with those of departmental personnel concerned with the Canada-United States defence development and production sharing program and the field of overseas defence exports and thus provide central guidance for all departmental activities in this regard.

The total of United States defence production sharing business placed in Canada in the period January 1, 1959-August 31, 1964 amounted to $838.4 million. In the period January 1, 1961-August 31, 1964 Canadian defence exports to overseas countries amounted to $153.6 million.

I would now like to refer to those responsibilities that have more recently been given to the department. Last year the government approved certain recommendations of the Glassco commission, which provided that the Department of Defence Production should be made a central purchasing agency for all departments and agencies of the federal government, both civilian and military, other than commercially oriented corporations. The government also approved recommendations that the department should be given additional responsibilities relating to the development of standard specifications, the development of warehousing and materials handling services for all departments

other than the Department of National Defence and for establishing a traffic advisory group to improve traffic management throughout the public service.

As a result of the careful consideration and study of these recommendations, the concept has emerged of an integrated supply service by which the now existing procurement and service branches of the department are being augmented by new units that are, or will be, responsible for such matters as specifications, cataloguing, regional purchasing, warehousing, traffic management and quality assurance.

Another recommendation of the Glassco commission involving the Department of Defence Production on which action has been taken by the government involved the transfer of certain responsibilities including both procurement and printing functions from the Department of Public Printing and Stationery to the Department of Defence Production. During the past year the activities of the former procurement, purchasing and stores branch of that department, which was responsible for the procurement of office machines, stationery and forms, has been integrated into the Department of Defence Production, and the activities of the Canadian Government Printing Bureau have been made a responsibility of the department. These latter responsibilities include the carrying out of printing operations at the bureau in Hull, the operation of outside printing units and those of an administrative nature which relate to such work. As you may recall, I outlined the various steps relating to the transfer of responsibility in some detail at the time of the consideration of our departmental estimates.

I would also like to draw to your attention the fact that the operational branches of the department have been reorganized on the basis of major industrial groupings. The ten operational branches based on these groupings, which also conform to the structure of the Department of Industry, are aircraft, electrical and electronics, machinery, shipbuilding, clothing and textiles, materials, food products, wood products, chemicals, and mechanical transport. In addition, the service units of the Department of Defence Production, which might be described in general terms as financial and administrative, are now providing appropriate services of this type to both the Departments of Defence Production and Industry. I think that this is one of the points that has been often overlooked when observations have been made as to the expansion of the department.

I trust that I have succeeded in giving you an appreciation of some of the additional activities that the Department of Defence Production has assumed since July, 1963.

The great variety of items that the department is called upon to procure and the expenditures that represent such procurement are indeed impressive. Between April 1, 1951, which is the date of the establishment of the department and the end of 1963, over $10½ billion has been expended on requirements for the Department of National Defence. The following expenditures were made in the calendar year 1963 against all contracts issued by the Department of Defence Production as detailed in my 1963 report to Parliament:

Department of National Defence	$ 523,551,000
Department of Defence Production—Votes in support of defence industry	16,776,000
re foreign governments	189,288,000
Canadian external aid	21,079,000
Other	3,325,000
	$ 754,019,000

The volume of procurement activity during 1964 will, no doubt, exceed 1963 as it will include procurement of those items previously purchased by the procurement, purchasing and stores branch of the Department of Public Printing and Stationery and also purchasing activities that have been carried out on behalf of a number of departments and agencies, including the Departments of Citizenship and Immigration, Public Works and Civil Defence College.

In addition, there is, of course, the substantial volume of liaison and promotion work which relates to the Canada-United States development and production sharing program and our overseas defence exports as well as the provision of assistance to Canadian contractors in the area of foreign subcontracts.

As I have already informed the members of this committee, it is our policy to buy, whenever possible, at firm prices, obtained as a result of invitations to tender that are issued to those known sources, who have given evidence of ability to do the type of work involved. The department does not advertise its requirements. One of the reasons for this, apart from cases of classified items, is the problem of reaching suppliers, who are located all across Canada. Instead, the department maintains "source lists", on which are entered the names and addresses of potential suppliers. As each requirement arises, invitations to tender are sent to firms whose names appear on the source list for such items. I would like to repeat the fact that it is our departmental policy to place on these lists the names of all Canadian suppliers who have indicated a desire to be listed and given evidence of ability to fulfill contracts.

Athough procurement on a firm price basis, established through competitive bidding, is our basic departmental policy, there are occasions when this method is either impossible or impractical; in such cases prices must be established by some form of negotiation. Cases of this type include: (1) lack of competing sources of supply; (2) lack of, or indefinite nature of, specifications; and (3) proprietary rights.

Many of our major production contracts for complex defence systems must be negotiated because of either one or a combination of the three factors outlined above. In this type of situation a great responsibility falls on the shoulders of the contracting officer to apply more effective contract pricing on purchasing negotiations. Indeed, it has only been possible to move away from cost-reimbursable type contracts towards firm price and incentive type contracts in these defence systems areas because we have continuously upgraded the calibre of our contracting personnel. It has been necessary to recruit more knowledgeable officers with experience in production management, industrial engineering, cost and financial accounting, and contract negotiation techniques. These skills are necessary in an environment where normal competitive market pricing conditions are either imperfect or totally absent. Hence, the contracts officer substitutes through skilled negotiation the competitive market pressures that are always exploited in good normal commercial buying work. Although the salary costs of these more skilled contracts officers have increased, these costs are more than offset by reduced contract costs and improved service. For example, on the basis of a cost plus fixed fee contract for maintenance of the mid-Canada line, costs were $14.64 million in 1958/59. As greater skill was obtained in the negotiation of more sophisticated contracts with incentive fees and bonuses, each succeeding contract resulted in lower costs to the crown. While the specifications and conditions at the various sites have remained unchanged, the 1963/64 maintenance costs for the mid-Canada line were reduced to $9.46 million. At the same time, standards of performance and service have improved.

During the past several years the United States government has pioneered many new project management techniques, such as PERT, by which I mean the program evaluation and review technique, that have proven most success-

ful in improving the manner in which complex defence systems contracts are managed and costed. The main object of these new techniques is to improve the manner by which time factors, cost factors and technical reliability factors are administered on the items under development and production. At the present time the Department of National Defence and the Department of Defence Production are working together in a joint program to utilize these new methods in a concerted way. As a result of the establishment of a new integrated programming group in the Department of National Defence, the Department of Defence Production is meshing its project management approach with them to create a more effective project management capability on these major defence contracts.

Significant achievements have been realized through the introduction of phased delivery contracts for major items of sized clothing and standing offer agreements for non-sized items of commercial production. These methods will enable my departmental officials to purchase at lower prices, achieve lower administrative costs and at the same time reduce the inventory position of the Department of National Defence.

During the course of the Glassco investigations of defence production, criticism was directed towards the department because it took too long in some areas to process its work. For several years this problem had been recognized by defence production and steps were introduced to streamline the operations in all of our regional offices in Canada. Following the tabling of the report by the royal commission on government organization, this matter was investigated again and a schedule control system was introduced to departmental procedures at headquarters. Essentially this system is designed to put a "time control" on the normal work flow of the department. This system has been installed in one of the ten headquarters branches and steps are now being taken to introduce it into the other nine. It is hoped that when the program is complete in a year's time, that the basic problem outlined by the Glassco investigators will have been remedied.

I believe that we have a well trained, competent and enthusiastic departmental staff. There were close to 1750 employees in the department in 1952 and, despite the continued introduction of improved buying techniques, it was possible to reduce this total to 1441 by March 31, 1959. Since that date, the increased responsibilities of the department, including the transfer of the Canadian Commercial Corporation, production sharing and defence export activities, establishment of the emergency supply planning branch, the transfer of functions and staff from other Departments, the formation of the Canadian government supply service and the provision of service functions to the Department of Industry, have resulted in an upwards move to 1829 as of August 31st of this year.

I would submit that once these figures are considered against the background of the total responsibilities of the department and not merely in reference to the volume of expenditures on contracts placed for the Department of National Defence, it will be clear that the increase over the past few years is in line with the work being done.

In closing, I would like to express the hope that I have succeeded in presenting an outline of some of the most significant activities of the Department of Defence Production. I have not attempted to deal with the precise accomplishments of the individual branches or with such activities as regional purchasing or those of the emergency supply planning branch.

The CHAIRMAN: Thank you, Mr. Drury. We can now proceed with the questioning. I would suggest that in our questioning we try and stick to the matters covered by the minister's statement and at this stage keep away from specific programs. At our next meeting we will be dealing with specific pro-

grams and we will then have an opportunity to look at such things as the Bobcat and the Provider programs. I would suggest we should leave that sort of discussion until we have heard that presentation.

Mr. SMITH: Should we not confine our questions to that part of the minister's statement which deals with defence procurement and defence matters? There were certain parts of it that went somewhat far afield and I do not know whether we have any authority as the defence committee to go beyond defence matters.

The CHAIRMAN: Essentially we are concerned, by our terms of reference, with defence. Whether we can include the whole Department of Defence Production under that umbrella I am not too sure.

Mr. SMITH: I would think not.

Mr. WINCH: Mr. Chairman, I have two basic questions and I assure you they are related to the presentation made this morning by the minister. May I just, by way of introduction, say that I also have the privilege of being a member of the Public Accounts Committee. The Public Accounts Committee has been interested in the relationship between the Department of Defence Production and the purchases and disposal through the Crown Assets Disposal Corporation. So intrigued was the committee with that question that a special subcommittee was appointed on this matter, and it is because of the studies of the subcommittee of the public accounts committee itself that I have been trying to do some homework in preparation for today's and the subsequent meetings of this committee dealing with the Department of Defence Production.

Mr. Chairman, I would base my first question on the first part of the second paragraph on page 15 of the minister's presentation this morning where he said:

> I believe that we have a well trained, competent and enthusiastic departmental staff. There were close to 1,750 employees in the department in 1952, and, despite the continued introduction of improved buying techniques it was possible to reduce this total to 1,441 by March 31, 1959.

I am rather intrigued that the minister should have only brought us up to the date of March 31, 1959. I think my question will explain my interest. In my homework I discovered these facts: In 1952 there were 1,744 of a total staff, and the value of contracts placed in 1952 amounted to $1,608,784,000.

Now, just going to 1959, although I have it for every year, the minister gives information to March 31, but I have the entire year of 1959; and in that year there were 1,463 on the staff, and the value of contracts placed amounted to $667,133,000.

I want to go, as a result of my studies, beyond where the minister did, to the end of 1963. In 1963 there were 1,611 on the staff, and the value of the contracts placed according to the official records is $681,968,000. So therefore, Mr. Chairman, you will see my question is this: that from 1952 when there was a staff of 1,744 to the end of 1963 with a staff of 1,611, there was a drop in staff personnel of 133, and in the value of the contracts placed from 1952 there was a drop from $1,608,784,000 to $681,968,000 in 1963.

I have asked the minister if he will relate the drop of approximately $1 billion in value of contracts between 1952 and 1963 to the drop of 133 in personnel in 1952 to 1963.

Mr. DRURY: Mr. Chairman, I am not sure that one can provide a direct relationship between the dollars of contracts placed and the number of people on the staff. The Department of Defence Production consists almost entirely of what in business terms would be known as "overhead". I think that all the

members of the committee are well aware that if an operation is to be a continuing one, the rise and fall of overhead cannot be directly or immediately related to the rise or fall of the total business transacted. Even though there is a reduction from year to year, or from one year to another in the total volume of business done by any of the branches, the Department of Defence Production is still under an obligation to maintain in being the competence necessary to pick up the load again if and when it arises.

It would perhaps be misleading to try to work out some kind of direct relationship between the total quantum of contracts placed and the total size of the staff. I will also point out that in examining the total volume of contracts placed in 1952 one has to look at bit at the nature of these contracts. It requires no more work to negotiate the placing and supervising of a contract for 4 million bullets than it does to place, negotiate and supervise a contract for only 200,000. Indeed, the latter may be more difficult if it is an uneconomic run.

For this reason I think it is perhaps misleading to try to evolve a direct relationship between dollar volume of contracts placed and the size of the staff.

Mr. WINCH: Surely, Mr. Chairman, the Minister with all his knowledge in business is not going to tell us that basically this is correct. I have here every year. The year 1954 was the last year in which the value of contracts placed was over $1 billion. At that time there were 1,509 employees. From 1954 to the end of 1963, the government again has the value of contracts placed approaching the $1 billion mark. As a matter of fact in 1955 it was $744,100,000; and the highest placed since then was in 1960 at $798,830,000. I have given the figure for 1963. Is the minister honestly telling us that there is no relationship, or rather that there is a relationship which is quite understandable, permissible, and efficient as between 1,661 negotiating and handling contracts of $681,000,000, and 1,672, to 1,744 in 1952 handling over $1,600,000,000; and of 1,509 handling $1,291,378,000 in 1954? How long would private business stay in operation if it operated on this basis?

Mr. DRURY: The test I suggest is not the number but the efficiency with which individual transactions are included. I pinpointed it in the example given of substantial savings to the taxpayer as a consequence of more work and more skilled work put in in negotiating a contract for the maintenance of the mid-Canada line over the years. This has been the result, as I say, both of more work and more competence. This resulted in substantial savings, and it would, I suggest, be false economy to cut back on either competence or the number required to effect these economies merely and achieve the same kind of arithmetical relationship between the total number of staff of the department and the total volume of business included on behalf of the Department of National Defence.

Mr. WINCH: The minister in this last contribution has mentioned efficiency three times, so I think that it will lead into my second question. On pages 7 and 15 we have the only references in this 15 page presentation to the Canadian Commercial Corporation, and it will be found in the first paragraph on page 7, where there is just a very brief mention, and in the last half of the second paragraph on page 15, with just a very brief mention of the Canadian Commercial Corporation. Now, Mr. Chairman, I am hoping that by asking this question the minister will agree to provide us with a fuller statement of the position, and of the authority of the Canadian Commercial Corporation inside the present set-up of the department.

Mr. Chairman, I think this is a most important matter, because I have in front of me at the moment the revised statutes of Canada, 1952, chapter 35,

an act to establish the Canadian Commercial Corporation. I refer to section 4, and I quote it as follows:

4. (1) The corporation is established for the following purposes:

(a) to assist in the development of trade between Canada and other nations;

(b) to assist persons in Canada

(i) to obtain goods and commodities from outside Canada, and

(ii) to dispose of goods and commodities that are available for export from Canada.

Now, Mr. Chairman, I would like to ask the minister what is the position of Canadian Commercial Corporation today? What is the power of its operations? Are you not just using it as a word or name, by statute, for your purchases? Is it not correct that for all nominal purposes and as an establishment on the basis of efficiency the Canadian Commercial Corporation has been brought to absolute ruination and incompetence except in name?

Just so we may get it all together, is it not correct that starting in the last half of 1963 the president and general manager was relieved of all responsibilities, although he still has an office and secretary, and is on salary? Is it correct or not that the senior officers and trained personnel—some of them having over 25 years experience with this particular phase of purchasing within defence production—have been transferred to other positions not having to do with defence production or Canadian Commercial Corporation, and that a great many of the senior men of long experience are no longer being utilized, but are still on staff, and that the majority of the work of defence production is not basically being done now by experienced personnel who have up to—as near as I can find out—some 25 to 30 years of business experience in this particular field, and that their work is now being done by a branch of personnel of defence production with no previous experience in business or in this particular phase?

This is a study of my homework within the past four weeks, and I believe that we are entitled as a committee to a very full explanation not only on the status of the Canadian Commercial Corporation but also on the authority of the officers of Canadian Commercial Corporation as to what happened, and what utilization is now being made of the senior personnel who did the purchasing over those years, and who I now understand, if they are not figureheads, are doing other work?

I put it as bluntly as that because, as I said before, my four weeks investigation as far as I could go have left me most disturbed in mind, and I hope we will have a very full and detailed explanation of the various matters which I have mentioned to this committee. I had to present it as an entire picture, otherwise I did not think I would have been fair to the minister.

Mr. DRURY: Mr. Chairman, Mr. Winch ends his remarks by saying that he hopes he would have a clear agreement from me to his statement.

Mr. WINCH: No, I am sorry.

Mr. DRURY: Let me say at the outset that I most emphatically disagree.

Mr. WINCH: Well, let us have the evidence.

Mr. DRURY: Everyone can go back a bit. It will be recollected that the Canadian Commercial Corporation was in effect the genesis of the Department of Defence Production.

Mr. WINCH: But the act has not been repealed.

Mr. DRURY: It has not. It undertook on behalf of the government to do procurement for the Department of National Defence. As this work developed

it was found useful to have a crown corporation which could act on behalf of, and in the name of foreign governments which wished to purchase defence supplies in Canada; so from its early days Canadian Commercial Corporation had two functions, one, procurement on behalf of the Canadian armed forces; and, two, procurement on behalf of foreign governments, foreign powers, of defence equipment. As the level of activity in respect of domestic defence procurement rose, very sensibly the Department of Defence Production was established to take care of it. You yourself have indicated the volume of work transacted by the Department of Defence Production and the extent by which it has grown. Canadian Commercial Corporation continued and still continues to perform a useful function acting as agent for and on behalf of foreign governments which wish to have an agency of the Canadian government contract on their behalf for procurement of defenec and other supplies in Canada. This function has over the years been carried on by Canadian Commercial Corporation, the work being transacted in the name of the Canadian Commercial Corporation; but over the years more and more of actual negotiation and supervision of contracts entered into in the name of the Canadian Commercial Corporation has been performed by the line staff of the Department of Defence Production.

As one knows, a crown corporation does not come under the normal rules of the Civil Service Commission, and in its initial stages, steps were taken to make it self-supporting in financial terms. A commission was charged to the user of the services of Canadian Commercial Corporation, and a charge was made to foreign governments; and out of the revenues and commissions so earned, Canadian Commercial Corporation was able to pay its employees and maintain itself on an annually favourable balance. With the competition which, however, developed for the sale of defence equipment to foreign governments, the experience was that if the Canadian Commercial Corporation was, in addition to the purchase price of the goods involved, required to charge a commission on top of this, we would cease to be competitive. Gradually, from the mid 1950s, exceptions were made for increasing the number of this practice to charge commission to foreign governments. By last year this exception to charging commission had become the rule, and it was found that the Canadian Commercial Corporation which initially enjoyed substantial revenue from commissions, no longer had any revenues; and in fact it was in name a crown corporation, but with no source of revenue at all; and the bulk of its work was being done by the line officers of the Department of Defence Production.

As a consequence it was agreed last year formally to transfer the responsibility for direct negotiation and contract supervision fully to the Department of Defence Production, and also to transfer to the civil service on the staff of the Department of Defence Production the bulk of the employees of Canadian Commercial Corporation, because it enjoyed the establishment of a good reputation in efficiency, and integrity with foreign governments.

It is clearly in our interest to allow Canadian Commercial Corporation to exist as a mechanism, and the name with it, through which foreign governments can continue to contract. The only difference is that while contracts are now negotiated in the name of the Canadian Commercial Corporation by Department of Defence Production line officers, the work which formally had been done by Canadian Commercial Corporation now formally is done by, and is the responsibility of the Department of Defence Production.

Mr. SMITH: What do you mean by the term "line officers"?

Mr. DRURY: Line officers are line officers.

Mr. SMITH: I am referring to the civilian organization.

Mr. DRURY: These are the officers I referred to in my statement as contracting officers within the department.

Mr. SMITH: You mean contract negotiators?

Mr. DRURY: That is right. I make the distinction because Mr. Winch did suggest that the experienced purchasing officers of Canadian Commercial Corporation had been pushed into the personnel department of the Department of Defence Production, that is, the personnel branch of the Department of Defence Production, which is composed of staff officers. I am sorry if I am a little oblique. This then is the situation, and the officers of experience and competency in Canadian Commercial Corporation are now performing within the Department of Defence Production as employees of the civil service of Canada rather than of a crown corporation, those functions with which they were and are qualified, and I would certainly take exception to the statement that this recommendation of the development of procurement methods for foreign contracting has meant the ruination of Canadian Commercial Corporation. This I would suggest most strongly has been an evolution looking towards greater effectiveness and greater efficiency in procurement on behalf of foreign buyers, and to the useful consequence that we are more competitive rather than less so.

Mr. WINCH: Might I ask the minister a subquestion.

The CHAIRMAN: I wonder if you would mind keeping your questions as brief as possible, because there are other members who wish to ask questions.

Mr. WINCH: I would like to ask by what authority has the power of the corporation been transferred from the corporation to line officers?

Mr. DRURY: I am sorry, but I am afraid I do not follow you.

Mr. WINCH: I ask you by what authority has there been a transfer of authority of the corporation as outlined in section 4 of the act to line officers? How far does this extend. You only mentioned foreign nations and purchasers; but the section reads: "to dispose of goods and commodities that are available for export from Canada; to assist in the development of trade between Canada and other nations". Would you tell us where our experienced officers of Canadian Commercial Corporation are now?

Mr. DRURY: Well, in relation to your second question I do not think I have the answer as to who they all were and where they are precisely now.

Mr. WINCH: Could you find it out for us?

Mr. DRURY: I would be glad to do so.

Mr. WINCH: Where was authority ever transferred to the line officers.

Mr. DRURY: The organization of the Canadian Commercial Corporation is a matter of determination under the statute by the directors of the Canadian Commercial Corporation.

Mr. WINCH: Under what section?

Mr. DRURY: I do not know what section of the act it is, I do not have it here.

Mr. WINCH: Well, I have.

Mr. DRURY: I am sorry. I do not have that one. But I think you will find that the directors are responsible for controlling the activities of the corporation.

Mr. WINCH: There is no transfer of powers that I can see.

Mr. DRURY: Now when you say transfer of powers, there has been no transfer of power from Canadian Commercial Corporation to anyone else. The Canadian Commercial Corporation still enjoys the same powers which were conferred and continue to be conferred upon it by the statute to which you made reference.

Mr. WINCH: Does its own staff do the work now, or is it done by a branch of the Department of Defence Production?

Mr. DRURY: The bulk of work on contract negotiations and contract supervision in relation to contracts executed in the name of Canadian Commercial Corporation is now being done by the officers of the Department of Defence Production.

Mr. WINCH: It is not being done by the staff of Canadian Commercial Corporation?

Mr. DRURY: That is correct.

The CHAIRMAN: Now, Mr. Harkness.

Mr. HARKNESS: Well, on page 5 you mention something about a production sharing arrangement with the United States and in accordance with the principle established by agreement with Mr. McNamara in 1963. What difference, if any, is there between the defence sharing arrangement with the United States at the present time compared to before this date, whatever it was, in 1963?

Mr. DRURY: In 1963 two significant changes were proposed; in one, it was agreed that there would continue to be as between the two countries a rough balance maintained at the highest practical level. This particular feature had not been covered in the earlier arrangement between the two countries.

Mr. HARKNESS: I disagree.

Mr. DRURY: Well, you are entitled to disagree.

Mr. HARKNESS: I disagree on the basis that I discussed the very point personally with Mr. McNamara on two or three occasions, and there was a general agreement we had at that time, that we would try to keep these things roughly in balance.

Mr. DRURY: This understanding then—if I may put it another way—was not incorporated in any document to which I had access.

Mr. HARKNESS: No, I think perhaps it was not incorporated in any documents.

Mr. DRURY: Where is it now?

Mr. HARKNESS: It is now incorporated in a document. That is one difference; it is in a document rather than merely a verbal understanding. What other difference is there?

Mr. DRURY: The second one was the evolution of an analagous or similar agreement in relation to developments. The sharing of weapons development costs was a new area which had not been covered previously. The earlier arrangement related to the program of production sharing. A somewhat similar arrangement was made in 1963 to cover the development contracts as distinct from production contracts.

Mr. HARKNESS: Well now, in connection with production sharing arrangements and, more particularly, our efforts which have taken place over many years, which are referred to at page 6, with the rest of our NATO allies, particularly the European NATO allies, what is the status at the present time of the sort of general agreements which were arrived at to the effect that certain programs would be developed by different nations with the understanding that there then would be an effort made to get common procurement of these items?

Mr. DRURY: Mr. Chairman, I think, as Mr. Harkness is only too well aware, there really has not been spectacular progress made in implementing the agreement in principle or the general agreements within the NATO alliance, looking to the adoption of common user items and single source manufacturing. The Department of Defence Production has been trying to pick out individual

projects which appear to have some chance of success, and concentrating its efforts on these individual items, and putting a real drive on them rather than trying to argue the case for the global or over-all implementation of the agreements in principle. And, in this we have had some success, whereas in respect of others we have not made too much progress.

Mr. HARKNESS: I take it that, generally speaking, from what you say, the general situation in respect of getting common user items is not much farther ahead than it was three or four years ago?

Mr. DRURY: I regret that is the case.

Mr. HARKNESS: I think one of the most regrettable things so far as the NATO alliance is concerned, is that so little progress has been made in this regard. There is no question that it would add very greatly to the advantage both of financing and of the fighting efficiency of the alliance if success could be obtained in that regard.

Now, what specific items are on our list for development by agreement with our NATO allies at the present time?

Mr. DRURY: Well, let me say at first there is no item under development with all of our NATO allies. We have not been able to find a single item in which all of the partners in the alliance can agree. And, there are a number of items on which we have been able to conclude arrangements on either a bi-lateral, trilateral or, perhaps, wider basis and I will give you some examples of these. One of them is a development sharing arrangement with the United Kingdom on a battle field reconnaissance drone, known in the trade as the CL 89, currently under development by the Canadair plant. The financing of this is being done jointly by the United Kingdom and Canada. Another is an anti-tank weapon, which is new, known as the M72. The production of it is being jointly financed by Canada and Norway. This has been a shared production with some portions being produced in Canada for not only ourselves but also one other NATO partner, namely Norway.

In respect of prospects of agreement, without, in fact, agreement, I might cite the counter mortar radar. It will be recollected that the National Research Council had very considerable success early in this field in respect of the counter mortar radar, and a new set, financed as a Canadian development to meet the specifications laid down by NATO for the whole of Canada, is underway.

Mr. HARKNESS: This was one of the items which was on Canada's list of items to be proceeded with by joint agreement.

Mr. DRURY: One would have hoped perhaps that in respect of this item, if it were agreed that we, Canada, would go ahead and develop this, then there would not be a duplication in this effort made by other countries. However, we have hopes that because of the technological attention to the Canadian set this will be adopted, if not by all, by at least a number of members of the alliance. Another novel and, in my view, very useful development, has been a tank navigation aid, developed to meet the Canadian Army requirements and financed entirely by Canada. This item, in terms of cost effectiveness and the usefulness of its function, in our view, looks like a good prospect for adoption by all or many of our partners.

Mr. HARKNESS: Is that not now fully developed?

Mr. DRURY: Well, in the sense that anything ever can be fully described as being fully developed. It is now ready to go into production.

Mr. HARKNESS: That is what I meant.

Mr. DRURY: Yes.

Mr. HARKNESS: Well, in respect of these lists which were agreed upon, I think, four or five years ago, are these items still in existence and are they recognized as, say, specific fields in different countries, with the final hope that when an item such as this navigation equipment is brought to the production stage, other countries will acquire these things.

Mr. DRURY: That would be our hope.

Mr. HARKNESS: In respect of this agreement of some four or five years ago—and Gordon Hunter will remember the time better than I do—are these lists still, say, valid, or is any attention being paid to them?

Mr. DRURY: Attention is paid to them. They have not served the purpose which I think at one time we hoped they would; there is no question about that. They are, however, still valid. Periodically they are revised and I am told they do form the basis on which we make our assessment of the likely usefulness of projects for development with regard to NATO.

Mr. HARKNESS: Have these lists of NATO, which in the last two years have been under discussion, been revised and brought up to date, or has this thing sort of been set aside?

Mr. DRURY: Last year we took the initiative in trying to get them into a more active state and have more use made of them and greater acceptance. This had some positive reaction, but again, like the earlier demarche, they were not as acceptable as we would have liked them to be.

Mr. HARKNESS: I would hope that Canada would press this as strongly as possible, because I think it is a matter of extreme importance to the alliance and each country within the alliance.

Mr. DRURY: I agree.

Mr. HARKNESS: I have two other questions on different matters.

The CHAIRMAN: I wonder if Dr. McMillan might ask a question on this topic?

Mr. HARKNESS: Certainly.

Mr. MCMILLAN: I am wondering about the cost sharing agreement with the United States. You give the figures over six years of roughly $838 million, or approximately $140 million a year. Is that figure remaining constant, or is it going up or down?

Mr. DRURY: In respect of the $140 million a year which you mention, there are two methods of analysing this trans-border operation. One is on the basis of contracts placed, and the other is expenditures actually made under the program. This figure here is given to you on the basis of contracts placed. The amount of contracts placed will vary substantially from year to year, because, to cite a case in point, when the contract for the 104 mutual aid aircraft was written it was to be executed over a period of some four or five years. However, in terms of contracts placed, this produced a huge sum in one individual year. I think this was done in 1962, if I remember it correctly, and the level then of contracts placed in that year rose to one quarter of a billion dollars. This did not reflect itself, of course, in a corresponding amount of expenditure in the same year.

In relation to your general question in respect of whether this volume of business—I think this is what you mean—has been going up or has been going down, at the moment pending the delineation of the Canadian armed forces procurement program, the level is remaining fairly steady. One would hope, and expect, that when the procurement program of the Department of National Defence—their new procurement program—is determined and put into operation, the level of the volume of business conducted under the production sharing program would increase both ways.

Mr. HARKNESS: On page 11 you state:

> —it is our departmental policy to place on these lists the names of all Canadian suppliers who have indicated a desire to be listed and given evidence of ability to fulfil contracts.

There is a difficulty here so far as new firms are concerned. How does a new firm get on the list of people invited to tender when they have not been able to give evidence of their ability to fill contracts? I know this is a difficult question. I had some personal experience in respect of this matter when I was minister of defence. There were complaints from various new firms in particular to the effect that they were not able to get on the list, or receive invitations to tender because they had not been in a position to give this evidence of ability to fill contracts.

Mr. DRURY: The first step, in really over-simplified terms, is for a company or a firm to indicate its desire to tender on contracts and to execute contracts if they are successful in the bidding. The next step is for the firm in question to fill out a qualifications questionnaire which, as I understand it, is assessed. The submission of the questionnaire and its assessment is followed up by a visit of an evaluation team from the Department of Defence Production to the production facilities in question. The facilities evaluation team is required to make a judgment. This is a judgment of whether, in the light of its experience in a number of other previous circumstances, the facilities, both physical and human, are adequate to do the kind of work the managers of the firm would like it to do. If there is in existence a firm with a plant staffed that can be looked at, I do not think there probably very often arises a problem. However, where a man desires to get into a certain line of business and does not want to make the investment in plant, machinery and staff until such time as he has a contract, then I would agree there is a problem.

I really do not know the answer to this. In private commercial practice there are occasions when the management of buying firms is prepared to make an assessment as a banker does of a man's ability to organize production and bet on it. We in the government, however, I think have a responsibility to ensure to the Department of National Defence that they will get what they have requistitioned of us in the quality and in the time asked for. Perhaps there is—and indeed perhaps there should be—an element of co-operation on the part of the Department of Defence Production not to take gambles on the ability of people who would like to get into business to produce when there are known facilities for contracting for something and at a reasonable price.

Mr. HARKNESS: What this comes down to is that the man who already is established and who has done business with the department has a terrific advantage over anybody who is trying to get into any particular business of this kind.

Mr. DRURY: Well, I would be foolish to deny that a habit of doing business with the government does not give you an advantage in continuing to do so compared with a man who has not been in the field before. There is some advantage. But, I would suggest this advantage would be minimal in the case of a man who had the plant and staff which were susceptible of evaluation, and who desired to do business with the Department of Defence Production but had not previously.

Mr. HARKNESS: Well, I would suggest on the basis of two or three examples, which I do not want to quote, this is an area in which perhaps some care should be exercised and in which improvements could be made.

Mr. DRURY: I am sorry, but did you say that some care should be exercised?

Mr. HARKNESS: Yes, first, in refusing to notify particular firms to tender and, if they do tender, being extremely suspicious in respect of whether or

not they can do the job properly and thus saying on the evidence of their inability to fulfill contracts that their tender is thrown out?

Mr. DRURY: Well, I will accept this admonition and look at it.

Mr. HARKNESS: I did not put it forward as an admonition; I put it forward on the basis of some experience and as one of the difficult areas with which we have to deal. I recognize it is a difficult area but it is also one in which I think some Canadian citizens and businessmen perhaps at times are unfairly discriminated against.

Mr. DRURY: I think we should continuously be on guard against those possibilities which is, I suppose, endemic in all large organizations—and I do not limit this to a government democracy—to play it safe and to reject it because it is not 100 per cent safe in respect of any proposal which does represent useful enterprise. I would agree with that.

The CHAIRMAN: Does that complete your questioning Mr. Harkness?

Mr. HARKNESS: I have one other question. I notice that the increase in numbers of staff in 1963 and up to August of 1964 has been extremely rapid. The increase taking place from 1959 up to that time was relatively quite small, and then you have a very rapid increase. What is the reason for the rapid increase in the last 1½ years? Most of these things which you list in this sheet are for things that took place before that.

Mr. DRURY: I am not sure I would agree with that, Mr. Chairman. One item which we have been just discussing is the transfer of the staff of the Canadian Commercial Corporation to the Department of Defence Production. Another is the bringing into the department or the strength of the Department of Defence Production the emergency supplies branch which previously was under the emergency measures organization. Another is the transfer to the Department of Defence Production, in numbers anyway, of the Canadian government printing bureau.

Mr. HARKNESS: But that figure is not included in this.

Mr. DRURY: When you say that which figures are you looking at?

Mr. HARKNESS: The ones on the sheet supplied to us.

Mr. DRURY: Oh, yes. These add up to a total of 430.

Mr. HARKNESS: Yes.

Mr. DRURY: Or, netting a figure of 430.

Mr. HARKNESS: There has been approximately 225 added to this list in the last 1½ years.

Mr. DRURY: Yes. Now, do you want me to run through this memorandum or to elaborate in any particular?

Mr. HARKNESS: Well, I want an explanation of why there has been such a rapid increase in the last 1½ years. The only thing so far from what you have said which would explain that would be 85 from the Canadian Commercial Corporation and the emergency supplies planning branch. Now, I do not know whose staff the emergency supplies planning branch was on before but, in any event, the Department of Defence Production was doing most of that work previously.

Mr. DRURY: That is correct, they had, although it nominally came under the emergency measures organization.

Mr. HARKNESS: Yes, but you people were actually doing it.

Mr. DRURY: I am told, doing it in quite a modest way. This is now a rather larger organization, including a number of officers outside of Ottawa, who are regional officers. The largest item in your list is the defence export activities,

which represent the increased emphasis being placed on endeavours to give effect to these things about which you were talking earlier, namely endeavouring to sell abroad both Canadian production for NATO allies and joint development with our NATO allies.

Mr. HARKNESS: All that has been going on for years, and these 135 people were not taken on in the last year and a half for that purpose.

Mr. SMITH: They were taken on for the development of the frigate program.

Mr. DRURY: If you look at the graph, Mr. Harkness—perhaps I should have a logarithmic curve drawn here—you will see the number at the beginning of 1963 is shown as 1,600, and the number at August 1964 is shown as 1,830. There is a difference there of some 220 to 230. I have suggested that the Canadian Commercial Corporation would account for 85 of those. There is in there a figure of 80 temporary or casual employees, to which the asterisk relates.

> These short term employees (6 months) were hired to do clerical work associated with: (*a*) the formation of the Department of Industry and (*b*) a survey of procurement in civilian departments and agencies of the federal government.
>
> Most of them have already left the department.

That runs up to 160 of the 230. We have an increase in staff branches to support formation of the Department of Industry and Canadian government supply service, which is another 36. It is a new function which would bring our arithmetic up to something in the order of 200. Then we have a figure of 38 on the transfer of functions and staff from other departments, which runs in excess of the 220. I think this would outline to you the major items of what appears to be a sharp upturn in the curve which, probably because of the scale used, appears to be more spectacular than it is in fact.

Mr. HARKNESS: If it is not as spectacular as it seems, then it means that in fact the number of people shown in the Department of Industry, over which there was considerable complaint in the house, is actually greater than the numbers complained about.

Mr. LLOYD: About which there is a lot of comprehension and not so much valid complaint.

The CHAIRMAN: May I proceed with Mr. Smith?

Mr. SMITH: Perhaps we have unwittingly had a classic exposition of the application of Parkinson's law. You and Mr. Harkness both deplored the lack of success in the standardization program between the NATO allies. Is one of the inhibiting factors in that lack of success the fact that most NATO countries use their defence procurement as a means of developing or supporting their own industry?

Mr. DRURY: There is of course a tendency to do this in every country.

Mr. SMITH: Including our own?

Mr. DRURY: I would say there is a tendency to do this in support of the national economy. What we endeavour to do is to procure in a way which will help and benefit the national economy, rather than the reverse.

Mr. SMITH: It is a very human desire, or intent.

At the bottom of page 2 of your statement, Mr. Drury, you say:

> Officials who are capable of appreciating the present and future potential of our economy in the fields of research, development and technology which can be proper assistance, support Canada's economic strength and future growth.

Would not that statement on the face of it indicate that there is something of a duplication between the functions of the Department of Industry and the Department of Defence Production?

Mr. DRURY: Well, let me put it this way. It would mean that to some degree both departments are pursuing the same objectives; it is for this reason that there has been a close relationship set up between the two departments to avoid duplication of effort and to take advantage of similarity of objectives.

Mr. SMITH: The development field—is that really a function of the Department of Defence Production? Are they not primarily acquirers rather than developers?

Mr. DRURY: Well, a step in the acquisition frequently is for development, and when one talks about developers, they are not developers in the sense there is within the Department of Defence Production any kind of staff engaged in engineering development work itself. The Department of Defence Production acts merely as contractors and managers of development, but they do not do it themselves.

Mr. SMITH: Again let me refer to Mr. Harkness's question, and the theme of the company assisting to support Canadian economic strength and growth, would that not indicate perhaps that the department should take a more lenient or a more openminded view towards those people who wish to become suppliers of equipment and to have new opportunities to bid on equipment?

Mr. DRURY: Well, when you say a more openminded view, it does mean that they should not take a close and narrow view. I would agree with this. But without examining specific examples I do not think I could agree that the kind of view taken has been closed and narrow.

Mr. SMITH: I did not mean to suggest it.

Mr. DRURY: But I would agree that we have a function which is closely related to the main object of the Department of Industry, to expand and develop the Canadian manufacturing industry, and that the approach should be rather more open than closed. I would agree with this.

Mr. SMITH: Particularly in this field where there are presently a very limited number of suppliers.

Mr. DRURY: Well, you do not always secure efficiency, economy, or usefulness by increasing the number of suppliers. In the weapons systems field one thing which has become evident as time goes on is that we are getting fewer and fewer but more and more complex instruments. And as, in the case of a large supplier of public utility equipment, the setting up in Canada of a number of firms which are capable and ready to produce a very limited number of these very large items does not result in economic good health.

Mr. SMITH: You mean the structure.

Mr. DRURY: That is right. So I would not agree with your proposition in principle that increasing the number of suppliers is economically good. In some instances it is quite true, but in other instances, this is not so.

Mr. SMITH: All Canadians are very conscious of being distinctively Canadian in many fields of activity within the last few months. I notice that at the top of page 3 you use the same phrase in relation to your department. But after reading the first two pages of your statement I am afraid that I do not quite understand how the Department of Defence Production is distinctively Canada.

Mr. DRURY: Well, in most of the allied countries procurement of defence equipment is the direct responsibility of the Department of National Defence. As you know, in the United States a very large part of operations, a very large branch of the department of defence in that country, is devoted to the placing

and management of procurement contracts. The same is true in France; and as I say in another of other NATO countries. Now, we have for a long while separated the procurement functions in respect of national defence from the conduct of training and operations which is exclusively the responsibility of that department.

Mr. SMITH: I suppose your department is very much the counterpart of the American essential supply agency.

Mr. DRURY: I am not sure of all the functions that are in the defence supply agency in the United States. But my understanding is that it reports directly to secretary McNamara and is limited to the responsibility for common user items; that is, items which are common to the army, navy, and air force of the United States. But the procurement of items which are unique or peculiar to one service continues to remain the responsibility of that particular service.

Mr. SMITH: I have here "Armed Forces Management" for November, 1964 in which is described the function of the defence supply agency. These include quality assurance, production expediting, industrial security, and accounting and payment of contractors. They all fall within your department, do they not, generally speaking? And I also notice that in the three years since it has been set up as a separate branch of the department, they have reduced their employment figures by 7,800 military and civilian employees, and have reduced by 50 per cent the storage locations, on which they are saving $55 million a year.

Mr. DRURY: I am glad to say that we are starting along the same route.

Mr. SMITH: I hope we have the same success, especially in the ultimate savings. Now, I have some questions on a branch of the minister's department, but not relating to a specific topic.

The CHAIRMAN: I understand Mr. Lambert has a question. Maybe you would not mind holding your question over to a further meeting?

Mr. SMITH: I quite agree.

Mr. LAMBERT: I discussed the military setting with Mr. Winch and Mr. Harkness and it seems to me the subject of development in production sharing is very much a will-o'-the-wisp matter.

The phraseology used by the minister on page 5 sounds very nice, but let us not fool ourselves. In so far as the NATO countries are concerned, the bigger the country, the more difficult it is to deal with. It was put to me by one of our counterparts that the bigger countries were quite prepared to be co-operative so long as you use their equipment. Is this not one of the prime difficulties; that is, that in each country they are trying to maximize their production and their development?

Mr. DRURY: I think it is true that each country is endeavouring to maximize its production and its development. This is a factor in the economic growth of the country. It is quite natural that each national government would strive for this. There are, however, clearly limits beyond which, even in a narrow national interest, it is not wise to go as it is uneconomical to do so. These limits vary from country to country. Some are rather more—if I can call it this—internationally minded than others. Some are very nationalistic indeed, but they all have the same general interest in keeping their own national scale of development and their own national scale of production.

Where we come in is that it is up to us to demonstrate that the economies of joint development or joint production are such that they outweigh the seeming short run advantages of a nationalistic approach. As Mr. Harkness pointed out, and with which I heartily agree, we have not had as much success in this as we would have liked, except I may say with the United States.

Now, your general proposition is that the large countries are quite prepared to standardize on their own equipment. We have not been successful in selling

any major items of equipment—and I say major items of equipment—to any of our NATO allies. It is an unfortunate fact of life that large countries do not seem to be prepared to place their reliance on a major item of equipment developed elsewhere. This applies to us, Canada. In development here there can be argument in respect of the technological and military soundness. Even if there are a few things which are superior, we still have to be very successful in persuading others to adopt major items of equipment which we have attempted to develop here.

However, we have had a great deal of success both in components and in what I might call minor systems. One of the most spectacular of the minor systems is the Doppler navigational system, a Canadian development by Canadian engineers. There is a very widespread measure of acceptance amongst the NATO countries. There have been a number of other items in the field, particularly of aerial navigation, but when it comes to prime aircraft, whether this be transport or combat aircraft—

Mr. SMITH: Prestige items, perhaps.

Mr. DRURY: One might call them in a sense prestige items.

Mr. HARKNESS: Armoured personnel carriers.

Mr. DRURY: I am not sure we had an aircraft which we could claim was better than anything else anywhere; but I do suggest that even if we had been successful in developing this to a satisfactory state in terms of military requirement and price of manufacture, we would have encountered some very considerable resistance to its adoption and acquisition by our other NATO partners. As a consequence we have been concentrating our effort on not what Mr. Smith calls the prestige items—not the prime items of military equipment—but on the components or subsidiary systems—the less important items, where we do not have to overcome this factor of reluctance, in a sense I suppose, to admit that some other country has more competent military equipment development facilities than its own.

Mr. LAMBERT: You are talking about one of the NATO club rules.

The CHAIRMAN: Before we adjourn, there are one or two matters to be dealt with. First of all, there is a document entitled "Department of Defence Production Staff Summary". With the agreement of the committee, we will have this printed as an *Appendix* to today's Minutes of Proceedings and Evidence (*see Appendix "A"*).

Agreed.

The CHAIRMAN: Secondly, on behalf of Mr. Winch who had to leave early, I am going to ask a question. Will the minister, at a later date, supply the Committee with the number of personnel under the direct authority of the President and General Manager of Canadian Commercial Corporation in 1952 and now?

Mr. DRURY: Yes.

The CHAIRMAN: The committee stands adjourned until Thursday at 11 o'clock when we will have in attendance officials from the Department of Defence Production.

Mr. SMITH: Will the Minister be here?

The CHAIRMAN: Will you be here, Mr. Drury?

Mr. DRURY: Thursday is our normal cabinet day and unless I am urgently required here I have some other responsibilities.

Mr. SMITH: We are not finished with the Minister.

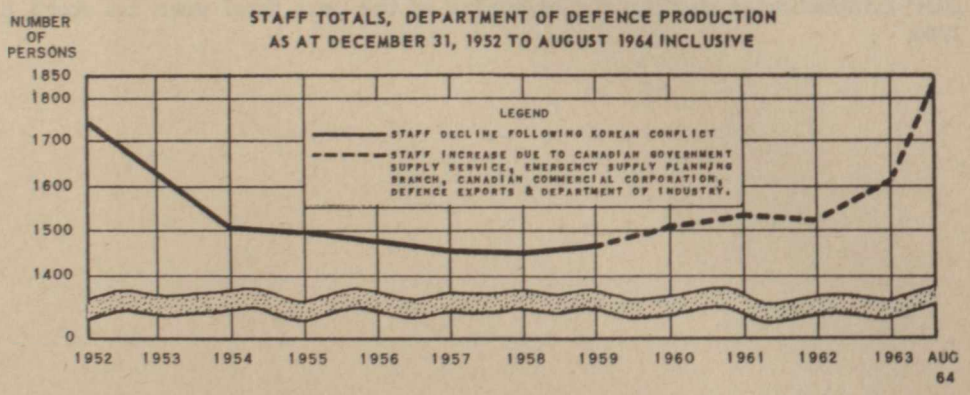
The CHAIRMAN: After our next few meetings we might have the Minister back for another meeting, to clear up any unanswered points.

APPENDIX "A"

DEPARTMENT OF DEFENCE PRODUCTION

STAFF SUMMARY

Following the Korean conflict, the staff of the Department of Defence Production showed a consistent decrease each year until 1959. During this period the work associated with contracting increased due to the introduction of more effective buying techniques such as incentive contracting. These improvements were aimed at reducing prices paid by the government.



Expenditures against contracts placed by the Department decreased consistently each year from a high of $1,051 millions in 1952 to a low of $633 millions in 1960, when they began to increase again reaching a peak of $723 millions in 1963.

At March 31, 1959, the staff of the Department totalled 1,441; at August 31, 1964, the staff totalled 1,829. Thus there was an increase of 388 employees during this intervening period.

The main factors influencing this staff increase were:

Transfer of Canadian Commercial Corporation	85
Defence export activities	135
Establishment of Emergency Supply Planning Branch .	67
Casual assistance	80*
Transfer of functions and staff from other Departments	38
Increase in staff branches to support formation of Department of Industry and Canadian Government Supply Service	36
	441
Less: Staff of the Minister's Office who are now charged to the Department of Industry	—11
	430

*These short term employees (six months) were hired to do clerical work associated with: (a) the formation of the Department of Industry and (b) a survey of procurement in civilian departments and agencies of the Federal Government. Most of them have already left the Department.

During the period 1959-1964 the 135 employees associated with the promotional defence export program were responsible for obtaining and administering prime export military contracts valued at $577.7 millions on behalf of foreign governments and assisted Canadian Industry in obtaining foreign subcontracts worth $414.3 millions, bringing the total value of foreign export orders to $992 millions.

Since March 1959, activities involving an additional 430 employees were added although the actual increase to August 31, 1964, was only 388. The difference of 42 represents improved manpower utilization in the operation of the Department.

The purchasing and stores function of the Department of Public Printing and Stationery has been transferred to the Department of Defence Production. However, the above figures do not cover the staff which will be included in the DDP establishment starting the beginning of the next fiscal year, i.e. April 1, 1965.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 21

THURSDAY, NOVEMBER 19, 1964

DEPARTMENT OF DEFENCE PRODUCTION

WITNESSES:

From the Department of Defence Production: Mr. G. W. Hunter, Deputy Minister; Mr. D. M. Erskine, Director, Regional Purchasing Branch; Mr. J. C. Rutledge, Director, Shipbuilding Branch; and Mr. R. M. Keith, Financial Adviser.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21564—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—(24).

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, November 19, 1964
(35)

The Special Committee on Defence met at 11.15 a.m. this day. The Vice-Chairman, Honourable Marcel Lambert, presided.

Members present: Messrs. Brewin, Fane, Lambert, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, MacRae, Martineau, Matheson, McMillan, McNulty, Pilon, Smith, Winch (14).

In attendance: *From the Department of Defence Production*: Mr. G. W. Hunter, Deputy Minister; Mr. W. H. Huck, Assistant Deputy Minister; Mr. J. C. Rutledge, Director, Shipbuilding Branch; Mr. D. M. Erskine, Director, Regional Purchasing Branch; Mr. J. G. Glassford, Director, Electrical and Electronics Branch; and Mr. R. M. Keith, Financial Adviser.

The Committee continued its consideration of the operational practices of the Department of Defence Production.

A document showing "Integration of Canadian Commercial Corporation Employees into Civil Service", was tabled by the Deputy Minister, and included in the printed record.

On motion of Mr. Winch, seconded by Mr. Martineau,

Resolved,—That the President and General Manager of the Canadian Commercial Corporation be requested to appear before this Committee.

The matter of arranging this appearance was left to the Steering Sub-committee.

Mr. Hunter presented a statement respecting, in particular, the purchasing of supplies and equipment, the tendering system, control procedures, and scheduling of contracts.

The witness tabled an outline of the establishment of the Department of Defence Production.

Agreed,—That the abovementioned table be included, at that point, in the Committee's proceedings.

Mr. Hunter, assisted by Messrs. Erskine and Rutledge and Mr. Keith, was questioned on his statement and related matters.

At 1.00 p.m. the Committee recessed.

At 3.45 p.m. the Committee resumed.

Brief prepared statements were tabled respecting *H.M.C.S. Provider* and the *Bobcat Program*

Agreed,—That these summaries be included in the Committee's Evidence at this point.

21564—1½

The witnesses were questioned on various facets of the work of the Department of Defence Production, dealing particularly with the *Provider* and *Bobcat* programs.

The witnesses were thanked and permitted to retire.

At 5.15 p.m. the Committee adjourned until 11.00 a.m., Tuesday, November 24, 1964.

E. W. Innes,
Clerk of the Committee.

Note—The evidence, adduced in French and translated into English, printed in this issue, was recorded by an electronic recording apparatus, pursuant to a recommendation contained in the Seventh Report of the Special Committee on Procedure and Organization, presented and concurred in, on May 20, 1964.

EVIDENCE

THURSDAY, November 19, 1964
11.15 a.m.

(*Text*)

The VICE CHAIRMAN: Well, gentlemen, I see a quorum.

I regret that the Chairman is not present today. He has been called out of town on urgent business.

Today we have Mr. G. W. Hunter, the Deputy Minister of Defence Production, with Mr. W. H. Huck, Assistant Deputy Minister; Mr. D. M. Erskine, Director, Regional Purchasing Branch; Mr. J. C. Rutledge, Director, Shipbuilding Branch; Mr. J. S. Glassford, The Director of Electronics; and Mr. R. M. Keith, Financial Adviser to the Ministry.

These gentlemen will be witnesses. First of all, however, I have been provided by Mr. Hunter with a reply to a question which was put by Mr. Winch at the close of the last meeting concerning the integration of Canadian Commercial Corporation employees into the civil service. This is a tabular report, and may I take it that it should now be incorporated in the record as the reply to the question put by Mr. Winch?

Agreed.

The report follows:

1. As of March 1952 total Canadian Commercial Corporation		38
2. As of March 1964 (prior to integration) total CCC employees		*84
3. As of November 1964 (subsequent to integration) of the above-mentioned *84 CCC employees:		
(*a*) Resignations and transfers to other departments (all junior Clerical staff)	12	
(*b*) CCC President and his secretary remain on CCC establishment	2	
(*c*) CCC Comptroller and CCC Secretary continue to perform dual CCC/DDP roles on DDP establishment.	2	
(*d*) On DDP International Programs Branch establishment—	55	
10 officers and *45* clerical staff continue to perform duties similar to those of CCC.		
(*e*) Remainder on DDP/DOI establishment	13	
Traffic Management Branch DDP 1 officer and 5 clerical staff performing similar functions to previous CCC Traffic Unit	6	
CCC officers loaned to DDP prior to Mar. 31 subsequently transferred to DDP establishment 1 officer to Emergency Supply Planning Branch DDP January 1963.	2	
1 officer to Shipbuilding and Heavy Machinery Branch—to DDP April 1963 subsequently to DOI July 1964		

CCC officers transferred to other branches after March 31, 1964.	2	
1 officer to Aircraft Branch, DDP		
1 officer to Electrical & Electronics Branch, DDP		
Clerical personnel transferred to other branches	3	
1 clerk to General Services Branch, DDP		
1 clerk to Electrical & Electronics Branch DDP		
1 clerk of Mechanical Transport Branch DOI.		
Sub-total	13	
TOTAL Accounted for		84

NUMBER OF EMPLOYEES	YEAR
108 (est.)	1946 Oct. 31
335	1947 Mar. 31
335	1948 Mar. 31
361	1949 Mar. 31
411	1950 Mar. 31
665	1951 Mar. 31
38	1952 Mar. 31
49	1953 Mar. 31
50	1954 Mar. 31
52	1955 Mar. 31
50	1956 Mar. 31
49	1957 Mar. 31
49	1958 Mar. 31
51	1959 Mar. 31
54	1960 Mar. 31
60	1961 Mar. 31
69	1962 Mar. 31
81	1963 Mar. 31
84	1964 Mar. 31

Mr. WINCH: Can I raise one matter on this reply which I now have had an opportunity to study?

The VICE CHAIRMAN: Yes; that is all right.

Mr. WINCH: I am most disturbed with the information supplied, as relating to a letter which was sent by Mr. Drury, under date of October 28, about the situation, which, on the basis of that letter, cannot in any way bring conformity between the orders then and the information just now supplied as to the number of employees in the Canadian Commercial Corporation.

Now, because I think there is great confusion, or misunderstanding, or wrong information being given to this committee, I would like, if I may, before we get on to the other business, to move, seconded by Mr. Martineau, that the president and general manager of Canadian Commercial Corporation be called as witnesses before this committee.

The VICE CHAIRMAN: You have made a motion, seconded by Mr. Martineau.

Now, in view of the fact that Mr. Drury will be back before this committee do you feel you should defer your questioning in this respect until his return?

Mr. WINCH: No. In view of the fact that I asked for certain information which I now have, and because I cannot possibly place any substantial, honest correlation between his previous letters and the information now supplied, therefore request that the motion now be proceeded with, that the president and

general manager of Canadian Commercial Corporation be called as witnesses before this committee.

The VICE CHAIRMAN: I am advised that the President of the Canadian Commercial Corporation would be available.

Perhaps you could indicate briefly what is the nature of this apparent discrepancy, in order to see whether it can be straightened out?

Mr. WINCH: Can I put it this way: There was a letter in the latter part of 1963, signed by Mr. Drury as minister, to the effect that all were being transferred excepting the president and the secretarial staff from Canadian Commercial Corporation, and according to the information which has now been supplied to us, and after certain questions, the result is that in March, 1964, there are 84 who come under the direct authority of the president and general manager of the Canadian Commercial Corporation.

This matter is of such importance that I believe we should call the President and the General Manager before this committee.

Mr. MARTINEAU: I wish to back up what Mr. Winch has said. I think it is up to the president and the general manager not only to explain the discrepancy but also to give to the committee some information as to why this transfer was made and what has been the result, bearing in mind always that apparently the transfer was made without taking into account the provision of the statute which established the corporation; and I am referring to chapter 35 of the Revised Statutes of Canada, 1952, section 6, which deals specifically with the employment of such officers and servants and determination of the conditions of employment and remuneration, and there is the directive of the minister. To me this is a very direct violation of that provision.

That is the reason why I think this matter should be fully investigated by questioning Mr. Drury and by calling before this committee as witnesses the two officers, and the only two officers, that remain on the payroll of that corporation.

The VICE CHAIRMAN: All right, gentlemen. You have heard the discussion. Are you ready for the motion?

Mr. MCMILLAN: I was wondering if, after we have heard Mr. Drury, we could refer this to the Steering Committee.

The VICE CHAIRMAN: Well, I think that perhaps since the Chairman of the Corporation is here the Steering Committee could arrange for the scheduling of a meeting, and he would be present with Mr. Drury.

I personally cannot see any difficulty here.

Is that agreed?

Motion agreed to.

That is fine. As to the date of this particular discussion, this will have to be taken up by the Steering Committee.

We now have Mr. Gordon Hunter, the Deputy Minister of Defence Production, who has a statement to read to the committee. The members of the committee have each now been provided with a copy and therefore I will call on Mr. Hunter.

Mr. GORDON (*Deputy Minister, Department of Defence Production*): Thank you, Mr. Chairman.

At the time of his first statement to this committee the Minister observed that it is the responsibility of the Department of National Defence to determine what is needed, when and where, and the responsibility of the Department of Defence Production to fill those needs at the minimum cost, consistent with the need to develop and maintain Canada's defence production facilities.

Accordingly, then, the Department of National Defence defines their requirements and provides the contract demands and specifications needed to

initiate procurement while our department investigates sources of supply, develops production schedules, awards contracts, supervises production and, where necessary, helps contractors to obtain supplies. The Department of National Defence inspects and accepts the supplies and then pays the bills.

I would now like to explain briefly the role of the Department of Defence Production in handling a requirement from the Department of National Defence.

The first task of the Department of Defence Production on receipt of a requisition or contract demand from the Department of National Defence involves the selection of the most appropriate supplier. It is our departmental policy to buy, whenever possible, at firm prices obtained as a result of invitations to tender issued to those known suppliers who have given evidence of ability to carry out the contract. Behind this policy is our view that the competitive market offers the best guarantee of fair value for the taxpayer's dollar.

In employing this procedure, the department does not use public advertisements to invite tenders. Instead, as my minister has explained, we maintain up-to-date source lists, which record, under various commodity headings, the names of those firms which are able to supply the items and have indicated an interest in doing so. These lists are under constant revision.

Additions are made when a possible supplier writes to the department and asks to be listed or when a procurement officer observes that a firm is not listed although, from his intimate knowledge of the requirement, he considers that it should be listed. In these cases the department immediately sends the firm a questionnaire requesting detailed information covering the type of goods produced, particulars of their labour force, production machinery, etc. On the basis of the data contained in the questionnaire, when returned, the firm's name is appropriately listed, providing such action is justifiable.

I might add that the minister mentioned that the evaluation teams were sent out the other day in cases where we did not have sufficient information as to their capabilities; but that would be done, and that is included as being "justifiable".

The composition of our source lists reflects certain principles which govern our procurement procedures. Accordingly, as the department devotes considerable attention to developing and promoting Canadian production of defence items, foreign producers are not invited when there are adequate Canadian sources. In addition, the department does not ask possible suppliers to compete against their own sources of supply, and thus distributors are not asked to compete against the actual manufacturers of the same goods.

However, our regional purchasing offices, which normally carry out procurement action within the geographical area they serve, are permitted to include on their invitation lists the name of wholesalers, jobbers and, at times, retailers. Fourteen regional offices are located across Canada from St. John's, Newfoundland, to Victoria, British Columbia.

When the department receives a request to purchase supplies or services which may be obtained through competitive tenders, steps are immediately taken to issue an invitation to tender to potential suppliers. The invitation sets forth the details of the requirement, the name and address of the consignee, and other appropriate data. It also refers to, or is accompanied by, the relevant specifications, which are provided by the Department of National Defence. The tenderer enters his price or prices according to consignment points; offers any discount terms, etcetera, and returns the document, which becomes a tender, to the Department of Defence Production.

The success of the competitive tendering system depends, in a large measure, on the stringency of the measures that are observed to assure that tenders are dealt with fairly. I can assure the members of your committee that scrupulous care is taken in handling tenders.

On receipt, tenders are retained unopened in the custody of the departmental secretary and remain in his possession until they are opened immediately following the closing date specified for receipt of tenders.

The department has always rigidly maintained a policy of not accepting late tenders. When the hour and date for the closing of tenders on any particular requirement is reached, the box in which the tenders have been kept is sealed so that further tenders cannot be placed in it. Any late tenders are returned to the sender without delay.

As soon as the tenders are opened and listed they are forwarded to the procurement unit concerned. Here the essential details of each tender are entered on a tabulation sheet and on the basis of the evaluation of this data the lowest acceptable tender is selected.

As I have pointed out, the basic departmental policy is to purchase by competitive tender. However, there are occasions when this method of procurement is either not possible, or impractical. In such instances procurement must be taken through some form of negotiation. As my minister has already mentioned, reasons for negotiation include:

(*a*) A lack of competing sources of supply,
(*b*) A lack of, or the indefinite nature of, specifications, and
(*c*) Proprietary rights

At this time I do not propose to discuss the various techniques that are employed in the carrying out of negotiations as this area has been reviewed in some detail by Mr. Drury in his statement to the committee. However, I do wish to underline the fact that every effort is made to bring the taxpayer the best possible value for the dollars that are expended for defence procurement.

Authority to enter into contracts for the purchase of defence supplies is governed by the Defence Production Act wherein it is provided that no contract shall be concluded without the approval of the Governor in Council except in isolated cases where the minister considers that the contract must be entered into immediately in the interests of defence; or where the estimated expenditure does not exceed $25,000; or where the estimated expenditure does not exceed $50,000 and the lowest of three or more competitive tenders is being accepted. Any contract involving more than $10,000 which has not been so approved must subsequently be reported to the governor in council. By order in council, treasury board has been authorized to exercise the functions assigned to the governor in council under the act. Our departmental contracts authorization division reviews all proposals for entry into contracts above these fixed dollar amounts to ensure that the principal terms and conditions conform to departmental policies. The division also prepares submissions to treasury board where the board's approval for entry into a contract is necessary.

As far as possible, our departmental contractual documents have been standardized, and are available in either English or French or in bilingual form. Where contracts are let by competitive tender, an acceptance of tender in simple contract form is issued to the successful tenderer. The same form, with a slight alteration of wording, serves as a purchase order which may be used when contracts are arranged by negotiation. In special cases, where additional conditions have to be included in the contract, formal contracts are prepared by our legal branch.

A series of general conditions have been developed and published by the department, which, by reference, are incorporated in all contracts. These basic conditions include such matters as arrangements for subletting any part of the contract, conduct of the work, inspection, acceptance and delivery, warranty, government issue, scrap, insurance, accounting, secrecy and protection

of work, patent claims and royalties, Canadian labour and materials, title, default, termination, and other similar matters.

In addition to its contracting responsibilities, the department must ensure delivery of the supplies ordered. The various elements of this task—often known as "Program Control"—are primarily concerned with ensuring orderly production progress, to the end that the required delivery schedules may be met.

Program control, for major projects, begins with the scheduling operation, which precedes contracting. Essentially, scheduling involves the detailed analysis of a program to determine the delivery rates and sequences required for each component in order to achieve the orderly completion of the program as a whole. In certain programs the major scheduling responsibility rests with the department while in other cases considerable responsibility rests with the prime contractor.

Throughout the course of production on major programs, the continuous review of progress is a major concern of our department. Our production and expediting officers, who work closely with both the contractor and the services must, if possible, anticipate difficulties and assist in the solution of production problems as they develop. Steering committees, composed of representatives of our department, the Department of National Defence and the contractor, provide one means by which effective control is maintained.

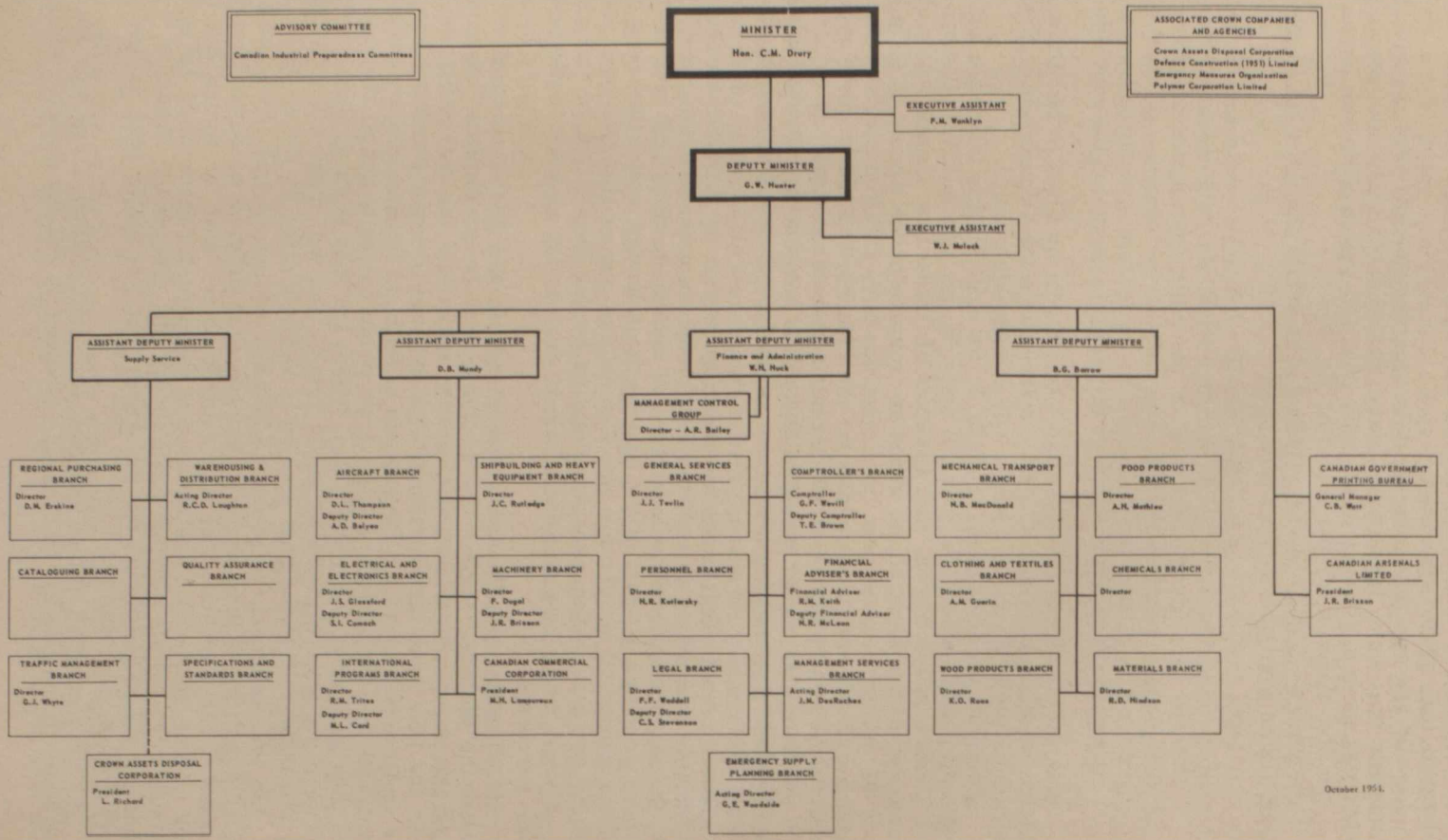
I hope that I have been able to outline the general procurement procedures of the department and at the same time have illustrated the clearly defined division of authority between the Department of Defence Production and Department of National Defence as well as the co-operaitve relationship between the two departments which must and does exist.

The VICE CHAIRMAN: Mr. Hunter has also provided us with an organizational chart of the department as it now exists, and this has been circularized to the members, and I take it that we may take it and have it printed in the record at this point in the proceedings?

Is that agreed?

Agreed.

DEPARTMENT OF DEFENCE PRODUCTION



October 1951.

The VICE CHAIRMAN: All right, gentlemen, we are ready for discussion or to question Mr. Hunter or any of the other witnesses in regard to this statement, and related questions.

I would ask you, if possible, to defer questions dealing with the subsidiary statements that have been given about H.M.C.S. *Provider* and the *Bobcat*, which will serve as discussions on their own and within their own limits.

The first name on my list is that of Mr. Winch.

Mr. WINCH: Could I ask Mr. Hunter if he would enlarge a bit on the first paragraph on page two wherein he states:

> The first task of the department of defence production on receipt of a requisition or contract demand from the Department of National Defence involves the selection of the most appropriate supplier. It is our departmental policy to buy, wherever possible, at firm prices obtained as a result of invitations to tender issued to those known suppliers who have given evidence of ability to carry out the contract.

Now, Mr. Chairman, the question I would like to direct to Mr. Hunter is: Exactly what is your position, upon receiving from the Department of National Defence orders to receive tenders to buy certain equipment?

My point, Mr. Chairman, I think I can explain this way: Let us take airplanes. I understand that our air force in the past had two Comets, and two Comets only, but in the purchase of those two Comets they either purchased, or had to purchase, subsidiary supplies in the amount of $1 million. I say $1 million because now the Comet has been declared obsolete. Also, in Ottawa, $186,000 worth of supplies for the Comet and $714,000 worth approximately in Montreal have been declared surplus. What happened in Montreal I do not know, but as a member of the public accounts committee I do know that $186,000 worth of supplies were put up for sale and they got an offer of $75 for them.

What I am trying to get an understanding on is this: Who makes the decision on the letting of contracts for certain replacement equipment? Who has the say with regard to how much of certain supplies you have to buy? Is that a decision, or part of the agreement on buying, and is the ratio of $1 million additional supply for two Comets the same ratio that you use on making purchases when, say, you might be buying the CF-104, or the others?

I think it will help this committee if you can tell us what is the basis of these purchases.

Mr. HUNTER: Mr. Chairman, the answer to the first question as to who makes the decisions to buy the airplane, if it be an airplane—these large programs for airplanes such as we have noticed in the papers for the last year, the talk about tactical aircraft—in the case of major programs like that the air force tells us, or the Department of National Defence tells us, what they want, and we look over the field; but we would naturally get all the proposals and then go back to them with them. Where the item is an airplane, the contractor deals often with the air force directly and will make a demonstration of it to them, so that the final decision is certainly made by the air force.

On the matter of the scale of additional equipment and spares, this has varied from time to time, in my experience, with different products. They have worked it out, I believe, that it is roughly 25 per cent for spares, but from time to time, if the air force knows that the need for them might be less for a simpler type of aircraft that has a longer life, such as the Dakota, it would require a lesser percentage for the spares that you would need as against a more complicated type.

At the moment I cannot give you exact information. I can only surmise that since, in the case of the Comet I—I believe it was the Comet I which we

bought—there were not too many sold, and we might have bought more spares for that model of airplane at the time while they were in production, so that we would have a full and complete range of spares; and this was perhaps at a scale greater than they would have bought for an aircraft like the Dakota, which we knew would be in production for a long time.

I can get you the exact percentage figure, but I do not have it here.

Mr. WINCH: What I am trying to get at is: When you receive at the defence department instructions to purchase who decides—is it the defence department, or your own department—as to the amount of spares to buy in relation to the number of planes you buy; and—I think this is the key point—does the purchase cost received by your department have any relationship to the number of supplies additional that you buy?

Mr. HUNTER: On the first part of your question, as to who makes the decision, I can say that the end decision is definitely the air force's; but it is usual that there is a spares provisioning conference held, and that the contractor will come and sit down with the Department of National Defence and with our people, and the contractor explains what he feels the spares ought to be, and the air force, from their knowledge of the technical and operational characteristics of it, give us their views. We actually are perhaps more interested in the fact that we are going to order them concurrently and what the cost will be, but the decision as to how many spares are to be ordered and when, is definitely the air force's.

Mr. WINCH: They tell you?

Mr. HUNTER: They tell us, yes.

Mr. WINCH: Then, my next question is: Is the purchase of additional supplies and replacements a factor in the purchase price of the plane itself?

Mr. HUNTER: This would be very much a factor because at the time of the original order, since while the aircraft is being produced, spares are naturally much cheaper and can be ordered at much less cost than having to order them later. So that the number of spares ordered is very definitely part of the negotiation of the purchase contract that we have with the manufacturer.

Mr. WINCH: Then, Mr. Chairman, may I ask two very short questions, because I know that others have some in mind, too: Would you say that there is a definite ratio between the purchase of replacements or supplies of $1 million to the purchase of the two Comets carried through on Canada's purchase of all planes?

Mr. HUNTER: If you are just asking me for my personal opinion, this looks like about 15 per cent of the original cost—$1 million. The cost of the two Comets which, I recall, was about $3½ or $4 million each—this would be a high ratio to have left at the end of the life of an aircraft.

Mr. WINCH: But would you say, then, that where there is $1 million left—

Mr. HUNTER: As a matter of fact, you gave me the figure, but I did read it in the evidence before the public accounts committee and I have no reason to doubt it; but I can only say again—and I would be glad to get you the information—that the reason for that, in the case of the Comet, is that it is no longer in production and the air force made their best judgment of the spares to buy; but they later went out of production, so those are the items that are in the spares list.

Mr. WINCH: Could I ask whether you in the Department of Defence Production ever question the charges which are made to the department for the supplying of spare equipment? I ask this question because I am a member of a subcommittee of the public accounts committee, and we had presented to us some of the material which has now been made available from crown assets in Ottawa, and I saw there a knuckle joint over a flap. I suggest that this could

be produced for $4 or $5 or I miss my guess as a mechanic, and yet the charge is $97. Do you ever question the amount that you have been charged for spares?

Mr. HUNTER: We very definitely question it. We have people now—and I do not say we have had them since the commencement of the department's operations—who are well qualified to assess the orders for spares that we purchase. We have residents in the major plants, several of whom are aircraft engineers and I think they are very competent.

Mr. WINCH: And since when have you made this study?

Mr. HUNTER: Well, we have not made this special duty on this particular case, but this is something that we would be—

Mr. WINCH: Have you always made it on general principles?

Mr. HUNTER: This is something we would do every day, to the best of my knowledge.

Mr. MACLEAN (*Queens*): Mr. Chairman, on page one there is a statement that it is:

> ...the responsibility of the Department of Defence Production to fill those needs at the minimum cost, consistent with the need to develop and maintain Canada's defence production facilities.

How much weight is given to these subsidiary considerations, and how often are these considerations overwritten by cost alone? And I would like to have some explanation of what these other considerations are, with regard to Canada's production facilities? Is any consideration given, for example, to whether, in the case of where there may be two plants, one plant is in a highly vulnerable area and another is relatively dispersed where it might, in case of attack, be more likely to be able to continue to produce? This is the sort of thing. What are these other considerations?

Mr. HUNTER: To answer the first part of your question as to the responsibility of filling these needs at the minimum cost, one of the minister's responsibilities is to see that there is a reasonable defence production base to meet requirements that may arise for different items. This probably had much more significance in the days after the war, during the Korean build-up time, in order to have an aircraft industry. Since then, using your example, we have at least the base to handle those strategic components of the aircraft that would enable us to handle a large aircraft program.

On the second part of your question, as to how we decide about—I think decentralization is the word—of the plants, we have certainly kept this in mind from time to time.

There are not too many opportunities to do this, where there are plants in an area that might be considered to be decentralized—and I think repair and overhaul is perhaps a good example—we do spread repair and overhaul work on an allocated basis where it is possible. This, I think, is the best example of the government trying to decentralize aircraft work.

Mr. MACLEAN (*Queens*): So far as the actual manufacturing of defence items is concerned, is there a conscious effort to work towards dispersal if there is the opportunity? I grant you that there might not be the opportunity—

Mr. HUNTER: There is a very definite attempt made to do this. In fact, when we place a prime contract with a large contractor such as Canadair, we direct him to subcontract as large a percentage as can be reasonably and economically done. So far as Canadair is concerned, they issue large subcontracts for the main components, and they are dispersed as widely as possible. Certain work goes to the Maritimes and other into subcontracting areas in Ontario and Manitoba, and this definitely is by direction of the department, so that it just does not keep the whole contract to itself.

Mr. MacLEAN (*Queens*): I want to ask a question in a different field. Does the Department of Defence Production do all the purchasing for national defence of what might be termed the "C" class of stores? I am thinking of food and fuel and coal—aircraft fuel and motor fuel and—

Mr. HUNTER: Yes, we do. By law, by our act, we are the sole purchasers for the department of National Defence. There are cases, of which I guess you are aware, where we give local authority for emergency items to certain of the establishments; but generally speaking we buy all food, fuel and coal.

Mr. MacLEAN (*Queens*): I would like to ask a question with regard to the activities of the regional offices in this respect. I have been told that on occasions in the past—the accusation may not be right at all, and I am not making it—in the case of contracts for food, for example, instead of asking for the supply of certain types of food that could be cheaply supplied by a producer—contractor—in some areas there is a wide dispersal of the type of food required all in the same contract, and the result is that a middleman, an assembler as it were, is the only one who is in a position to meet the contract.

For example, there might be a requirement for not only fresh vegetables of the type grown in Canada, but included in that there might be something that is not locally produced, with the result that the producer could not possibly tender on the contract, and the only possible tenderer would have to be an assembler of food.

Perhaps this is not correct, and I would like to have a little further explanation or elucidation of how much the Department of National Defence depends on local supplies of food, if they are competitive, and whether this is done more or less locally, or at least regionally.

Mr. HUNTER: I do not think I have the required detail to answer you, but Mr. Erskine is the director of our regional purchasing branch, or, at least, that was his title at the time, up until our recent change. If Mr. Erskine would not mind I would ask him to answer that question.

Mr. D. M. ERSKINE (*Director, Regional Purchasing Branch*): I would be glad to.

In the matter of buying food through the regional offices we confine our tenders to the area served by the local office. We have on our source lists all potential suppliers of food and produce, and in the case of certain meat products we, of course, buy from those establishments approved by the health of animals division of the Department of Agriculture.

So far as produce is concerned, the majority of the firms on our source lists are wholesalers and distributors who handle both imported fresh vegetables and also domestic ones.

These men have to have the capability of delivering these stores, as they are required, sometimes daily to the various military establishments.

I think it would be very difficult, if we had a potato grower, for instance, since the quantity of potatoes required daily, or weekly, is quite small, and he would not have the delivery facilities; but he can be listed if he can compete, and the moment they were wanted we could place a tender with him.

Mr. MacLEAN: What is the position in the case of durable goods—canned goods?

Mr. ERSKINE: Well, canned goods actually are not purchased regionally; they are purchased centrally. This has been going on for many years. The contracts are placed with the canners, and in some cases, with jobbers acting for a number of very small canners.

Mr. MacLEAN (*Queens*): I have a further question regarding—

The VICE-CHAIRMAN: I wonder, Mr. MacLean, if, in view of the fact that there are a good number of people who have indicated that they wish to ask questions, members would rather confine themselves to one area. If everybody is given the chance to cover the whole range of operations we will never get to the others.

Mr. MACLEAN (*Queens*): I have just one more question that I was going to ask with regard to the type of tender, you say they are not given regionally. Did I understand you properly?

Mr. ERSKINE: No; canned goods are bought centrally.

Mr. MACLEAN (*Queens*): In this case is there only one point of delivery in the contract?

Mr. ERSKINE: No, there are many points of delivery.

Mr. MACLEAN (*Queens*): And the successful tenderer might be dependant on where the goods were to be delivered?

Mr. ERSKINE: This would be a factor, certainly, in his contract, yes.

Mr. LLOYD: Bearing in mind your observations, and concentrating on the matter of how the department fills its needs at the minimum cost, consistent with the need to develop and maintain Canada's defence production facilities —which is where Mr. MacLean began his questioning, I think—I would like to ascertain from Mr. Hunter in more detail where you draw the line between, for example, tenders and allocations. What are the factors that influence you, for example, in the matter of the allocation of ship construction and ship repair, as against a tender? Do you have a definite policy that you can outline to the committee in this regard?

Mr. HUNTER: I think, Mr. Chairman, as I have mentioned, the policy of the department is to buy competitively wherever possible.

To go back into the history of the department, 12 or 13 years ago, when the department was started, we bought many things—many more things—by allocation than by competition. There was a time factor, at that time.

There was a shorage of people who were going to stay permanently with the department. It was formed by a number of "dollar-a-year" men who came into the government and who subsequently brought people in who were trained, and have been better trained since, to negotiate all of the contracts. We have attempted to bring everything into line, including ship construction; and repair and overhaul—the two areas in which there is still certain allocation—we are getting them to the point where we should be able to try to operate by competitive tender.

This has been our aim, and I can tell you that in both areas at the present time, considerable work has been done, and I hope that within the next year or two both of these areas will be handled on a competitive basis.

This is not easily handled. Ship construction particularly has been difficult, but we have made considerable strides; and we hope to do the same in the case of repair and overhaul work.

Mr. LLOYD: Getting down to specifics on this subject, I believe that you have competitive tenders for ship construction on the west coast and competitive tenders for ship construction on the east coast, for certain quantities and kinds of ship construction. You do not do it, in other words, throughout all Canada in the area of competition.

Mr. HUNTER: This, we thought, was really a step in the direction of nation-wide competition, if we are able to achieve it.

Mr. Rutledge is here and he can speak on this question. He is director of the shipbuilding branch. Perhaps he would answer that question. He is chairman of the interdepartmental committee which is inquiring into this very

problem, and they hope to be able to recommend to the government a policy by which shipbuilding for the government as a whole might be handled.

Mr. LLOYD: You may have a problem in reconciling this on the one hand with the desire to maintain capabilities at certain areas in Canada, may you not?

Mr. HUNTER: This is a real problem.

Mr. LLOYD: How does overhead in cost of construction enter this picture? Are you familiar—

Mr. HUNTER: As a matter of fact, I know a certain amount about this, but perhaps Mr. Rutledge might say a word on it. Mr. Rutledge.

Mr. J. C. RUTLEDGE (*Director, Shipbuilding Branch*): I would assume that the question is: In what cases do you engage in area competition as distinct from open competition, and what are the differentials. There are no recognized differentials. There is no formula; but certainly there are differences that arise.

To illustrate, the west coast has a very high wage rate in comparison with the east coast. Overhead is a more subtle question, because overhead costs—overhead burdens—are in turn related to labour application.

I do not think you could generalize on overhead. I can say, however, that on the west coast there is very high efficiency in the application of manpower, but we have not been able to discuss any formula that would define the differentials. Each case must be taken on its own merits.

Mr. LLOYD: There must be some basis to decide that at least the west coast is one area and the rest of Canada is another. For example, the Atlantic coast yards compete with on-the-river yards for new construction, do they not?

Mr. RUTLEDGE: You are talking about new construction. In our experience we have only had one major development contract go out on a competitive basis, and that is the *Provider*, which is likely to be dealt with again. That was on open competition basis. We felt confident enough on it to let all yards in Canada compete.

On occasion, if you have a ship which is going to operate in a specific area, or if it is a ship which is going to be stationed in a specific area—if that is going to be the base of operations for the ship—it is not unreasonable to have the ship constructed in that area.

Mr. LLOYD: This would probably be the reason, then—I will put it the other way: Is this the reason, then, that the conversions of destroyer escort vessels to having helicopter capabilities—I think there were four or five done on the west coast—

Mr. RUTLEDGE: Yes.

Mr. LLOYD: Was there any distinction between the two yards?

Mr. RUTLEDGE: The first four conversions were largely developmental in type. There was not sufficient precision in the development of the requirements to permit effective competition; but at the time that we did award these contracts these vessels at that time were to be based on the west coast. This has subsequently been changed; but at the time the contracts were awarded it was intended that those vessels, which were part of the fleet on the Pacific coast, would remain there, and the contracts were limited to contractors from the west coast yards.

The VICE CHAIRMAN: May I just call a brief halt at this point. We have had one Reporter and I think he should have a break about now.

—Recess.

The VICE CHAIRMAN: Order, please. We will resume.

Mr. Lloyd, are you finished?

Mr. LLOYD: No, I am not.

Mr. Rutledge, when we left off you had explained, I believe, that at the time of the award of contracts for the destroyer escort conversions at that time you had adopted, or had given some thought to the fact that the ships would be based on the west coast—

Mr. RUTLEDGE: Yes. Probably I might develop that a little further.

We foresaw a program of possibly 14 conversions, and it divided rather neatly into seven on the east coast and seven on the west coast. Seven of the destroyer escorts were based on the east coast and seven were based on the west coast. It didn't seem unreasonable that those which were based on the west coast and were going to continue to operate on the west coast should be converted in the west; and, similarly, those that were based on the east coast and were going to continue to operate there should be done there.

Furthermore, there is the economic factor; there is the cost of moving a vessel of that type from one coast to the other; not only is there the dollar cost involved, but there are the manpower problems, and so forth.

However, this situation did not remain constant. It was constant when we awarded the contracts for the first four conversions, but there was then a change in the deployment of the fleet, and these vessels that were on the west coast were to be used on the east coast; so we had to re-examine the situation. The first four had already, in that context, been awarded to a west coast yard. We made the next job on a competitive basis open to east coast yards, and the next job on a competitive basis open to west coast yards, and we have a seventh which we are examining at the present time.

Mr. LLOYD: Well, Mr. Ruthledge, the volume of work that might be obtained by a few yards on the east coast—and that would include the Quebec coast and the river yards generally—the volume of work that might be obtained in the river yards enables them to keep down their overhead cost dollar, does it not?

Mr. RUTLEDGE: I would agree. Overhead cost is related to volume of work.

Mr. WINCH: But the efficiency is better on the west coast, you said?

Mr. LLOYD: He said labour efficiency.

Mr. RUTLEDGE: That is, the application of manpower is superior on the west coast.

Mr. WINCH: That will shut you up.

Mr. LLOYD: I presume I am supposed to direct my questions to the witness, and I would add that any comments that are made are (a) in bad taste, or (b) out of order, or (c) only designed to confuse the questions I am trying to put to the witness. Whatever the situation may be, it might be better to reserve all observations until all the evidence is in.

In fact, Mr. Rutledge, in the west coast yards—granted the factor of efficiency may be in their favour—the overhead costs that you are faced with, and their distribution of overhead to the various ship construction for the government of Canada—would it be higher than it would be on the east coast?

Mr. RUTLEDGE: On this matter of overhead costs, I am very reluctant to answer your question. It is not that it is not a reasonable one, but it is a very complex one and it is related to the manpower application.

Let me give you an illustration. You may, in one yard, have a quite high overhead rate in comparison with a second yard. Now, the rate is measured in terms of the dollars that are attracted by each dollar of labour spent. However, if you use less labour at the high rate, the high overhead rate commonly used may not be, in total dollars, as significant.

Let me give you one or two illustrations. On our destroyer escort program we found that the third lowest cost was in a west coast yard, and that is an area which, traditionally, has high wage rates. In other words, to generalize on this is a very dangerous thing.

Mr. LLOYD: But, it is a fact that there is a large volume of other ship construction arising within your yards. The government of Canada has suffered losses in this connection.

Mr. RUTLEDGE: Yes.

Mr. LLOYD: Now, let us shift our operations to the east coast. But, before doing so could you tell me how many independent yards there are on the west coast?

Mr. RUTLEDGE: There are three major yards on the west coast, several intermediate yards and some minor yards. But, the major yards are three in number. There are two in the Esquimalt and Victoria area and one in Vancouver.

Mr. SMITH: How many are owned by the same owners?

Mr. RUTLEDGE: There are two owners for the three yards.

Mr. LLOYD: Now, coming back to the east coast and the river yards, I believe that the Davie and Collingwood yards are wholly owned subsidiary companies of Canada Steamship Lines.

Mr. RUTLEDGE: That is right. Canada Steamship Lines has the following shipyards: Davie Shipbuilding in Lauzon, Quebec; the Kingston shipyards at Kingston, Ontario; and the Collingwood and Port Arthur shipbuilding yards. As I say, there are four yards in the Canada Steamship Lines complex.

Mr. LLOYD: And, because of this complex Canada Steamship Lines manage to get a large volume of work arisings because of their ownership of steamships in the upper lake system.

Mr. RUTLEDGE: Are you referring to commercial work?

Mr. LLOYD: A large volume of commercial construction, yes.

Mr. RUTLEDGE: That is right.

Mr. LLOYD: And, it is my belief that ship construction in respect of ships built in Canada for Canadian owners can qualify for subsidies.

Mr. RUTLEDGE: Under certain conditions, yes.

Mr. LLOYD: Then, in respect of these three yards that were just mentioned, the operation of the subsidy, in fact, has increased the volume of work arising in these three yards.

Mr. RUTLEDGE: Yes, undoubtedly it has. Davie Shipbuilding, in particular, and in addition, Collingwood shipyards, have benefited substantially from the subsidy. But, they have arranged that, and I would make that quite emphatic. They have generated the work that would qualify them for application for a subsidy, and they have enjoyed more benefits than any other shipyard in the application of subsidies under the same circumstances. In fact, much of the work of Davie Shipbuilding has been for other than Canada Steamship Lines.

Mr. LLOYD: Does the parent company call any tenders for its needs from yards other than its own three yards that it controls?

The VICE CHAIRMAN: Well, I have some difficulty, Mr. Lloyd, in seeing the relevance of this questioning within the Department of Defence Production. I would like to say that there is a question of time involved. I am sure this is all very interesting but there are other people as well on the committee.

Mr. LLOYD: Yes, I realize that. However, I do not think the time I have taken has exceeded that of another member who started the questioning the day before and then started it again today.

The point I am trying to get at is this. Through the advent of ship subsidies, that complex of subsidiary companies owned and controlled by parent companies that were engaged in the shipbuilding business, and which had need for large volumes of shipbuilding, had an advantage over other yards such as those in Saint John and Halifax.

Mr. RUTLEDGE: It would in the acquisition of business.

Mr. LLOYD: And, there is no question about that.

Mr. RUTLEDGE: It would be absurd for me in any way to deny that. If you are both an owner and a builder you are likely to generate more business for your yard. I would not deny that for a moment.

Mr. LLOYD: So, this puts the yards which do not have such a tie-in with the ship owner at a disadvantage in trying to compete with tenders submitted to your department.

Mr. RUTLEDGE: I would just like to make one other point. The features in respect of one of the great areas of shipbuilding subsidy are twofold. One is in connection with the carriers in the lakes, but another very significant area has been in the fishing industry and, quite frankly, I know of no shipbuilder who is engaged in fishing.

Mr. LLOYD: So, there is an opportunity for the other yards to maintain a volume of work arisings to keep their overhead down. Is it not a fact you have been greatly concerned in the main about costs to government? Is this not the prime consideration?

Mr. RUTLEDGE: We are preoccupied with that.

Mr. LLOYD: And you have been more so recently than you have been in the past.

Mr. RUTLEDGE: Yes, precisely.

Mr. LLOYD: Therefore, these yards which do not have a tie-in, unless they manage to win work arisings in the private sector are at a very definite disadvantage in terms of overhead costs. How do you reconcile your concern in respect of costs with the statement you make—and this is my point, Mr. Chairman—of the need to maintain capabilities throughout Canada. It is a matter of a judgment decision?

Mr. RUTLEDGE: Yes, it is a matter of a judgment decision. When you speak of costs you are speaking in terms of allocation and if by allocation we encounter costs of a level somewhat higher than we would competitively that results in a certain situation. Allocation has been the rule in naval ship construction. I would like to go back to world war II. There were some good reasons then for allocation, but the situation is constantly changing. It is changing very, very rapidly at the present time. The justification for allocation in the early stages was simply that with a massive shipbuilding program our facilities were somewhat limited. No one, two or three yards could hope to satisfy on a delivery basis the entire requirements or specifications for naval ship construction, and it was of a type that did not lend itself to competition. You could not go out fairly on a competitive basis. I would suggest one of the justifications of that allocation policy at that time was the principle of the defence base of keeping the work decentralized and maintaining facilities at a variety of points. However, to an increasing degree at the present time, those arguments and factors have changed. We have become more mature as an industry and in terms of government. The navy is able to define its requirements with precision and we are able to contract for them on a competitive basis.

Furthermore, the industry is more mature and able to expose itself to the risks involved in competitive pricing. You will realize that some of the early

destroyer escorts took over five years to build and to go for a firm price on something of that nature is to engage in a very hazardous financial venture for any shipyard. Our yards are not large. If we totalled all our yards in Canada we would not have a single yard as big as Harland and Wolff. We have a large number of small units widely distributed. But we are in a position where we now can look competitively at things.

Mr. LLOYD: There is one other question in this field.

The VICE CHAIRMAN: Mr. Lloyd, this part of the questioning has taken half an hour. I now am faced with the problem that we will have to sit this afternoon. In order to deal fairly with the witnesses, I would suggest we tighten up the questioning.

Mr. LLOYD: I have only one more question. I believe, Mr. Chairman, if you look at the total amount of time I have occupied you will find that it has not been unreasonable. Would you be kind enough, Mr. Rutledge, to advise the committee of what has been the changing role of the Maritime Commission with the establishment of the Department of Defence Production under its present organization; for example, in respect of allocations, what are your relations with the Maritime Commission?

Mr. RUTLEDGE: The Maritime Commission role not by law, but by administrative practice, has been changed. The Canadian Maritime Commission brings to the Department of Defence Production its recommendations on allocations. The Canadian Maritime Commission continues to do that; however, if a decision has to be taken in respect of awarding a contract on a competitive basis, then the Canadian Maritime Commission is not invited to participate. Therefore, I would say the only change in that specific area, perhaps is that there is a much smaller incidence of recommendations from the Canadian Maritime Commission simply by the increased application of competition.

Mr. LLOYD: I will bear in mind your admonition, but I am far from satisfied.

The VICE CHAIRMAN: There are other people here, too, who have problems and yours can come up later.

Mr. LLOYD: I agree with your observation, but I believe you are applying it to me when you might, with equal force, have applied it before to others, or at least it might have been done under the other Chairman.

Mr. SMITH: May I ask some supplementary questions? I think you might like to correct an impression that has been given. Port Arthur and Kingston have not done any major shipbuilding work in approximately the last ten years.

Mr. RUTLEDGE: The period is a little long; let us say, in recent years.

Mr. SMITH: In recent years neither of them has been building any major ships?

Mr. RUTLEDGE: Yes.

Mr. SMITH: Was the *Alexander Henry* the last one in Port Arthur?

Mr. RUTLEDGE: I do not know.

Mr. SMITH: There has been no naval shipbuilding work either allotted or tendered to the great lakes yards since the end of the war?

Mr. RUTLEDGE: That is incorrect, sir. I am speaking from memory here. The Port Arthur shipbuilding did participate in our last minesweeper program.

Mr. SMITH: Participation in what way?

Mr. RUTLEDGE: They built a minesweeper.

Mr. SMITH: About when was that?

Mr. RUTLEDGE: I would say it would be about 1957. I am giving an approximation. Your question was in respect of the period since the war?

Mr. SMITH: Yes.

Mr. RUTLEDGE: In respect of the *Provider* which keeps cropping up in this discussion, the Collingwood shipyard was invited to tender and did tender on that. That answers your second question.

Mr. SMITH: I was asking whether they had actually done any work by allocation or otherwise in recent years?

Mr. RUTLEDGE: A certain amount of repair work has been done, but principally in Collingwood the only contracts which flash through my mind at the moment are degaussing contracts.

Mr. SMITH: Which usually are small contracts?

Mr. RUTLEDGE: Yes.

Mr. SMITH: In the great lakes yards ships have been build competitively in recent years for both the Pacific coast and the Atlantic coast in competition with other yards in Canada?

Mr. RUTLEDGE: You are speaking now of commercial shipbuilding, I assume?

Mr. SMITH: Yes. The Crosby Company has had two fishing vessels built recently in Fort William.

Mr. RUTLEDGE: Yes. They have done commercial ship construction in great lakes yards which might have gone elsewhere. The only element of your question on which I hesitate is in respect of whether or not tenders were invited from coast to coast. I do not know whether or not they competed with the west coast or the maritimes.

Mr. SMITH: One was built for Shell Oil which is on the west coast now?

Mr. RUTLEDGE: Yes.

Mr. MCNULTY: Would Mr. Hunter tell us whether his department purchases for any department other than the Department of National Defence at any time?

Mr. HUNTER: Yes, we do. As a matter of fact, we have been directed by the government to plan for the purchasing for other government departments of what is known as "common-use" items. At the present time we are doing certain buying for the Department of Citizenship and Immigration, and for the Department of Public Works, in respect of the Alaska highway. We have taken up any such problems which are known to be coming up in the next year or two.

Mr. MCNULTY: In respect of the matter of tenders and the receiving of them, do you take the date the tenders are mailed, or the date they are received in your office as the closing date?

Mr. HUNTER: It is the date on which they are received in our office. In the past days I believe we used the mailing date, but that was changed some time ago.

Mr. MCNULTY: What was the reason for the change?

Mr. HUNTER: I think the reason was that it was found there could be errors through not getting a proper stamping. Apparently there were other cases which led to argument, so we finally decided that it would be the date on which tenders were received in our department.

Mr. MCNULTY: Did you at any time make any allowance for a person who mails these tenders by registered mail within a reasonable amount of time, whereas they would normally arrive at your office at the closing date? Is there any allowance made?

Mr. HUNTER: Cases of this kind have occurred. We decided that we could not allow those cases and we had to be really strict about the date on which we received the tenders in our office, for whatever reason.

Mr. FANE: Mr. Chairman, many of the questions that I had have been answered, but I am going to go ahead and ask the questions because I have them written out. My first question is: What is the policy in regard to refits, repairs and conversion of naval ships regarding the allocation or calling of tenders?

According to various answers and to Mr. Hunter's presentation this morning, certain tenders are made by direct allocation and in other cases tenders are called. In both these instances are firm prices established when a contract is awarded, or are they allowed at a later date when ships have been fully examined?

My second question is: On what basis are these allocations made to the various shipyards?

Mr. RUTLEDGE: Mr. Chairman, the first question is when do we allocate and when do we compete for the refit or repair of a vessel. You can compete only in those circumstances where you are able to define, with sufficient accuracy or with sufficient precision the nature of the requirement. Where there is more than one yard that has the facilities of a type that will accommodate the ship and where the matter is not one of immediate urgency you can afford the time and repair of that vessel that is involved in competition. However, I would not like to leave you with the idea that in refits where there have been a great many competitions, allocations have generally been the rule. You then asked what sort of considerations govern you in allocation.

If a decision has been taken to allocate, what factors do you recognize in coming to such a decision on where you are going to allocate? They consist of factors such as the facilities that are needed? Just to take one illustration, there are only a few yards in Canada which could possibly refit *Bonaventure*, the aircraft carrier, because of the docking facilities which are needed. Another factor is the navy's—if it be a defence vessel—preparedness to have the ship moved; and there are many occasions when you cannot move a vessel for a variety of circumstances. There may be an emergency, and the vessel may have suffered heavy weather damage, and you cannot take it all over the place. Some vessels are of such a size that you could not move them out of the Halifax area. For example, we presently have *Assiniboine* undergoing modification in the Halifax Shipyards. We have no alternative but to allocate it there, because generally, some work must be done by the navy and the dockyard personnel, and it happens that the dockyard and the ship yard are adjacent to one another so we must recognize that factor when allocating there.

Another factor may be climate. We cannot move a ship up the St. Lawrence in midwinter. We must recognize factors of that type; or we might get a ship into one area, knowing very well that when it was scheduled for delivery, we could not move it because of icing conditions. In other words, there is a variety of technical considerations concerned, partly with the ship, partly with the nature of the requirements, and partly with the facilities of the yard. And then the Canadian Maritime Commission makes recommendations, having allowed for all these factors, in trying to introduce elements of equity and reasonableness in respect of an element of choice. But it is an imperfect world, and we cannot please everybody.

You had a third question: it was, how do we price a job when we allocate it? There is no problem of course if we have competition because then the onus is on the firms which are competing to give you a price which will likely be translated into a firm price. So there is no problem there. Allocation is however a more difficult problem. Ten years ago it was our practice simply

to award these contracts on the basis of actual costs plus a profit. But today we have become more sophisticated. We take the ship, first of all, and we estimate the price of the requirements ourselves, prior to the availability of the ship. We get an official treasury board authority based on a particular order of cost. The allocation has been made by the Canadian Maritime Commission. Funds have been supplied by the Department of National Defence. We put all these things together, specifying the ship's cost, the ship's requirements, and the proposed shipyard. The first thing in ship repair is to open up the vessel to examine what has to be done in the light of these specifications we have supplied, and in terms of any additional work which may only be revealed when we open up the machinery spaces. Then we send a negotiating team into the yard and we negotiate a price. The type of contract may vary with the type of ship and with the job.

To answer another part of your question, we have known work and certain elements of unknown work, so we negotiate the price when the job has been opened up. It is impossible to define what up to that time was unknown work. Then, there is considered our labour factor, which is one of the elements of cost. That is on a target basis. We come to a figure for man hours and we negotiate that. We introduce a target figure in that connection, and if the shipbuilder beats that he gets a bonus; if he does not he loses any profit on the excess. In respect of overhead we negotiate a firm price and, where possible, we negotiate a firm or target price in respect of materials.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I would like to know how you deal with "supplementaries" when you let a contract to build a vessel.

This is my question. When you let a contract to build a vessel the amount is set, for the *Provider* for example, at $16,000,000. Meanwhile, because of defective plans and errors, changes have to be made which increase the cost. This is something that happens quite frequently. How do you determine with the contractors the extra cost you will have to pay over and above the original contract?

(*Text*)

Mr. RUTLEDGE: Your question had reference to how we price work which may be additional to the original firm price?

Mr. LESSARD (*Lac-Saint-Jean*): Exactly.

Mr. RUTLEDGE: We negotiate every item that is extra and we establish a firm price for that. In the case of the *Provider*, which you mentioned as an illustration, we had 75 design changes which occurred during the history of the ship. Every one of those was priced individually. The negotiating officer examines the material, the labour content and the overhead application, as well as the fee, and obtains an exact figure in that respect, which must be authorized by treasury board.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): A lot of mistakes seem to happen along the way. Are the people who design the vessels partly to blame when mistakes are discovered? Is someone responsible?

(*Text*)

Mr. RUTLEDGE: You asked if errors occur is anyone responsible. You used the word "design". It is difficult to generalize on this. If the Chairman would permit, let us take the case of the *Provider* in order to illustrate.

The CHAIRMAN: We will call it ship "X".

Mr. RUTLEDGE: The *Provider* was designed by the navy. By and large it is a very good ship. Certain defects occurred which could be attributed to design problems. Since the design had been established, and since the shipbuilder conformed to that design, you could not hold the shipbuilder responsible for that design flaw, if that is what it was.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I agree with that but in the private industry when those responsible for a department order a piece of machinery the people who make a mistake in their specifications have to bear the responsibility. It seems to me that in the case of government departments, the navy, the army or the air force, no one has the sense of responsibility found in industry. It would seem that there are no penalties for mistakes in those government departments. It would seem that mistakes are allowed at any level of administration without any penalties being imposed. Could you give us a few examples of cases where government administrators have been penalized or dismissed on account of poor administration?

(*Text*)

Mr. RUTLEDGE: The only example I could give you right at the moment is that if the government is suspicious that there has been an error, they could call the responsible official before a parliamentary committee such as this, and he must defend himself. Whether or not you would call that a sanction, I do not know. In answer to the question whether somebody is fired for an error, I could not answer that.

Mr. LESSARD (*Lac-Saint-Jean*): Thank you, Mr. Rutledge. I will return to Mr. Hunter.

(*Translation*)

After reading the two documents, Mr. Drury's and yours, this morning it seems to me the two documents are based on a very definite opinion. In the first place you felt you had to justify the existence of your department, as for some time now the members of this committee have entertained some doubts about its existence, and as a gentleman here has just said you are here to answer that. Could you tell me who prepared the documents that were read to us last Tuesday and again today? I am not asking you to name the person but to tell me what his responsibility is at your departmental level.

The VICE CHAIRMAN: I should state here, Mr. Lessard, that the minister read his document and he himself is responsible for it. Mr. Hunter read his document and he himself is responsible for it.

(*Text*)

Mr. MATHESON: On a matter of privilege, surely—

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I will accept your reply since I must accept it. I have one particular complaint. On page 5 of Mr. Hunter's document it is stated, in the second paragraph, and I quote:

> I can assure the members of your committee that scrupulous care is taken in handling tenders.

This is what I am complaining about. Are your regional divisions in the habit of splitting the tenders they receive so as to let two contracts with regard to one tender? For example plumbing material was ordered recently. There was a fairly long list and three people were asked to tender, all three tendered and two received the tender that had been split up, but the third got nothing. Is

your department in the habit of splitting tenders so as to choose the lowest prices submitted by two tenderers or to obtain the lowest possible price leaving out the third tenderer whose prices were lower than those of the other two? I am quoting that as an example because I had some doubt as in the Saguenay area, or in my own county, the suppliers called in very rarely get an order and I have had a look at their tenders in order to compare the figures. I have found that their tenders were sometimes the lowest and yet they did not get the order. I am now awaiting a report on an investigation I asked your department to carry out in this particular case, but I have not yet had an answer.

(*Text*)

Mr. HUNTER: The general policy of the department, when a long list of supplies is ordered, is that if it makes sense, any order can be broken up, if certain contractors quote low on certain items. But I would qualify it by saying that it happens only if it makes sense. There are cases where out of a hundred items there is possibly one item on which a contractor is lower than another. In this case we would look at it, if it were a small item, and see if it made sense. That would happen if the other two contractors had, let us say, 50 or 49 items on which they were low and the order was being split on that basis. However, generally speaking, and this is one of the terms of our contract, we do not guarantee that we will place the whole order on the list of items on which the tenders are called, with any one contractor. In fact we say the opposite, that we will possibly accept only part of the order.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I would like to add something here. When someone has a contract to service a military station, a radar station for example, when he has finished the job do you normally call on him again to tender or do you just accept someone else without asking him to do so.

(*Text*)

Mr. HUNTER: I would say, Mr. Chairman, that the general answer to that is that the result of any previous tender has no bearing upon any future tender, other than if the contractor had ignored our invitations to tender. But if they advise us that they are not able to fulfil the requirement, they will certainly stay on our tender list and they are continually given the chance to bid, as long as we feel they are interested.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I have given you concrete examples to the effect that that is not done. Your orders here are wonderful. What is said on paper is wonderful but what is actually done is sometimes very different. One last question. On page 6, in the last paragraph, it is stated that your documents are all in French, in English or in the two languages. I have noticed that all the forms sent to our local suppliers are only in English. Could that be rectified?

(*Text*)

Mr. HUNTER: Mr. Chairman, we are at present rectifying it. This may be within, let us say, the last year or so; but when I checked recently I found that all suppliers have been given an opportunity, and were asked if they wished their invitations to tender to be in French or in English, because I understand at certain times specifications lose in translation. Certain firms prefer them to be in English, the language in which they were originally drawn. But unless I am wrong, we like to have all tenders drawn up in both French and English.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): One last question in another connection. Has any thought been given recently to amalgamating the two departments, that is, Defence and Defence Production, in order to reduce the administration. Has the department studied the matter? Do you think it would increase efficiency?

(*Text*)

Mr. HUNTER: Mr. Chairman, perhaps I am a little biased, but I really did not think this would be more efficient, since we have personnel who have been with us since formation of the Department of Defence Production, and in some cases they came from the old department of Munitions and Supply. One reason perhaps there has not been much consideration to integrating the Department of Defence Production with the Department of National Defence is that we recently have been charged with the job of buying for all government departments. So it seemed to be better that we should remain as a separate buying agency, when we take over the buying for the rest of the Government.

The VICE CHAIRMAN: I have left on my list Mr. MacRae and Mr. Martineau. Since the meeting for next Tuesday is scheduled for one of the economic papers for discussion regarding defence spending, and since everything is tied up for that study, we might meet again after Orders of the Day. This committee room is available, and our Reporting Staff and Officials are available, so we might conclude it at that time.

Mr. MARTINEAU: I have been consulting with Mr. MacRae and I find that his question would take about a minute, and my question as well. Perhaps it might be better if we finished with the original line of questioning now.

Mr. WINCH: I have two questions based on the original specifications.

The VICE CHAIRMAN: All right. This afternoon we shall continue with whatever questioning is available, and it may be that Mr. Lloyd and the others would be coming back, when I think we could continue with the Bobcat and everything else. The meeting is now recessed until immediately after orders of the day.

The committee recessed.

The VICE CHAIRMAN: We have a quorum. The point raised by Mr. Winch this morning was in connection with the Canadian Commercial Corporation, and Mr. Hunter tells me that he has some information he would like to give which would help to prepare the questioning which will take place at a later date with the Minister and the President of Canadian Commercial Corporation. It is a very short statement.

Mr. HUNTER: Thank you. I would like to say a word about the apparent conflict which Mr. Winch mentioned this morning concerning information we tabled showing 84 people on the payroll of Canadian Commercial Corporation as of March 31, 1964, on the directive from Mr. Drury to the staff of Canadian Commercial Corporation dated October 28, 1963. I would like to mention that our information shows within the period the staff of the Canadian Commercial Corporation, and in fact their duties, had been transferred to the direction of the Department of Defence Production as of the date of October 28, 1963. Mr. Drury directed it. It was really a matter of finances that they were left on the payroll till March 31, 1964. The money had been set up in Canadian Commercial Corporation, in fact it was in their funds and paid out of surplus of prior years, which was just about used up. Since the funds were there, they were left on that payroll.

One further remark about the legality of what we have done: we have the confirmation of the deputy minister of justice who, acting as the deputy attorney

general, has confirmed that the action we took in accordance with Mr. Drury's directive was in fact legal, in his opinion.

Mr. WINCH: Now is the time to ask a question about the statement just made. How many are now under the direct authority of the President and General Manager of Canadian Commercial Corporation, or should we wait until we have them appear before us?

The VICE CHAIRMAN: I think we should wait until we have them.

Mr. WINCH: All right. I think that my contention has been conclusively proven by Mr. Hunter's statement.

The VICE CHAIRMAN: This morning when reaching the stage of questioning, I had Mr. MacRae next on the list.

Mr. MACRAE: My first question is directed to Mr. Hunter, and it requires statistics. I would be perfectly agreeable if I could get them later on in the form of a letter; I mean statistics of the total purchases for goods and services in the last calendar year, which the minister told us was $745,019,000. I would like to have the portion which was purchased by competitive tender, and that portion which was purchased by other than tender both as to dollars and as to percentage. As I said, I appreciate the fact that perhaps the witness would not have that information here, and I would be perfectly willing to receive it later on in the form of a letter if he does not happen to have it here.

Mr. HUNTER: We have certain information, but I am not sure if it corresponds to the period you are asking about. I would like to ask Mr. Keith about it.

Mr. R. M. KEITH (*Financial adviser to the department*): We have some statistical information here, for the calendar years 1963-1964, but it deals primarily with purchases on behalf of the Department of National Defence only, and we do not have the total information that you have asked for. It would have to be obtained for you.

Mr. MACRAE: You say it can be obtained?

Mr. KEITH: Yes.

Mr. MACRAE: The reason I used that date was that the minister used the calendar year 1963, and it was that figure of $754 million odd. I thought you could pass your statistics on to me.

Mr. KEITH: It may be that we would have to use the government fiscal year.

Mr. MACRAE: That would be all right. My second question will not take too long, but I shall have to lay a very brief groundwork for it. It concerns those manufacturers in Atlantic Canada and in western Canada who tender for supplies to the Department of National Defence specifically through this department. Let us take a tender calling for shoes for the armed forces; let us say it is for 50,000 pairs of shoes. The tenders would be called for from a great many firms. The shoes must be delivered to Cobourg, Ontario, which is an army depot for the Department of National Defence. Then following that the shoes would be distributed to such places as Camp Gagetown in New Brunswick.

Now, in the maritimes we have a number of excellent firms who can only compete if they can do something a bit better, and if people are willing to pay a bit more for it. The shoe firm would have to pare down its price so low that in the final analysis it would lose out, but they want to keep their men working. Part of the cost of the shoes was in transportation. As I understand it, a firm manufacturing like this must pay the cost of transportation from Fredericton —and I use that just as an example—to Cobourg, Ontario. These shoes are then turned around and shipped back to Fredericton. But in the meantime the cost of the transportation is paid by the manufacturer, and even if it is only 10

cents a pair, there may be only a 10 cent differential between the maritime and the Ontario firms near Cobourg, where there may be half a dozen competitors.

I would like to ask this question. Perhaps Mr. Erskine would be more aware of it than anyone else. How much thought has been given to doing something about that in these last half dozen years, or over this last period of time? What is happening to our manufacturers in the maritimes and in western Canada vis-à-vis firms in central Canada?

Mr. ERSKINE: Actually, Mr. MacRae, on the subject of requirements, there are also air force requirements, and they have a depot at Moncton, and at Downsview and at Namao, Alberta. The navy has a depot at Esquimalt on the west coast, and at Montreal. This problem has been of concern to my knowledge for 20 years. I mean this question of transportation. Actually, the supply line problem is such that unfortunately they are not able to standardize the kinds or sizes in clothing. They must use this more or less centralized distribution system to make a maximum use of quantities of personal wearing apparel. I understand the Department of National Defence in its integration program is looking into this whole problem of distribution and supply, so that gradually we may expect some improvement as far as that is concerned, although I have seen many anomalies in which eastern firms have been low bidders on shipments out to Namao, Alberta, but have lost the business on contracts being shipped to Moncton. We actually have a record of it. I do not think I can say what the military supply line will be immediately, but I do know they are looking into it.

Mr. MACRAE: You say it is being considered as a particular problem?

Mr. ERSKINE: Yes.

Mr. MACRAE: Thank you.

Mr. MCMILLAN: I would like to follow up what Mr. MacLean said today. He said: "I understand that our troops in France got their provisions and food and other supplies through the British". What provision is made for our troops in Cyprus and the Middle East? Do you buy for them over here, and ship it to them?

Mr. HUNTER: I shall have to ask Mr. Erskine again. You asked if the United Kingdom government supplies the Canadian army in Germany. The United States Air Force supplies our air division in France, and two wings in Germany. Mr. Erksine will be able to give you the details.

Mr. ERSKINE: I am sorry, but I do not know personally. However, I believe that buying for the United Nations forces is done under an arrangement with the United Nations for all the troops in that particular area. But just which country has the major responsibility for the food, I do not know. We would have to check it back through the United Nations agreement.

The VICE CHAIRMAN: Are there any further questions on the first round? I know Mr. Winch wishes to ask a question on the second round.

Mr. WINCH: Yes, before we get to the details which will follow on the Bobcat.

The VICE CHAIRMAN: One moment, will you please leave that alone for a moment.

Mr. WINCH: Before we do that, there are two questions I would like to ask based on the presentation made by Mr. Hunter this morning. The first question is this: I would like to have from Mr. Hunter the fullest possible clarification he can give us about the authority of the Department of Defence Production to make purchases. May I make it clear as to what I am after. Up until the recent change in your authority and requirements you dealt mostly in purchases for the Department of National Defence. Now, when you receive from the Department of National Defence certain information about requirements, do you automatically have to follow exactly what is said, or do you have

any authority to question it? May I give you briefly two illustrations in order to outline what I have in mind: one will take us back 20 years. As a member of the subcommittee on public accounts we discovered illustration No. 1. During the last war on the purchase of a supply of table linen for officers' messes, there was bought not only enough to take care of them from then until now, but there is still enough for the anticipated requirements of another 35 years.

And here is another one which is more recent. Let us take air force uniforms. These were obtained via the Department of Defence Production. Within recent weeks the air force as a division of national defence has found that not only did they have enough air force tunics for their present requirements for many years ahead, but even on the basis of years ahead they had 12,000 tunics more than they required. The Department of Defence Production bought these air force tunics from Eaton's at a cost of $6.50 each; they are turned over to Crown Assets Disposal Corporation and the highest tender which they received was 17 cents per tunic, and even that was withdrawn as being too high.

Now you see what I am after. This is an expenditure of the taxpayer's money, and it is done through the purchasing agency of the Department of Defence Production. If you go back to the last war, I gave you an illustration of their buying enough linen to last for 50 years for officers' messes. We go into the question of tunics and we find they have 12,000 declared complete surplus which were bought at $6.50, and they cannot even sell them at 17 cents each. These are two examples, and I could give you a great many more. As the Department of Defence Production have you any authority whatsoever to question the amount of material that you may be asked to purchase? Is there any protection of the taxpayer? If you think something is wrong, or is being supplied for 50 years ahead, can you do anything about it?

Mr. HUNTER: Yes, there are a number of things we can do about it. In the first place, if we see a requisition coming forward which we feel is out of line, we can question them to see if they have made a mistake. I do not feel we have any authority to tell them what they must do, but we would certainly question them. And to get back to the subject that you mention of controls on purchasing following official requisition: in the first instance, they have to make up an early estimate of requirements in great detail; they go through about three screenings from various units up to the head of the line of the particular service, and then they are subject to a senior screening review in the Department of National Defence, which we are asked to attend. If it is the air force, I would ask the director of the aircraft division who is more acquainted with the problem to attend; so we have this second chance to raise any point or objection we might have.

The next step in the Department of National Defence is that they must go before the Treasury Board who again after a senior screening internally have a further check made through the staff of the treasury board as to what they want and how much clothing they want, and the detailed requirements if any. Then there is a further check when they go before the Treasury Board, composed of ministers; and I suppose there is a further check when they appear on the floor of the House. This, I think, is really a pretty good screening of their current requirements. I think that funds in national defence are probably watched a lot more closely than perhaps they were some years ago. There seems to be less money to be voted, and things are kept more under control. So I do not really feel there are the problems now that there might have been, when you speak of 20 years ago.

Mr. WINCH: You have no explanation beyond your authority of how, as a department, they would have purchased enough table linen to last for 50 years?

Mr. HUNTER: I do not think we would do it in the first place.

Mr. WINCH: You mean when it was bought?

Mr. HUNTER: As a matter of fact, it may have been purchased 20 years ago, but I do not think it could happen now.

Mr. WINCH: All right. Could you give me any information on how you got 12,000 surplus air force tunics which cost $6.50, when you cannot sell them for 17 cents apiece now?

Mr. HUNTER: These very well could have been tunics of a considerably different colour than the type of tunic that they decided to use several years ago.

Mr. WINCH: They are using the same tunic right now.

Mr. HUNTER: If this is so, then I am afraid I cannot explain how it would happen.

Mr. WINCH: Do you not think it rather unusual to have 12,000 surplus tunics that cost $6.50 apiece?

Mr. HUNTER: I would have to know more about why they were surplus.

Mr. WINCH: They were declared surplus by the Department of Defence Production. Do you have any information on this subject?

Mr. HUNTER: They could have been purchased any time during the last five years, and I would not guarantee that our screening would narrow it down to 12,000 uniforms over five years.

Mr. WINCH: So basically you cannot challenge the orders which are given to you?

Mr. HUNTER: You say we cannot challenge them; if we felt them to be out of line for any reason, we would question them, if not challenge them.

Mr. WINCH: Under your procedures now do you have a method of a closer check-up on whether what you have been asked to buy is actually required? Do you now have to make a closer check-up so that matters of this kind cannot happen again?

Mr. HUNTER: No, we do not. I think it is felt that there are enough of these other controls which I mentioned which would catch any error of size. You ask about their happening now. We are going to be in a much more difficult position, when we buy for all the government in the next several years, and we have made it a point that we are not a control agency, but that we are there to buy what the various government departments want. We leave the methods of control up to the Treasury Board, and we are prepared to do the things required of us: they must explain to Treasury Board when they get the money in the first place.

Mr. WINCH: That is exactly what I am after. You just said that as the Department of Defence Production you are there to buy what other departments want, be it right or wrong.

Mr. HUNTER: That is so, but if things appear to be incorrect, we would discuss it with them and ask them if it was in order, because we have had from 20 to 30 years experience in buying ourselves; we have a pretty good idea of what is required, whereas people in the services do change from time to time, and mistakes are perhaps made more easily by those people probably than by those who have been doing this type of thing for 20 years or more.

Mr. WINCH: May I ask one more question: Do you feel that you have any responsibility in the department as such, when evidence came up before the committee that in one year the Department of National Defence has turned over around $33 million of surplus goods to the crown to be sold for only a few thousand dollars. Did you feel any responsibility to investigate the matter when this came up about two months ago?

Mr. HUNTER: I certainly did. I happen to be the vice president of Crown Assets Disposal Corporation, and I happened to know they were mainly aircraft

parts. So I asked our aircraft branch to check into it, and come up with the reason why this sort of thing would happen. These parts were largely for aircraft being phased out of the inventory of the R.C.A.F.; and after looking at it, it did not seem to our aircraft people—who were more familar with the spares which you have to have to keep aircraft in the air—to be too far out of line. But I admit that it sounds like a lot of money.

Mr. WINCH: It sounds like a lot.

Mr. HUNTER: Yes, but I do not think the total figures were too far out of line.

Mr. WINCH: On page 2, in the first paragraph and second sentence you say:

> It is our departmental policy to buy, wherever possible, at firm prices obtained as a result of invitations to tender issued to those known suppliers who have given evidence of ability to carry out the contract.

May I ask Mr. Hunter if he could give us some idea of what the phrase "known suppliers" means? And before I put that question may I ask him how long he has been deputy minister?

Mr. HUNTER: I was appointed in 1962.

Mr. WINCH: You mean within the department?

Mr. HUNTER: Yes, and I was assistant deputy minister for the previous eight years.

Mr. WINCH: I think I may direct my question to you: Would you give us an understanding of what "know suppliers" means? And will you be kind enough to tell this committee whether you include in that term of known suppliers any lists from the government or from party sources to the effect that they are to be invited to tender or will be given any preference? Would you be kind enough to give us a truthful answer to that question?

Mr. HUNTER: I can give you my answer without any hesitation. We have only one set of source lists, and they are the people whom the directors of our branches feel are competent to supply defence materiel.

Mr. WINCH: You say to your knowledge the Department of Defence Production in all its aspects has never been given any list outside of what you yourself know of, as to those that should be invited to tender, or to be given a preference?

Mr. HUNTER: That is right.

Mr. WINCH: Will you now tell us then what is meant by "known suppliers"?

Mr. HUNTER: By "known suppliers", we mean the suppliers of whom we are aware, either through their bringing themselves to our attention, or our having known of them through having operated in the predecessor departments which go back to about 1938, I would say, and anyone who is asked to be added to this list in the meantime. In other words, they are all known suppliers who are capable of meeting the requirements, which are mentioned above, to supply materials. That is what is meant by "known suppliers."

Mr. WINCH: Do you send tenders to all and invite them to tender, or do you only select persons or companies for certain materials that you want?

Mr. HUNTER: On the head office requirements, which are roughly all those over $10,000, it is my understanding—and I can check this with my departmental secretary, who is here—that we send them to all people on the lists.

The VICE CHAIRMAN: Are those all the questions on the general statement? If so, very well. We had circulated to us two statements of fact or summaries. One concerning H.M.C.S. *Provider,* and the other concerns the *Bobcat* program.

For the purposes of the record I would accept a motion that these two summaries be printed as part of the proceedings to appear right at this stage. Mr. Lloyd moves it and Mr. Fane seconds it. The motion is agreed to.

The statement is as follows:

"HMCS" PROVIDER

As a preface to a discussion of the costs associated with the construction contract for the *Provider,* several points should be highlighted:

(1) The *Provider* is a combination tanker and supply vessel of approximately 22,000 tons displacement intended to replenish stores, both solids and liquid (fuel), in ships at sea. Transfer of solids is to be achieved by suspending a travelling platform on lines strung between the provisioning and receiving vessels. Transfer of liquids takes place through flexible hoses suspended in the same manner.

(2) In September, 1958, the government was informed that the estimated cost of the *Provider* was likely to be $16,875,000. In addition, the then minister of national defence, in his white paper of April 1959, stated that the cost of the *Provider* was estimated at $16,000,000.

(3) The cabinet, on June 25, 1959, advised that a contractor was to be selected on a competitive tender basis. Six companies tendered and Davie Shipbuilding Company Ltd. was the lowest bidder. Treasury board authorized the contract with Davie Shipbuilding on August 17, 1960 and completion was scheduled for July 31, 1963. Final acceptance took place on November 29, 1963.

(4) It was the first major contract in the history of naval shipbuilding in Canada that was awarded on a competitive firm price basis. The industry in question had advanced from cost plus to incentive contracts but not to competitive ones.

(5) The *Provider* was a "first of its kind" and as such had certain development characteristics. In deciding that this requirement would be procured on the basis of competitive tenders, it was recognized that any error in calculating the cost of certain of the development aspects of the program could prove extremely damaging to the successful tenderer.

(6) Therefore, to ensure effective, honest competition, prospective contractors were asked to tender on known requirements, so that all would quote on the same basis, segregating and excluding those aspects of the program which were still in the process of being defined or could not be calculated accurately. These included escalation on labour and materials, depot spares and some additional "on board" spares, construction and materials requirements, design changes and sales tax.

(7) It is most important to note that at least nominal provision was made at the outset for every item mentioned in (6) above. They were included in the original submission for contract approval from treasury board and every step taken was done so with full knowledge of its implications and with prior authority from treasury board.

To be specific, the original submission for contractual authority which was approved by Treasury Board on August 17, 1960, covered:

Basic competitive tender quotation	$11,040,960
Preliminary estimate of sales tax	1,300,000
Preliminary estimate of depot spares, etc.	557,665
Preliminary estimate of construction and materials requirements	870,000
	$13,768,625

The treasury board also noted that there would have to be provision for escalation costs on labour and materials, which is normal in the shipbuilding industry, especially for a program of this duration. Treasury board authorized the acceptance of this provision from the outset but a specific estimate of the probable cost was not projected. Over the 3½ years of construction, there was escalation at the rate of 3.4 per cent of the original contract price per year for a total amount of $1,300,000.

Therefore the original treasury board authority actually comprised:

Basic competitive tender price	$11,040,960	
Preliminary estimate of sales tax	1,300,000	
Preliminary estimate of depot spares, etc.	557,665	
Preliminary estimate of construction and materials requirements	870,000	
Escalation on labour and materials	1,300,000	(EST)
Total amount covered by original treasury board authority	$15,068,625	
Final estimated construction contract price	16,382,904	
Difference	$ 1,314,279	

The difference of $1,314,279 between the actual original treasury board authority and the final estimated construction contract price is comprised of two elements:

(1) More definitive cost figures for sales tax, depot spares, etc. and construction and material requirements, the preliminary estimates of which were included in the original treasury board authority.

(2) Incorporation of design changes raised by the RCN during the course of program, which accounted for only 4.5 per cent of the original contract price.

Recapitulation of the Difference of $1,314,279

Additional sales tax	$ 237,510	(EST)
Additional depot spares, etc.	248,335	(EST)
Additional construction and materials requirements	324,944	
Design changes	503,490	
	$ 1,314,279	

Summary of the "Bobcat" Program

The development program for the Canadian army amphibious armoured tracked vehicle (Bobcat) was initiated formally in February, 1954, and was terminated in December, 1963, The design responsibility for the program rested with the Canadian army, except in the latter stages when it was transferred to the contractor. The army was also responsible for project management except in the last phase when this was transferred to an interdepartmental steering committee. The Department of Defence Production was responsible for the negotiation and administration of the contracts associated with the program.

The following is a brief history of the four stages of the "Bobcat" program and the problems that were encountered.

Initial Concept

In February, 1954, the Department of Defence Production received a contract demand from the Canadian army for the development and production of one mild steel prototype infantry carrier. Eight firms showed an interest in this project and a survey of their facilities and staff took place, with the result that a contract was placed in August, 1954, with Leyland Motors, Montreal, Quebec. (This company was later absorbed by the Canadian Car Co. Ltd., Montreal, Quebec). A vehicle was delivered to the army for evaluation purposes in the early fall of 1956 and the final cost of this contract was $1,010,856.34.

Family Concept Phase I

During the latter stages of the development of the aforementioned personnel carrier, the army decided that a common chassis could be developed that would permit the mounting of other types of bodies. As a result, the next stage in the development of the "Bobcat" involved the entry into a contract with Canadian Car Co. Ltd. in November, 1956, for the development of three prototype mild steel light tracked vehicles in accordance with this new "family concept". A sum of approximately one million dollars was provided for this purpose. However, during the course of this contract there were a number of development difficulties which required the provision of additional funding.

The three vehicles called for in the contract, namely, two personnel carriers and one self-propelled howitzer, were taken over by the army in October, 1958, for testing. The cost of this phase of the program was $1,933,670.38.

Family Concept Phase II

The third part of the program involved the entry into a contract with Canadian Car Co. Ltd. in April, 1959, for the purpose of assessing engineering tests on the three prototype vehicles, producing an armoured hull and designing and manufacturing an unarmoured load carrier body. In June of 1959, the company advised that a study of the work required by the army indicated that the funding for this phase of the program should be approximately $1,260,000. During the course of this phase, there were certain changes in the specified work, including the production of a complete armoured personnel carrier instead of an armoured hull, which was originally intended to be mounted on a modified chassis. It was estimated that these changes would require additional funding of approximately $644,000, and these funds were made available.

The master armoured personnel carrier and the unarmoured load carrier body which had been developed were delivered to the army in October, 1960, and the final cost of this phase amounted to $1,968,883.

Family Concept Phase III

The results of field tests indicated that the personnel carrier would have to undergo some product improvement before it could be accepted for field use. However, in order for the program to proceed in an orderly fashion, it was decided to enter into contract with Canadian Car Co. Ltd. in March, 1960. This contract called for a product improvement program and a pilot production run of twenty vehicles. It was decided that on completion of pilot production, tenders would be invited for the production of 500 "Bobcats" at an estimated cost of $25,000,000. The contract for product improvement and pilot production had a ceiling price of 3.7 million dollars, and an interdepartmental steering committee was established to monitor the program. For this phase, the design responsibility for the program was transferred from the Canadian army to the company.

The first vehicle commenced its trials in February, 1963, and certain defects which required further engineering study became apparent. As a result, the proof trial was not completed until July. A number of major faults showed up in the vehicle and it was returned for further work.

Hawker-Siddeley, who had taken over from Canadian Car, advised that it had overspent the contract by approximately 1.5 million dollars and that an additional expenditure of 1.4 million dollars would be required to complete the program.

Contract Termination

Since the proof trial faults could not be corrected without a great deal of redesign and development work and because vehicles could be obtained more cheaply from other sources, the contract was terminated in December, 1963. The terminated contract was audited by audit services branch of the treasury, and it was determined that there was an aggregate over-expenditure of $1,642,149. The contractor asked to be reimbursed $799,612, or approximately 50% of the over-expenditure.

The Department of Defence Production was of the opinion that the over-expenditure was due to the fact that the changes to be made in the prototype vehicle required major redesign and development rather than product improvement. In consequence, the actual work involved in producing the twenty vehicles turned out to be much more extensive than was originally anticipated.

The department therefore recommended that a sum of $735,621 be paid the contractor in full settlement of his request. This was approved by the Government.

The following is a summary of the costs incurred in the "Bobcat" program and the projected expenditures in thousands of dollars:

	$000's Projected Expenditure	Costs Incurred
1. Initial development	$ 1,011	$ 1,011
2. Family concept phase I	1,933	1,933
3. Family concept phase II	1,969	1,969
4. Family concept phase III	3,600	3,600
5. Production	21,300 (Est)	—
6. Termination costs	—	736
TOTAL	$ 29,813	$ 9,249

Summary Of Reasons For The Cancellation Of The "Bobcat" Program

It is difficult to determine precisely all the various factors which resulted in the termination of the "Bobcat" program. However, in retrospect, it can be said with some certainty that the following were contributing factors:—

1. The scope of the program was not adequately defined at the early stages of the program and consequently the program was inadequately financed. The necessity of re-funding and re-approval at various stages throughout the program resulted in lengthy delays.
2. The design requirements for the Bobcat were altered a number of times over the course of the program which necessitated changes in the development of the vehicle although this is not abnormal in a development program and was probably not a major consideration in the ultimate lack of success.
3. Similar developments were undertaken in the United Kingdom and in the United States and at the time of cancellation of the Bobcat fully operational vehicles were available from the U.S. at considerably less than the projected cost of the Bobcat and with much earlier delivery for Canadian army use. The United States vehicle had by that time also been adopted by a number of other NATO countries.

Conclusions

The experience of the Bobcat has brought home the following points:—

1. Agreements with our allies for the delegation of responsibility for the development of complex military items backed up, if possible, by supply arrangements are highly desirable. However, the Bobcat project was not of an order of magnitude or complexity that would preclude Canada undertaking it alone.
2. The full scope of development projects should be determined early in the program and adequate financing provided.
3. It is essential that once a decision is made to proceed development projects should be pursued with determination to achieve the desired result expeditiously.
4. While all development projects involve risk, this risk is greatly increased by hesitation and delay in the course of the project. Review procedures are necessary during the course of the project to ensure that it is stopped with minimum loss if changed circumstances warrant this. However, these reviews must be designed to avoid delaying progress while the risks remain acceptable.

Now, we have the *Provider*, which is current. I suggest that you ask your questions, if any, in regard to H.M.C.S. *Provider*. Perhaps to assist the committee we might ask Mr. Rutledge to summarize or give us any additional comments he may wish to make in order to introduce this subject. But the statements will appear, as I have said, in the minutes right at this point.

Mr. RUTLEDGE: Mr. Chairman, I think the *Provider* is under discussion at the present time principally because of the apparent difference in prices between the basic tender of $11,040,960, and the final estimated cost of construction of $16,382,904. That I understand is the central issue, and it quite understandably is of immediate interest to this committee. In a few general observations on this subject I would reaffirm what has been stated in the

summary, that the government was informed before the contract was awarded and before construction commenced that the order of cost was likely to be in excess of $16 million. That was the best estimate and the best order of cost we could obtain at that particular time, and our final figures correspond quite accurately to it. The difference between the two prices quite clearly defined here is basically—if I might express it this way—that the original competitive price was exclusive of sales tax.

We had reasons for excluding sales tax, because the contract was going to require approximately 3½ years, and it might be subject to variations in sales tax. We had a recent ruling at the time from the Department of National Revenue that certain costs would be excluded from sales tax, such as drawing office costs, so for the purposes of comparison it seemed that we should exclude sales tax of 11 per cent as a factor here. It was estimated at $1,300,000.

The second major contributing factor to this difference in price was our acceptance of the principle of escalation of labour and materials. We did not seek escalation, and when we called for competitive tenders we clearly indicated in our invitation that we would give preference to those shipbuilders who were able to quote a firm price without any escalation. Every shipbuilder came in with escalation as a factor. But we did not allow unlimited escalation. We put a ceiling on escalation of 10 per cent. But, in addition, escalation was justified, because of the extended period of the contract during a time of rising prices in both labour and materials.

Those two factors account for a major element in the difference. The only third point I would make is that at all times we informed the treasury board, and by implication the government, of the cost factors that were involved. I would also like to point out that at no stage did the contract become a cost reimbursement contract. If there were any extra charges in the form of design changes, design modifications, or anything of that sort, we priced that out individually, separately, and arrived at a firm price for them.

Mr. LLOYD: Mr. Rutledge, do you have figures for all the tenders? How do they compare with each other?

Mr. RUTLEDGE: We received six quotations, and comparing them on the same basis, that is sales tax exclusive and on the basis of the employment of Canadian components wherever possible—this was a very important factor—they varied from the price of the Davie Shipbuilding, which is available to you, to the top price of $17,666,076.

Mr. LLOYD: What was the next lowest tender?

Mr. RUTLEDGE: The next lowest tender, on this basis of employing Canadian components, was $11,793,750.

Mr. WINCH: Was a comparison between the lowest tender, the highest tender and the final price obtained?

Mr. RUTLEDGE: Would you please repeat that question?

Mr. WINCH: What was the relationship between the highest price you received and the final price that you are paying for the *Provider*?

Mr. RUTLEDGE: The highest price that was quoted is in excess of the final price we are paying.

Mr. WINCH: That is the final price? What do you pay now?

Mr. RUTLEDGE: It is $16,382,904.

Mr. WINCH: Five million dollars over the bid?

Mr. HARKNESS: It was $5 million over the bid because you left out the sales tax, and so on. The final cost of course includes the sales tax.

Mr. LLOYD: I take it for granted that Mr. Rutledge, in the course of the questioning that I was pursuing, will point out the fact that presumably

there was a fair comparison of the work to be done when you called for tenders, and that the figures you are giving me, ranging from $11 million to $17 million, were comparing apples with apples, but when you compared the total cost of $17 million with the final cost of the Davie's contract—$16 million, I believe—you have added to the work program from the original tender a number of modifications, changes in designs, and additions in sales tax?

Mr. RUTLEDGE: It would be quite unfair to compare the highest quoted price, the $17 million, with the final price because, as you very well pointed out, Mr. Lloyd, originally we were comparing apples, but now you have introduced in the final price other factors that would have affected equally the highest tender.

In other words, the sales tax was exclusive right across, so that you would have to add a sales tax, you would have to add to that figure escalation, you would have to add to that figure design changes and modifications which would have applied irrespective of what shipbuilder you would be dealing with.

Mr. LLOYD: So that these additional costs would have had to be added to the $17 million had you awarded the contract to the higher bidder for some unknown reason? Is that what you are saying?

Mr. RUTLEDGE: I tried to clean up the point that Mr. Winch raised. To get back to my line of questioning, you said the second tender was $11 million.

Mr. RUTLEDGE: The second tender on that basis.

Mr. LLOYD: On the basic competitive tender quotation?

Mr. RUTLEDGE: We have a second tender here that is even lower than that, and I will introduce it simply for the purpose of clarity. We had another figure here, somewhat lower than the one I quoted, but it was taken on a high foreign content, and this was one of the factors in our assessment of tenders. We were attempting to achieve a high Canadian content in this vessel. It was the type of vessel that lent itself to a high Canadian content. The very basic characteristics of the ship were such that you could use a high percentage of Canadian components. We rejected that second lowest bid not on the grounds of price but rather on the grounds of foreign content.

Mr. LLOYD: So then I gather you had three quotations which were in the same general range or level of prices, did you not?

Mr. RUTLEDGE: Yes.

Mr. LLOYD: Forget the Canadian content for the moment; in terms of dollars, in reply to your call for tenders to the basic competitive tender quotations, you received three quotations between $11 million and $12 million?

Mr. RUTLEDGE: As a matter of fact, this is the sort of information that could be very simply tabled. It is rather difficult to identify this by word of mouth. Practically every company quoted on two bases, the high foreign content and the high Canadian content. On those who had a high Canadian content we had two bids in the $11 million area. Where they went to foreign content, the same bidders quoted on foreign content and were also low on that.

Mr. LLOYD: The significance of your answers here I think is that this is an illustration of how you weighed in your awards in your consideration of the production of Canadian industry, and in your awards you paid due regard to the volume of production of Canadian industry which would be involved in this contract. So that a judgment or decision on your part may result in an award to a higher tendered bid because of the fact it had a relatively high quantity of Canadian content. Has this happened very often?

Mr. RUTLEDGE: The key word that you used was "judgment". You must exercise judgment in matters of this type. I do not think we would have any right to pay a grossly extravagant premium for the privilege of buying a ship that was totally Canadian in content. Several of the conditions we set forth

in the use of Canadian components were these: there must be reasonable competition; a shipbuilder must be able to acquire reasonable competition in the supply of those components. In other words, no company must be set up in this business simply to produce a component for this ship. We were not trying to create new facilities, we were simply trying to take advantage of the existing facilities with reasonable economy.

Mr. LLOYD: Surely then the Canadian content does weigh in your conclusions? It might very well be that you would have a tender for $14 million with a very high degree of Canadian content, and another bidder with a very high degree of foreign content bidding $2 million lower, but if the factors were heavy enough you might very well award the contract to the $14 million bidder because in your consideration you gave weight to the volume of production in the Canadian economy.

Mr. RUTLEDGE: That is correct.

Mr. LLOYD: When you say you have competitive tenders you try, in your method of calling for bids, to bring out comparable factors as much as you can so as to make them as competitive as you can, but there is a high degree of judgment that has to take place in awarding a contract, is there not?

Mr. RUTLEDGE: On a matter such as you have used for purposes of illustration, that is the question of Canadian content, there is. However, there is also a very high degree of technical judgment that must be exercised by the Department of National Defence. I would just like to illustrate the complexity of this. A ship of the size of the *Provider* would unquestionably have about 10,000 classes of items in it. I am not just counting individual items, I said "classes of items". So you have a highly complex situation there, the assessment of which involves the exercise of the very finest technical judgment by the Department of National Defence.

Mr. LLOYD: Mr. Chairman, I am mindful of your admonition this morning and I apologize if I was too lengthy. I would like to put one more question to the witness on the matter of design which I believe was raised by Mr. Lessard this morning. I want to follow that up, and then I will be finished. On the question of design, as it applies to the *Provider*, could no ship be found elsewhere in the world that had been tested, designed, proven, and that could have met the requirement of the navy? Did we design this ship completely in Canada?

Mr. RUTLEDGE: Yes, the ship was completely designed in Canada and the design agent was the navy.

Mr. LLOYD: Does your department feel that an economy could be effected by making a good search around the world for a kind of ship already in operation, the specifications of which you could obtain?

Mr. RUTLEDGE: I would say that we are in this instance somewhat victims of the description of the ship as a tanker I suppose there are very few commercial vessels that are easier to construct than a tanker, but a tanker takes liquid materials from point X to point Y. This particular job here cannot be compared with a commercial tanker. If all you were looking for were a tanker, you would not have to search the world, you would find plenty right here. This ship is a tanker but it also has warship characteristics. It is designed to increase the effectiveness of the fleet. It was to sail at 20 knots, it was to have a range of 5,000 miles; it was to be able in high seas to replenish a destroyer escort both with solid supplies and with liquid supplies, and the requirements of this ship are not likely to be met by any commercial vessel because there is not that sort of need in the commercial world.

Mr. LLOYD: This leads me to this conclusion then, Mr. Rutledge, that Canada had decided it needed a ship of a particular design, unique among ships of other navies in the world.

Mr. RUTLEDGE: No design agent conceives of a ship that is going to be unique in every respect. The navy made use of the knowledge of the state of the art, of the new scientific information available from other navies, et cetera. It has undoubtedly ended up with a ship that was somewhat unique. A further pursuit of this line of questioning on your part places me, sir, in a rather difficult position because this question can only be answered properly by the Department of National Defence.

Mr. LLOYD: I will finish my questioning by asking you who designed the *Provider*, naval architects, the Department of National Defence, or were outside consultants engaged?

Mr. RUTLEDGE: The Department of National Defence.

Mr. MACLEAN (*Queens*): My first question is for clarification. Is the figure of $16,875,000 in paragraph 2 comparable to the final figure given on page 2, that is the final estimated construction contract price?

Mr. RUTLEDGE: It appears to be comparable. I might interpret a little bit more the first figure for you.

Mr. MACLEAN (*Queens*): Does the first figure include the sales tax and all these additions or does it not?

Mr. RUTLEDGE: I really do not know. This is a figure that the Department of National Defence used at the time when they were seeking authority. We did not come into the picture at this point. It is hardly an estimate. It is what we would refer to as an order of cost. I do not really know the precise composition of that order of cost.

Mr. MACLEAN (*Queens*): I am trying to lead into my question which is related to this. I would like you to give us from your experience a contrast or comparison of the estimated cost in this case and the final cost on one hand as compared to the estimated cost and the final cost of shipbuilding programs which have been allotted rather than given by tender. I would like this in general terms, of course.

Mr. RUTLEDGE: Currently we have a body of data available to us that we can estimate with reasonable precision. On our last destroyer escort program, referred to as the MacKenzie class, we estimated the final costs at approximately $25 million. If you go back to naval shipbuilding as recently as 10 years ago, you will find that the original estimate bore very little relationship to the final cost. The differences are rather staggering, but that I think is a matter of public record. However, today these estimates are done with a degree of precision, and I would like to believe a professional competence that we did not have then. Ten years ago we had an industry that had little experience in sophisticated naval shipbuilding, and I would go so far as to say that the navy did not have that quality of experience that it does today.

Mr. MACLEAN (*Queens*): So that these initial estimated costs in recent years have been more realistic than they were then?

Mr. RUTLEDGE: Quite realistic.

Mr. MACLEAN (*Queens*): I have one more question of more specific nature with regard to shipbuilding. When a contract is given to a shipyard and to suppliers of components—I am thinking of winches, pumps and this sort of thing—if some of this machinery, before the ship is taken over, fails, breaks down or is unsuitable, who is responsible for making good the cost in this case, is it the manufacturer or the shipyard? I am thinking of a case where

some machine perhaps broke down during the trials. It is a very costly procedure to bring the ship back to the shipyard. The total cost involved might be many times greater than the cost of the item in question. What is the element of guarantee of performance?

Mr. RUTLEDGE: First of all, those components are under warranty.

Mr. MACLEAN (*Queens*): By the manufacturer?

Mr. RUTLEDGE: Yes. If you would like me to relate your question to the *Provider*, I can do so.

Mr. WINCH: Bring in the winches. God help us, they broke down on the *Provider*.

Mr. LLOYD: Pumps and winches.

Mr. RUTLEDGE: I certainly will not resist that question. The manufacturer did produce in this instance winch pumps which were defective. The crown had no contract with that specific component manufacturer. It had a contract with the shipbuilder. Therefore our relationship was entirely with the shipbuilder, in this instance Davie shipbuilding. It was found these winch pumps were defective. They, in turn, must deal with the manufacturer. The manufacturer in this instance had to replace them at his own expense in their entirety. I will not be surprised if the Department of National Defence does not submit a claim to us for costs, inconvenience, and so forth, associated with the very replacement of those winch pumps, but basically the manufacturer is responsible, and in this instance he replaced them.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): When we were discussing the matter on the Defence Committee and particularly when we visited the *Provider* at Halifax our attention was somehow drawn to the fact that it was not entirely satisfactory, that some part was faulty, and that changes would probably have to be made in the near future. Is it a fact that your department was asked to make certain changes to the *Provider* and if so has the contract for those changes been actually let to a firm?

(*Text*)

Mr. RUTLEDGE: Yes, sir. Let me make one general statement first of all. There have been difficulties with the *Provider*, but the navy at the present time referred to this as a very good ship. We had three cases of what you might call follow on contracts in the case of the *Provider*: one involved the modification of one of the existing replenishment stations, another, the remote control for some winches, and a third, the introduction of flow stabilizers. Contracts were let in the first case to Lucas Rotax, in the second to Vickers Sperry and in the third to Saint John Shipbuilding Company.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): Do you have an approximate idea of the cost of these changes at this time?

(*Text*)

Mr. RUTLEDGE: In the first case, in the case of the modification of the existing replenishment station, approximately $30,000. In the second case, with Vickers Sperry, $13,000—I am giving you approximate figures—and in the third case I can be quite precise, $32,864.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): And this covers all the changes the Navy has asked for or suggested are necessary for this material.

(*Text*)

Mr. RUTLEDGE: These are all that they have designed and these are all for which we contracted. For me to say that that is all would be wrong. They have encountered some difficulty with vibration of the ship at certain levels. This finds its origin in a problem in design. It may be that the flow stabilizers will correct that. On the other hand it may be that it would be necessary to introduce a new design of propeller, but this we do not know as yet. I simply want to leave with you the idea that there could be further follow-on contracts, but nothing has been asked of us at the present time.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): One last question. The vessel was to be ready in July 1963 and I suppose the Navy took it over in November of that year, that is, about 4 or 5 months later. During that time when I suppose the vessel underwent certain tests at sea, were any changes made to it by the builders, Davie Ship Building, during that time?

(*Text*)

Mr. RUTLEDGE: Yes, and that is customary. When construction of a ship is completed, the ship goes on contractor's sea trials. He must prove the ship at that point, and it is normal that many deficiencies will be found at that stage. That is a very normal thing, and the owners or owners' representatives are on board during that period. A large group of experts go to sea on the vessel and examine every piece of equipment to ensure that it meets their standards. Following that, you have a conference of the various parties, the contractor, the Department of Defence Production, and the navy who play at that stage the role of the inspectors, and the owners. Many times the component manufacturers are also present. You end up with what is called a deficiency list of items that must be corrected, and if possible those are corrected before the ship is accepted. If not, they are listed as deficiencies and it is the responsibility of the shipbuilder to correct them, and the acceptance of the ship is subject to these exceptions.

Mr. WINCH: Mr. Chairman, all questions except one have been asked by Mr. MacLean. I can only go by newspaper reports but what is the basis of disagreement between your department and the ship-builder over the amount of $700,000? Is it usual to have a disagreement like this on an amount of $700,000 after you have a contract and you pick up all the extras?

Mr. RUTLEDGE: The amount seems very large.

Mr. WINCH: In comparison with the original contract of $11 million, it does seem rather large.

Mr. RUTLEDGE: Yes, quite. It is substantial. It is difficult to say that it is common, because you are reminded that this is the first case on which we could engage in a major shipbuilding exercise on a competitive price basis. If you are not on a firm price basis, then the type of difference is somewhat obscured. If a contractor is going to be paid on the basis of costs and reimbursement, then this does not occur. It is in the tight firm price situation that this occurs. We really have not pre-judged this. The contractor said that he lost this money on the job, and I suppose, in general terms, he made application for what is an *ex gratia* payment for something beyond the terms of the contract. We have assessed the evidence thus far, but more evidence is required, and a final judgement of this would be made by a committee of my colleagues, under the chairmanship of Mr. Huck, this committee would go into the merits of it. But we are not in a position to reach any final conclusions at this time about it at all.

Mr. WINCH: May I change my question a little bit, again going on the basis of newspaper reports. From what I have heard, I understand that this was a firm contract with the Davie Shipbuilding Company.

Mr. RUTLEDGE: That is right.

Mr. WINCH: And that you have paid or authorized to be paid all extras for changes in addition to the firm contract bid.

Mr. RUTLEDGE: That is right.

Mr. WINCH: Now, I understand from what you say that basically they are asking for $700,000 from your department, or from the federal treasury because they made a mistake in their firm contract bid, and lost $700,000. Are we not getting down to fundamentals?

Mr. RUTLEDGE: You are certainly getting down to fundamentals, sir.

Mr. WINCH: Is it customary for your department to make up a loss to a company after it has accepted a firm contract bid?

Mr. RUTLEDGE: Oh, no. But I would like to leave two thoughts with you: First of all, for us to make any adjustment in this contract simply on the basis of a loss, if there was any justification for it, we simply would not do it. However, in a situation as complex as this there may be circumstances in support of which they wish to bring in evidence where errors have occurred which they feel are beyond their responsibility as contractors. But for the contract itself no, no, we do not go around saying such a thing. To do so would completely deny the entire principle of a competitive and firm price contract. If you could do that, you would simply have a cost reimbursement contract. There would be no risk.

Mr. WINCH: That is the exact point I would like to point out, if I could, there was a firm contract bid.

Mr. RUTLEDGE: That is right.

Mr. WINCH: And you paid that firm contract?

Mr. RUTLEDGE: Yes.

Mr. WINCH: Your department did, and you have already paid all the extras for changes?

Mr. RUTLEDGE: Yes.

Mr. WINCH: Then on what basis, if you paid both, is consideration being given to another $700,000 payment as requested by the firm itself?

Mr. RUTLEDGE: First of all, we have not given final consideration to it. This is a sort of matter that is almost semijudicial, I might say, in the exercise of judgment here. This matter has not been presented as yet to the contract settlement committee. All the evidence has not been supplied of a type which in any way convinces us about it. However, there may be some evidence of which we are not aware.

Possibly I might illustrate a type of situation which might create such a thing. I mentioned that this ship has warship characteristics; although it is characteristically a commercial ship, it does possess warship characteristics as well.

Mr. WINCH: It is not armoured?

Mr. RUTLEDGE: No, but it is a structure of a type that is built to standards which are very exacting, and a type which would be characteristic of warship construction. It is much more difficult to build it than to build an ordinary commercial vessel. There you do not have the penetrating inspection that is required in a ship of this type that is going to become part of our defence effort. One of the factors that is very important to the contractor is the degree of the inspection to which he is going to be exposed. It is extremely costly to

the contractor if he is exposed to that exacting degree of inspection, when he did not provide for it in the first place, and when he had not allowed for it in his price.

Mr. WINCH: May I get this clear: are you saying that when a firm contract is let for a ship which is to have warship characteristics, there are cases that do not provide for this type of inspection in the contract?

Mr. RUTLEDGE: We choose to believe that there is. I was attempting to illustrate a type of situation where you could have a variation, and I was using it purely for the purposes of illustration. But there is a lot of judgment to be exercised. Let us suppose the navy required that the ships go out for a month of sea trials, and he has allowed for only two weeks of sea trials. Three weeks difference in the cost of this ship would be a tremendous amount. I do not want to bind myself in a position which endorses added cost, but I simply want to illustrate for you that it could occur.

The VICE CHAIRMAN: I think there is a great deal of speculation and presumption concerning a case which is almost of quasi judicial character. I do not think it would serve the ends of anybody to speculate further about it.

Mr. WINCH: Except that as a member of this committee I am permitted to get down to the details of the situation, and why it arose.

The VICE CHAIRMAN: I know, but you are not judging it because you have not got the evidence, and neither has the department.

Mr. WINCH: I have one more question. This is the first time in 11 years when I have been able to get an answer to a question which has to do with shipbuilding. May I proceed now to the *Provider* situation. When calling tenders for a ship like *Provider,* or for anything else as between eastern shipyards and western shipyards, we are told that there is greater efficiency and better workmanship in the west, but you also have the transportation of steel to think about. What is your line of demarcation as between the west and the east on a ship like this, when you have expenses going one way, and efficiency going the other? I know this is the sort of question which is asked in the house all the time, but how do you decide it as between east and west?

Mr. RUTLEDGE: May I paraphrase your question as follows: how can we determine whether there is a differential between costs in the east and the west? Let us relate this to *Provider.* I think it is fair to say that it is almost impossible to come up with a reasonable formula which would be fair in that instance, because you have factors on both sides. I am sure you would agree with me that the climate on the west coast cannot be compared with that of the east, and this in turn means that western construction is more favourable.

Mr. WINCH: I cannot ask you any nasty questions from now on.

The VICE-CHAIRMAN: I would like to point out that it is now 10 minutes to 5 and we would like to cover the Bobcat program as well.

Mr. MACLEAN: I have one brief question for Mr. Hunter of a general nature. The statement has been made that the department is the common purchasing agent for common user items for all departments. May I ask him if ships are considered as common user items?

Mr. HUNTER: They have not been considered so, as yet. The government has chosen to treat shipbuilding and ship construction as a separate item, and Mr. Rutledge is chairman of the interdepartmental committee having to do with recommendations to the government on what is to be done.

The VICE-CHAIRMAN: That concludes the questioning on *Provider.*

Mr. LLOYD: I have one question.

The VICE-CHAIRMAN: You are mindful of the time.

Mr. LLOYD: It was mentioned in the evidence that a stabilizer has been installed on *Provider*, and that the tender for it had been awarded to a Saint John firm, yet the difference in tenders was only $100. Earlier you said that the cost of transporting vessels from one base to another was of importance. Some questions were raised in the brief about the recovery of cost. For what reason was this tender awarded to Saint John in spite of the fact that there was only a difference of $100 between the two tenders?

Mr. RUTLEDGE: I do not recall the other factor, but there was a factor which was left open, that if such and such a thing should happen, there would be extra costs and so on. They introduced a factor in there, and it was this that placed us in the position of not being able to accept their tender with confidence.

Mr. LLOYD: Was it not to do with realignment of a shaft?

Mr. RUTLEDGE: Yes.

Mr. LLOYD: Thank you.

The VICE-CHAIRMAN: Now we are on the Bobcat program.

Mr. WINCH: Yes, may I be permitted to ask a question?

The VICE-CHAIRMAN: Very well, Mr. Winch.

Mr. WINCH: This is basic in principle. May I start at the bottom of page 3, where you say:

> It is difficult to determine precisely all the various factors which resulted in the termination of the 'Bobcat Program'. However, in retrospect it can be said with some certainty that the following were contributing factors.

And then on page 4 they try to deal with the factors, and they reach certain conclusions. Personally, I do not think this is quite good enough for the committee. May we have a greater enlargement on exactly what is meant? Because when the Department of Defence Production goes into something which costs millions of dollars, and after the money is spent, the entire thing is cancelled, it says to this "It is difficult to determine precisely what happened."

The VICE-CHAIRMAN: You will appreciate that you have not got the Department of National Defence here, who were the people who decided to cancel it.

Mr. WINCH: No. I am asking the Department of Defence Production who were responsible for the contractual work. Are we not coming back to the point I raised before that if you are told to do something, then you have to proceed with it and let contracts, whether it be right or wrong. Is that correct?

Mr. ERSKINE: I think the point is that when we say it is difficult to determine, this was a design and research contract, and for the first phase of the contract the design responsibility rested with the Canadian army. Now we are not in a position to assess all the various factors that entered into the decisions made by the design team in the factories of the contractors that affected it(the design). I think it is a fair statement to say that it is difficult to determine precisely and to know in a general way many of the things that are now quite obvious and which led to the failure of this particular program. Design responsibility, when it is mixed up with quantity production, has always led to difficulty over many years. In the initial phase of the Bobcat, we were told to translate the design responsibility and place it with a contractor. We did so, and we got some results. Unfortunately, they were not too satisfactory, but it enabled a conclusion to be reached in a reasonable period of time.

Mr. WINCH: Perhaps I might put it this way, in view of the fact that we now have presented to us this brochure or summary of the Bobcat Program, we find on page 4 two important items: In the first three paragraphs we have set forth by the Department of Defence Production a definite statement, that the full scope of development projects should be determined early in the program and adequate financing provided. And then we have a conclusion. May I ask

whether or not a conclusion of the Department of Defence Production on the experience of the Bobcat was conveyed officially to the Department of National Defence?

Mr. HUNTER: If I might answer your question, Mr. Winch, when you say that these were conclusions of the Department of Defence Production, actually they were joint conclusions of the Department of National Defence with ourselves. We pointed out what we felt were the reasons for cancellation with our conclusions, and we passed them on to national defence and asked them for any comment. They made several comments, so I can say that these are joint conclusions reached by our two departments. I think there are a couple of important words at the bottom of page 4 where we say in the second last line —in retrospect—that while these are things which have happened, we would not let them happen again.

Mr. WINCH: I have one logical question arising from your answer; in view of this being a joint conclusion of your department along with national defence, are these conclusions being followed through, let us say, in connection with the hydrofoil project at Halifax which you have now undertaken?

Mr. HUNTER: I can say very definitely that we and the Department of National Defence have learned a lot from this development. I would like to confirm that this has been a lesson to both departments.

Mr. WINCH: May I take it then that, going to the Bobcat now, there was not—I would not say proper—but there was not collaboration with the United States and the United Kingdom. But since the United States is also working on the hydrofoil, you now have the degree of collaboration and co-operation, and that you will not lack that degree of co-operation that you suffered in respect of the Bobcat?

Mr. HUNTER: Our people, along with the Department of National Defence, have very carefully gone over all the developments in associated countries, such as the United States and the United Kingdom, and have assessed our plans and aims. We feel that we are taking full advantages of any experience that they have, while they, in turn, are following our developments. The concept that is being evolved here is one which is different from the United States concept, I understand. I do not know all the details of it, but it was very carefully assessed before we took any steps to go ahead with our plans.

The VICE-CHAIRMAN: The Chair has a question or two, but the Chair will defer to Mr. Lloyd.

Mr. LLOYD: My question is very short; it has to do with design, and the Department of National Defence. I believe the question was asked by Mr. Winch. When designs come to you for procurement procedures, which are followed by your department, do you have any responsibility on the question of designs? Are design instructions matters for your officers and the Department of National Defence?

Mr. HUNTER: In certain areas we have people whom we feel are quite competent to make comments and to argue points with national defence. I am not sure if in the shipbuilding branch we feel that we do this.

Mr. LLOYD: I am more concerned about general equipment and such a program as the Bobcat.

Mr. HUNTER: In the case of the Bobcat I can say that we certainly did not have a large mechanical transport group in 1954. We were dependant on the Department of National Defence who were the design authority. If we had had people who felt that they were competent to argue about the specifications and drawings that we were given when we started, I am sure that we would have used them. But I do not believe we had those people, because of the fact

that national defence were the design authority. I do not believe our records show that we did question them, because they were pretty vague and pretty general.

Mr. WINCH: Did you say that the plans of the Bobcat were vague and general when you got them?

Mr. HUNTER: Let me check on this with Mr. Erskine.

Mr. ERSKINE: I would say that at the beginning you will notice under the initial contract that we received a contract demand from the Canadian army for the development of a field infantry carrier. We went to those firms normally known to produce vehicles, and we asked them for their opinions on whether they would be interested in going ahead with this type of development. A number of them were interested, including the major motor car companies, and we got a list of the engineers that they had on their staff who would be prepared to be put on this work. It was research and development in design, but as I have said this was a concept emanating from the Department of National Defence.

Leyland Motors was actually picked because of the competence of its design staff. We were looking less for production than engineering capabilities in respect of a tracklaying vehicle, and they were the only people who had a staff which had had experience during world war II. That was the reason for the selection.

Mr. LLOYD: Mr. Hunter, would you advise the committee what staff and what organization you think you have today to prevent a repetition of the events which developed around the Bobcat?

Mr. HUNTER: Yes, I would like to say I feel that all branches of our department today, when compared with 1954, are definitely more capable of assessing the type of information of which you speak, than we were in 1954. The experience I mentioned that we have learned from this, plus the increased competence of our staff, I feel, should go a long way towards seeing to it that this type of thing did not happen again. I feel that there is also greater competence and greater awareness in national defence.

Mr. LLOYD: Program scheduling may reveal these slowdowns more readily today than it did in days gone by.

Mr. HUNTER: Exactly.

Mr. FANE: Mr. Lloyd's last question would have been my first one. But do you think that something like this is apt to happen again? My next question is on the Bobcat program, which cost a little over $39 million. Am I correct? This is shown on page 3?

Mr. HUNTER: No, sir.

Mr. FANE: It was nearly $30 million.

Mr. HUNTER: The projected expenditure is included for a production of 500 vehicles, but they cancelled it after only 20 prototype vehicles. The project cost was in the order of $9,249,000 as shown in the brief.

Mr. FANE: Were not some of the difficulties caused perhaps by a change in the company? You dealt with Leyland Motors of Montreal, and then you turned it over to Canadian Car Company. Would this not have increased the cost and the difficulty of getting a comparative prototype made?

Mr. HUNTER: I am not sure. I do not believe it did. Let me ask Mr. Erskine.

Mr. ERSKINE: I would say that it led probably to a delaying factor. But in fact it was the senior design men at Leyland who went out and continued with the work at Hawker-Siddeley; and then in the later stages they had a

very large team that they put to work on it, and they were thus able to accelerate the final phase of it. The costs were rather small until the time when they lost ground.

Mr. FANE: This final concept of the Bobcat was originally to be a personnel carrier. Do I understand that they wished to develop the project in a way whereby they could employ different bodies on the same type of chassis, and that it was difficult to get them into a different phase? I notice there is a self-propelled howitzer and other things, such as personnel characteristics.

Mr. ERSKINE: That is correct.

Mr. FANE: That is one of the developments which made it so difficult, I presume, to develop a satisfactory vehicle.

Mr. ERSKINE: I am not qualified to speak of the technical plan. It undoubtedly led to many complexities, because they were trying to develop a common chassis on which you could have many different types of bodies placed, and which could be used for a multiplicity of purposes.

Mr. FANE: I fail to understand why a satisfactory vehicle of this type could be developed in other countries but not in Canada. Surely to heavens we have available people who could develop something that could be strong enough and satisfactory enough in this country.

Mr. ERSKINE: Actually the vehicle we are buying to replace the Bobcat is one which we believe to be a single purpose vehicle. It is only an armoured personnel carrier, while what we were trying to develop was a multipurpose vehicle. I am sure that if we had had a lot of money at the beginning and a more competent staff we would have come up with a Canadian vehicle, but beyond that I am not prepared to speak.

Mr. FANE: If the concept of a multipurpose vehicle was what you had in mind originally, it would have been produced perhaps notwithstanding the difficulties which you experienced, because this was a family concept basis of one, two, and three, which were more or less afterthoughts.

Mr. ERSKINE: There was a change in the concept from what was originally a single purpose vehicle to try to get a family vehicle, and one on a common chassis.

Mr. FANE: I should have said two and three developments, instead of one, two and three.

Mr. ERSKINE: I think it was an evolution of this family concept idea. It certainly did bring with it many complexities.

Mr. LLOYD: This had nothing to do with the research work designated therein.

The VICE-CHAIRMAN: Could you tell the committee briefly in what particular detail the vehicle proved efficient? You used the words "since its control faults could not be corrected, whether this was in the tracking system, in the motor, or in the suspension, I do not know".

Mr. ERSKINE: I believe Mr. Hunter has a list of the major defects which developed in the final concept.

Mr. HUNTER: This was a question asked by the Chairman.

Mr. ERSKINE: This is the official list provided by the Department of National Defence after the 2,000 mile trial: the shock absorbers were defective, the track and lead wheels came off the rollers; the sprockets, lubrication system, and the suspension were faulty, and there was some difficulty with the roof hatch. These were the major defects, but there were many others.

Mr. WINCH: What worked?

Mr. ERSKINE: I believe the body was excellent.

Mr. WINCH: But the soul was dead!

Could I ask a couple of brief questions? Were the contracts for research and construction of the Bobcat cost plus contracts?

Mr. ERSKINE: The original ones were. The design responsibility was with the army and we did not have the specification as such.

Mr. WINCH: Could you clarify something for the committee because we were given to understand by the press and others that one reason for the collapse was a delay of work, intensification and interest by the contracting companies in proceeding with the job. Could you clarify that and tell us whether it is correct or incorrect?

Mr. ERSKINE: We tried to condense it here. You will find there were many reasons for the delays. A very significant one was lack of funds at all times practically throughout the entire program until we came to the final phase. The fact was that we were overcommitted and overspent so that work was delayed. I do not think the companies deliberately did any delaying of their own. They were very, very keen to go ahead with this because they all had hopes that they might probably participate in some production work at a later date.

Mr. WINCH: My final question is on the Bobcat. You let the contract so you had the greatest responsibility. We heard Mr. Hunter say that at that time you did not have a staff who were able to deal with this type of matter. To whom did the reports from the contracting firm come on their accomplishments, their problems, their progress or lack of it, to your department or to the Department of National Defence?

Mr. ERSKINE: The Department of National Defence had project officers resident in the plant who were the guides and mentors of the firm. They were the ones who told them what they wanted done, and the reports came from the company through the project officers to the development branch in the army.

Mr. WINCH: So the Department of National Defence knew exactly what was going on, and if the money was not available to carry on it was because of something that happened outside your department?

Mr. ERSKINE: We were not responsible for the funding.

The VICE-CHAIRMAN: Are there any more questions?

Thank you, gentlemen, this meeting will stand adjourned.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 22

TUESDAY, NOVEMBER 24, 1964

DEPARTMENT OF DEFENCE PRODUCTION
and on the
Special Paper Respecting
DEFENCE EXPENDITURE AND ITS INFLUENCE
ON THE CANADIAN ECONOMY

WITNESS:

The Honourable Charles M. Drury, Minister of Defence Production.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21566—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),	Langlois,	Martineau,
Béchard,	Laniel,	Matheson,
Brewin,	Lessard (*Lac-Saint-Jean*),	McMillan,
Deachman,	Lloyd,	McNulty,
Fane,	MacInnis,	Pilon,
Groos,	MacLean,	Smith,
Harkness,	MacRae,	Temple,
		Winch—24.

(Quorum 13)

E. W. Innes,

Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, November 24, 1964.
(36)

The Special Committee on Defence met at 11:20 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Deachman, Fane, Hahn, Harkness, Lambert, Laniel, Lessard (*Lac-Saint-Jean*), MacLean, MacRae, Martineau, McMillan, McNulty, Pilon, Smith and Winch—16.

In attendance: Honourable Charles M. Drury, Minister of Defence Production; Mr. G. W. Hunter, Deputy Minister; and Mr. William Huck, Assistant Deputy Minister.

The Committee proceeded to a consideration of a special paper entitled "Defence Expenditures and its Influence on the Canadian Economy".

Agreed,—That the above mentioned paper be included in the Committee's *Evidence* at a point in advance of the Committee's consideration thereon.

The Minister made a brief explanatory statement; and he was questioned on the contents of the paper under consideration, and on related matters.

The Chairman undertook to secure, if possible, certain information, respecting the costs of the armed forces, for inclusion in the record.

At 1:15 p.m. the Committee adjourned until 11:00 a.m. Thursday, November 26, 1964.

E. W. Innes,
Clerk of the Committee.

21566—1½

EVIDENCE

TUESDAY, November 24, 1964
11.20 a.m.

The CHAIRMAN: We have a quorum, gentlemen, so may we come to order.

I would like first to apologize to the Committee for the delay in starting. There was a committee in here ahead of us which did not finish on time. We have experienced this problem a couple of times recently so I will get in touch with the other Committee Chairmen and ask them to remember that we are scheduled to start at eleven o'clock.

We are dealing this morning with the paper which was prepared and issued to all of us some months ago. There are extra copies here. The paper is entitled "Defence Expenditures and its Influence on the Canadian Economy", and with the concurrence of the committee I would suggest its inclusion, at this point, in the evidence of today.

Agreed.

The paper follows:

DEFENCE EXPENDITURE AND ITS INFLUENCE ON THE CANADIAN ECONOMY

Prepared by Department of Defence Production
(April 1964)

CONTENT

Section	*Title*	*Page No.*
I	Introduction	1
II	Influence on the General Level of Business	2
III	Defence Spending and Industry	5
IV	The Regional Influence of Defence Spending	9
V	Defence Expenditure and Foreign Trade	10
VI	Possibilities and Problems	13

APPENDICES

Appendix A:—Indexes of Real Domestic Product for Selected Canadian Industry (1949=100) 1939 and 1944

Appendix B:—

Table I:—Canadian Defence Expenditures Against Prime Contracts Placed in Canada for Four Major Industries by Area, Fiscal Year 1960-1961

Table II:—Canadian Defence Expenditures Against Prime Contracts Placed in Canada for Four Major Industries by Area, Fiscal Year 1962-1963

Note: Page numbers appearing in the following brief indicate the original pagination.

Page 1

I INTRODUCTION

There are many conflicting views on the role played by defence spending in the Canadian economy. Much misunderstanding is caused by overstating one or more of the many influences of defence spending at the expense of others. For example, such spending has been variously described as: a beneficial stimulant; the prime mover of research; the major factor underlying industrial growth; the lifeblood of the economy; or even as an uneconomic and ruinous waste of irreplaceable resources. All of these things, and more are now or have at some time or other been true—in a relative, if not in an absolute sense.

To take the "wasteful" argument first, it must be admitted on social grounds that all defence spending is undesirable. But given the world as it is, and if we accept the basic premise that we must be prepared to take our part in defending ourselves against aggression and if, further, we adhere to the Canadian tradition of paying our own way, we must logically accept defence spending as a more or less regrettable necessity for the foreseeable future.

In considering the benefits of defence spending, while it is wrong to consider it as an essential element in economic activity without which we could not exist, there can be no doubt that, in our complex society, these expenditures have many ramifications which go far beyond the initial results of spending the defence budget. The effect of such spending on the economy as a whole cannot be overlooked, and decisions to vary the level, the direction and the timing of such expenditures are not to be taken lightly. For example, defence spending can, to cite but a few of its possibilities, provide an important stimulus to the level of business generally, or in a particular geographical region; reduce unemployment; maintain or advance technical competence; lead to important new inventions and improvements in the non-defence area; stimulate foreign trade, and increase capital investment.

The actual economic effect of defence spending will depend broadly on the general economic climate, the amount of defence money going into the economy, the direction of such spending, and the suddenness with which changes in the direction or the level of such spending occur. With respect to general economic climate, defence spending may, within limits, expand an under-utilized or stag-

Page 2

nant situation, sustain a declining one, or do considerable harm if suddenly forced on top of a fully expanded economy. Canada has had some experience with these variations. What happened during World War II and the Korean War demonstrates two quite different results.

This paper proposes only a describe in general terms some of the influences that defence spending has exerted on the Canadian economy in the recent past; to indicate its effect on some of our major industries; and to point to a few grave problems with which defence spending is inseparably linked. Certain conclusions will be drawn, but are only offered with the important reservation that no absolutely final, definitive judgments can be made in this area, where so much is subject to great and unforeseeable change.

II INFLUENCE ON THE GENERAL LEVEL OF BUSINESS

Consideration of the influence of defence expenditures on the general level of business is best approached by looking at what occurred during four time periods. These are 1939 to 1945, 1946 to 1949, 1950 to 1954 and the years 1955 to date. In the first period, the tremendous volume of spending, reaching more than a third of gross national product in 1944, was associated with world war II. Spending raised business activity from levels of under-employment to a

place where resources were in very short supply and prepared the ground for much of the post-war period of expansion and inflation. In the second period expenditures were of relatively little importance and the economy stood at high levels based on civilian demand. In the third period expenditures associated with the Korean War and the defence build-up were superimposed on an economy operating at a high level. They combined with other expansionary forces to create strong inflationary tendencies and to complicate Canada's balance of payments problems. In the years since 1955, although defence expenditures have been declining generally they often added an element of buoyancy in a situation where the general rate of economic growth was slower than in the earlier years.

1939-1945—In September 1939, Canada was still suffering from the great depression of the 1930's. Unemployment was estimated at no less than 11.4 per cent of the labour force. Gross national product stood at about 5.6 billion and there is evidence that considerable excess plant capacity existed. The problem was to mobilize these under-employed resources and set them to work to satisfy

Page 3

military as well as mounting civilian demands. In spite of the rapid increase in defence expenditure, it was not until late 1941 that the slack was taken up, and serious competition appeared between the needs of the armed forces and the demands of the civilian sector.

A new phase of the war economy began in 1942. By that time resources were fully employed and further increases in output for war purposes meant diverting resources for civilian needs. In 1944, government expenditures reached $5 billion, about 42 per cent of the nation's output, as contrasted with about 12 per cent in 1939. Civilian employment outside agriculture was up by about 600 thousand over 1939, while there were 780 thousand in the armed services compared with only nine thousand at the outbreak of war. Inflation was controlled mainly by diverting resources from business investment and by encouraging huge savings by consumers, as well as by direct price control.

1946-1949—While government expenditure was reduced sharply as the war drew to a close, accumulated civilian demand, both domestic and foreign, began to exert a strong influence. Gross national product in 1945, at $11.8 billion, was down only slightly from that of 1944. Between 1946 and 1959, defence expenditures remained small. At the low point reached in 1947 they amounted to about $200 million, a mere 1.7 per cent of gross national product.

Accumulated savings and the enormous pent-up demand, coupled with the needs of overseas countries whose industries had been destroyed by wartime operations, continued to carry the Canadian economy along at a high level. The period was one of heavy investment in plant and equipment and extensive use of credit. Demand far outstripped supply, putting strong upward pressure on Canadian prices. Hundreds of thousands of ex-servicemen were reintegrated into civilian life with unexpected ease. By 1949, with supply catching up to demand, gross national product had reached $16.3 billion and unemployment stood at 2.8 per cent of the labour force.

1950-1954—When the Korean war broke out in 1950, the situation was in marked contrast to 1939 as very little slack existed in the economy system. Accordingly, the effort to re-equip for defence purposes, which by 1953 still accounted for only 7.6 per cent of gross national product placed severe strains on the economy. Prices began to rise almost with the outbreak of the war. The federal government again had to introduce measures to divert scare resources

Page 4

to defence. Although the situation was stabilized sufficiently by 1952 to allow many controls to be relaxed, heavy demand continued throughout this period. This related to direct defence expenditures, business investment in plant, much

of which was for defence purposes, and continued high levels of domestic consumption and exports.

The close of the Korean war, and the consequent reduction in defence expenditures both here and abroad, was associated with one of the few periods of economic decline in the North American economy since 1939. The year 1954 was one of mild contraction in Canada. Gross national product, having reached $25 billion in 1953, dropped slightly to $24.87 billion the following year. Defence spending shaded off to 6.9 per cent of gross national product. Unemployment rose to 4.3 per cent of the labour force reflecting the general decline in business conditions.

1955-1963—In the period, spending on defence contributed decreasingly to the upward movement of business activity. Between 1955-1963 defence fell gradually from 6.5 per cent to 4.2 per cent of gross national product. In the years immediately following the 1954 recession the Canadian economy moved ahead rapidly largely as a result of the impetus provided by large scale business and government investment in capital assets. High personal incomes and a heavy backlog of housing needs initiated a high level of residential construction. In the latter years of the decade the rate of growth slowed somewhat in keeping with reduced activity in North America. In these latter years defence spending probably contributed an element of buoyancy in a situation of easing economic activity.

In summarizing the effect of defence spending on the general level of business in Canada in the past 25 years, it is difficult to avoid the conclusion that such spending has not only been occasionally of overwhelming importance, as in periods of actual warfare, but also has practically always been of some importance at other times in either preventing or cushioning the effect of a decline or inducing a mild increase in business activity. The only period when little impact was registered, the immediate postwar era, was one characterized by a quite extraordinary combination of circumstances wherein war-created shortages at home and abroad were associated with great purchasing power in the hands of consumers, and a war-swollen capacity to produce on the part of manufacturers.

Page 5

III DEFENCE SPENDING AND INDUSTRY

From the standpoint of industrial development, world war II was probably one of the most important periods in Canadian history. It was during the war years that this country emerged from its traditional position as a supplier of basic materials to become an industrialized state. The record of what was accomplished is impressive. Existing industry was converted and expanded, and many new industries were established. In a remarkably short time, Canada produced a large volume of complex war goods while at the same time sharply increasing the already large output of basic materials. The following quotation graphically depicts the extent of the war production effort:

> "From the automotive plants came over 700,000 mechanical transport vehicles and more than 50,000 armoured fighting vehicles; field, anti-aircraft and naval guns were produced to the number of more than 40,000; more than 1,700,000 small arms were manufactured; ammunitions, chemicals and explosives were produced in astronomical figures. From shipyards came escort ships, minesweepers, landing craft and cargo vessels; from aircraft factories combat, patrol and trainer aircraft. Instruments and signals equipment were produced having a value of $551,000,000. The output of steel, coal, lumber, metals and basic materials was substantially increased, the output of aluminum became greater than the peacetime production of the entire world. From the

general manufacturing industry came $1,558,000,000 worth of food and furnishings for military establishments and personal equipment for the services."[1]

Something of the extent of this industrial growth is illustrated by the data in Appendix A—*Indexes of Real Domestic Product for Selected Canadian Industries.* In this Appendix the Indexes are based on 1949=100. It will be noted that total gross domestic product increased from 60.2 in 1939 to 103.0 in 1944, the peak year of output. The increase occured largely in the manufacturing sector, and within that again, mainly in the durable goods industries. Some of these increases are quite remarkable. For example, the output of

Page 6

iron and steel products trebled, as did that of electrical apparatus and supplies (including electronics). The output of the transportation equipment industry, (including aircraft and ship-building) increased no less than six-fold.

Again defence expenditures influenced industrial growth during the 1950's and 1960's. Following the heightening tension in Europe and the start of the Korean War it became apparent that a defence preparedness program would be needed. Apart from the direct impact of defence orders for equipment and services the Canadian Government gave assistance to defences and defence supporting industries in order to build up productive capacity.

Among the programs employed were capital assistance and accelerated depreciation. Standby Crown-owned defence assets were procured and have been maintained and premiums allowed to secure Canadian produced goods. In the 1960's, following major decisions to participate with allies in production and development sharing programs considerable efforts were directed to establishing sources of component parts, competitive production capacity and to encourage research development.

Among the large Canadian manufacturing industries, aircraft, shipbuilding, and electronics have continued to be affected substantially by defence spending. The effect of such spending on the aircraft and shipbuilding industries is examined hereunder by an analysis of size, employment, and value of output as a function of annual expenditures against prime contracts for defence purposes. The electronics industry is discussed in more general terms.

Aircraft and Parts

The Canadian aircraft and parts industry, having reached a considerable size in World War II, declined in the immediate postwar era, but experienced a revival as a result of the Korean War and the general defence build-up in the 1950's. A high proportion of the industry's business represents defence. In 1950 the industry comprised 15 establishments, employing about 10,500. Factory shipments amounted to about $55 million.

By 1955, this industry had more than trebled in size. It then embraced 52 establishments with 33,000 employees engaged in turning out nearly $354 million worth of goods and services. In that year, expenditures on prime contracts under the aircraft programme amounted to no less than $448 million.

Page 7

For more recent years, the equivalent statistics for shipments are at roughly comparable levels. During 1961 and 1962, for example, annual shipments amounted to about $304 million and $352 million respectively. Defence spending under the aircraft programme in the same two years amounted to $231 million and $244 million, emphasizing the strong reliance of this industry on defence procurement. Aside from some commercial repair work, the produc-

[1] Page 7, Volume I, Kennedy, J. de N; *History of the Department of Munitions and Supply Canada in the Second World War.*

tion of reciprocating engines, and the construction of a few types of light aircraft, the industry is very closely tied to defence sales, both domestic and foreign.

It should be emphasized in connection with this industry that a considerable proportion of the defence work done has been for foreign sources, especially the United States. Sales of equipment in that market, stimulated in recent years by Defence Production Sharing arrangements, have given support to the industry despite reduced levels of Canadian procurement.

Shipbuilding

In the shipbuilding industry, defence spending has represented a somewhat smaller percentage of total business, for two reasons. First, the major firms in the industry often produce a range of products for sale to a more diversified market than is the case for aircraft and parts manufacturers. Secondly, although non-defence work has been relatively hard to get the industry has still managed to acquire some volume of new non-defence construction as well as commercial repair work.

Nevertheless, defence spending has been of great importance to the industry. Factory shipments by 79 establishments employing over 22,500 workers amounted to approximately $183 million in 1953. Defence spending in the same year was valued at about $99 million. In 1955, 70 establishments with 16,800 employees shipped $134 million worth of goods. Defence outlays for the year were $87 million. In 1961, shipments stood at $137 million from 63 establishments employing some 14,800 persons. Defence payments amounted to $52 million.

Electronics

Some material available allows a more general discussion of the electronics industry and its relationship to defence expenditures not possible with shipbuilding and aircraft and parts industries. The industry illustrates many of the problems associated with a highly specialized manufacturing industry in Canada and the influence exercised by defence expenditures.

Page 8

Broadly speaking the electronics industry in Canada is dominated by a number of large firms, in the main foreign owned, established basically to manufacture foreign designed and developed products for the Canadian market. The Canadian industry imports parts and equipments where demand is not sufficient to warrant production in this country at a price that will encourage purchasing by plants located in Canada. Plants located in Canada usually engage in less research and development work than associated companies in the heavily industrialized nations of the parent companies. The parent firms supply technical back-up activities to Canadian subsidiaries.

Canadian located manufacturers draw a very high portion of their business from the Canadian market and sometimes find it difficult to make much headway in the export field. This is probably a result of several factors including relatively high unit costs for short production runs, lack of unique products and sometimes of controls imposed by foreign associates. It is also because many companies have never geared for an appreciable export sales effort.

Demand for defence products has encouraged expansion of facilities and output. In some cases military requirements provided a basic demand on top of which profitable commercial sales could be developed. In other instances facilities have been established to produce components and parts for use in equipment, thereby widening the technical ability of the industry. The industry has shown a truly remarkable rate of growth since 1939, increasing by eighteen times. While a great deal of the demand came from non military sources,

defence has been and still is a very important influence. In recent years estimates suggested that defence absorbed about 20 to 25 per cent of Canadian supply while during the Korean War and World War II the evidence indicated a much higher proportion. Only in the 1946-1949 period has military demand been inconsiderable.

But it is not only in the important quantities of goods and services taken off the market that defence has contributed to growth. In addition it has supplied a vigorous drive to provide the most up-to-date equipment that ingenuity can devise. Abroad a considerable portion of research in the electronics field is financed by defence. The same is true in Canada. Defence-orientated research has been instrumental in providing companies in this country with a number of specialized items of production and sale.

Page 9

Finally, in the 1960's integration of Canadian and American efforts for defence of North America and the concomitant Defence Production Sharing program for economic co-operation have given the industry access to a very large U.S. market for defence goods. This in itself can provide the industry with some incentives for improvement of production capabilities, design and development capacity, and other aspects necessary to better its chances to trade abroad.

THE REGIONAL INFLUENCE OF DEFENCE SPENDING

Until recently, no material was available that permitted even a rough appraisal of the influence of defence procurement spending on particular Canadian regions. It has, of course, always been possible to isolate specific communities whose economic life centered around a military installation or a defence plant, and indicate some of the effects that a change in spending would have on the installation or the area. However, nothing was available that allowed any type of measurement on a broader basis.

Recently, however, data on expenditures against Canadian prime contracts, placed in Canada for procurement of goods and services, have been tabulated for four major industries. These are aircraft and parts; electronics; shipbuilding and instruments.

Even so, we do not have a complete picture. The material is restricted to Canadian prime contracts only: it takes no account of subsequent transfers of business between areas by sub-contracting for materials and parts; and it fails to allow for expenditures against goods and services bought from other industries. Within these limits, however, the data provide quantitative indications of the extent to which some economic areas benefit from Canadian defence expenditures in these four industries. Appendix "B" sets out this data for the fiscal years 1960-61 and 1962-63.

The heavily industrialized complexes of southern Ontario and Greater Montreal account for most of the business received. In 1960-61, of total expenditures for the four major industries of $277 million, the Montreal area obtained nearly $144 million. The province of Quebec received $150 million. Metropolitan Toronto got $74 million worth of this business, with a further $27 million to the rest of the province of Ontario, leaving only about $26 million for the rest

Page 10

of Canada. For 1962-63, the total was about $259 million. Shares by area were $117 million for Montreal, an additional $13 million for the remainder of the Province of Quebec, and $62 million and $31 million for Toronto and the rest of the Province of Ontario respectively. The remaining $36 million went to other areas of the country.

While the most highly industrialized areas of Canada perform most of the work on prime defence contracts, such expenditures are also of importance to the Maritimes, British Columbia, and the Winnipeg area. In the case of Winnipeg and British Columbia, the bulk of defence procurement is directed, respectively, to aircraft and shipbuilding. In the Maritimes, expenditures were made in the electronics, aircraft and shipbuilding industries.

V. DEFENCE EXPENDITURES FOR FOREIGN TRADE

Defence expenditures exercise a great influence on Canada's balance of trade and international payments. The dominant factors appears to be our trade with the U.S. and fluctuations therefore depend on U.S. decisions concerning strategy which influences spending in Canada.

Canada has held a favourable balance of payments position in relation to total expenditures on defence over the past five years. Foreign expenditures in Canada on the defence account have amounted to about $2.4 billion against Canadian expenditures abroad of about half as much. U.S. expenditures in Canada amounted to nearly $2.2 billion in contrast to Canadian expenditures in that country of about $0.7 billion. The highly favourable Canadian balance results in the main from U.S. expenditures to provide and maintain continental defence installations and to purchase uranium which the U.S. classifies as a defence requirement. That and continental defence expenditures in Canada by the U.S. account for most of the surplus in Canada's favour.

In contrast, the situation in relation to production of military hardware of the kind needed for modern forces is quite different from that favourable position. Canada normally imports more of such items than are sold abroad. However, under the Canada-United States Defence Production Sharing program U.S. procurement, which included F104 MAP and Caribou I aircraft, gave a small advantage to this country during the 1959 to 1963 period. If these orders were disregarded exports would stand perhaps $150 million lower revealing Canada's more normal position as a net importer of weapon systems.

Page 11

To review the background of current developments, three times since the outbreak of World War II defence expenditures have exercised an influence on our foreign trade great enough to warrant extraordinary government action. In 1939, the traditional trading pattern for Canada was to use her current account surpluses with Britain and other countries to finance her deficits with the U.S.A. World War II reduced supplies of convertible currencies from traditional markets while increasing imports from the United States. To finance these increases, comprising largely defence goods or plant intended for defence purposes, a variety of measures were taken, including the Hyde Park agreement of 1941. That arrangement provided for the sale of specialized war material by Canada to the U.S.A. to provide financing for Canadian imports.

In 1950 and 1951, Canada incurred substantial deficits on current account, due in large measure to investment demands, at least some of which originated with defence expenditures. The defence requirements of the Korean War were superimposed on the Canadian economy, then operating at close to capacity. This exerted inflationary pressures, and greatly increased imports. International buying took place on a large scale, in anticipation of shortages and price increases. The government had to act to control imports and to channel resources to essential industries.

Since then, the concepts of continental defence, weapons standardization and development and production sharing have accelerated the adoption by Canada of United States-type equipment. The complex nature of modern

weapons systems, their every high cost, rapid obsolescence, and the cost of carrying out of their research, development and production processes, have resulted, within the last few years, in increasing Canadian reliance on U.S. sources for research and development, and often the production of most major equipment. If the Canadian requirement was too small or too immediate to permit economic production in Canada, the equipment had to be purchased directly from the U.S.A. Where production in Canada was feasible, the cost of royalties and technical assistance as well as of components still meant an outflow of Canadian defence money to the U.S.A.

This trend meant that an increasing proportion of the Canadian defence dollar would go to U.S. industry. To offset such dependence on United States developed equipment, the Canada-United States defence production sharing program was initiated in 1959. This arrangement, while restricted to defence

Page 12

equipment, provided a significant degree of access for Canadian firms to the world's largest single market for highly-engineered goods.

In 1963, $142 million worth of U.S.A. defence production sharing business was placed with Canadian industry. Total purchases by the U.S.A. in Canada in this category during the first 5 full years of the programme amounted to $748 million. Against this, Canadian defence production sharing business placed in the U.S.A. amounted to $152 million in 1963, bringing the total for the 5 years to $678 million. The cumulative 5 year balance of such business between Canada and the U.S.A. was, accordingly, $70 million in Canada's favour. The long-term aim of the two countries, and one which is important to both, is to maintain a rough balance at increasing levels in their trade in defence production sharing items.

Generally speaking, sales of Canadian defence equipment abroad help to keep down the cost of the limited requirements of the Canadian Armed Forces; stimulate research and development in secondary industry; contribute to the standardization of military equipment among allied countries; and benefit the Canadian economy through their effect on such things as employment, the technological capability of industry, and our balance of payments. The success of the defence production sharing arrangement with the United States has led to recognition of the desirability of establishing comparable non-conflicting arrangements, of rather more limited scope, with other NATO countries.

The ability of Canadian industry to compete effectively with foreign industry for defence production business is, in the long run, dependent upon its ability to develop equipment and components that have the potential to meet some future military requirement, and to be able to produce items of required quality within necessary time limits at a competitive price. This means that Canadian manufacturers must be competitive with United States and other manufacturers of comparable products.

The Government has had to institute action to assist Canadian industry to become competitive. This action has taken many forms, among the most important of which, although small in money terms, is aid to industry to develop items that have some defence potential, to establish qualified sources for the production of components and equipment and to modernize Canadian defence industry.

Page 13

The benefits of this assistance are not limited to defence production. The resulting technological advances in the complex production operations of highly sophisticated weapons systems spread readily into other areas of Canadian production. The economy as a whole is made stronger and better able to make its way in world markets.

Several major problems are faced by Canada in attempting to reach export markets for manufactured goods. Two show up clearly in the defence industry field. The first is the effect of foreign ownership or control of much of this country's manufacturing industry. In the main foreign owned operations in Canadian secondary manufacturing were intended to produce for the Canadian market or to take advantage of British preferential tariff rates. This has resulted sometimes in a tendency to exclude Canadian plants from foreign markets or to inhibit Canadian development of unique products suitable for sale abroad. However, the Defence Production and Development Sharing Programs have been bringing about relaxations in these restrictions. Canadian subsidiaries are taking an increasing part in exports and in development for defence.

Secondly, some Canadian owned and controlled companies, never having developed extensive export programmes, appear unwilling to act aggressively in seeking foreign defence business. Provision of favourable circumstances for exporting can be done at the government level but individuals and firms must act to expand trade.

VI. POSSIBILITIES AND PROBLEMS

So much is background. It is part of the story of what defence expenditures have contributed to Canadian economic growth and development. The question that now has to be asked is how changing levels of spending may influence the future. The answer to this depends on what the future holds in the way of changes in the level of spending and on the direction in which expenditures are channelled. Will disturbed international conditions make a large increase in spending necessary or will a continued period of relative stability permit further reductions? What decisions on defence policy will be taken by the Government thereby affecting the way in which available funds are spent and influencing the business done by plants, industries and areas of the country?

Inasmuch as we cannot know what the future holds the best that can be offered here is to suggest the results of two or three possible courses of action. These must be based on assumptions as to spending levels and possible decisions

as to the direction spending may take. To do this, rather extreme positions have to be assumed, making the discussion perhaps a trifle academic. Nevertheless this approach has the advantage of sharply emphasizing problems inherent to some degree in less extreme situations that have characteristics similar to those stated.

First of all is it possible to visualize a sharp reduction in total funds available for defence? Such an action combined with the fact that major weapon systems are costly leads to the decision that they cannot be conceived, designed, developed and produced in Canada but must be purchased abroad. Purchases abroad could, under defence production sharing arrangements, be offset by foreign procurement in Canada composed largely of sales of components or of less sophisticated items.

This approach has serious implications for the technical development competence of Canadian manufacturers. Even though purchases of major systems abroad are balanced by equivalent dollar-value business in Canada the effect is not the same. The difference lies in the demands placed on the technical knowledge of manufacturing companies. A major new weapon system conceived, designed, developed and produced places the ultimate in demands for ingenuity on prime contractors and supporting firms. It is this struggle for new and better products that keeps industry in the front rank of technical knowledge.

If most major systems are bought abroad there is a good chance that subcontracting against foreign systems will not be enough to maintain competence. Foreign prime contractors have their own supporting firms to which they generally turn during the conceptual phase of weapon building for assistance in

designing and developing components. Canadian subcontractors will not likely be included during the conceptual phase and may well miss some part of the development phases as well. This is a serious disadvantage to producers and must inevitably lead to a gradual decline in technical knowledge and a lessening in ability to compete for contracts.

The second major possibility is a considerable expansion of its defence effort leading to the design, development and production of some major weapon systems in this country. The result would likely be a heavy emphasis by Canadian industry on technological improvement. Here the problems are largely costs and the difficulty of making sales to foreign countries. Because major systems are extremely costly, making quantity sales of production models to major industrial nations is very difficult. The hundreds of millions and often billions of dollars of business is much sought after and government are under

Page 15

extreme pressure not to place such contracts abroad but to adopt comparable domestic designs.

The third possibility lies between the extremes stated above. Clearly it would be desirable to find a course of action that would permit, indeed encourage, expansion of technical skills while at the same time making it feasible to take advantage of the economies offered by procuring many major weapons abroad. Present defence development sharing policies designed to encourage participation by Canadian companies in the research and development of U.S. defence projects are a step in this direction. Even so, there are at least two problems here. One is the degree to which doors can be opened sufficiently early to assure Canadian participation in the conceptual phases of U.S. major projects. Unless access to the conceptual phases of weapon development is possible Canadian firms will be handicapped. A few minutes thought will indicate how immensely complicated providing such access becomes and how it implies increasing integration of Canadian and U.S. business and armed forces.

The second problem concerns the extent of specialization of Canadian industry. Canadian industry has never been able to compete abroad in all areas of economic activity. In specialized fields Canadian industry has done well and the probabilities are that if specialized areas of defence business could be developed to the point where this country were an acknowledge world leader, markets could be found abroad for its production.

Because participation by Canadian industry in foreign defence production programs does not itself assure maintenance of a high technological level it needs to be supplemented wherever possible by creation of joint defence research, development and production programs with other countries to meet mutual military requirements. Establishment of such programs on a bilateral basis can lead to trilateral or multilateral programs where other allied countries have similar military requirements. The current joint UK/Canada plan for development and production of the CL89 Surveillance Drone, to meet British and Canadian military requirements may serve as an example of the type of joint program visualized. As in any such solution, there are major obstacles to

Page 16

the development of this concept, chief of which are considerations of national prestige and the extent of the respective military requirements for the equipment involved.

In general, it can be said that unilateral national development of major weapon systems amongst the western countries is rapidly giving way to the concept of collaboration among allies in defence research, development and production in the interests of conservation of the respective national resources in money, manpower and technological capabilities. In this general direction, with all its inherent difficulties, appears to lie the best hope for strengthening scientific and technological capability within Canada's engineering industry.

Page 17

APPENDIX "A"

INDEXES OF REAL DOMESTIC PRODUCT FOR SELECTED CANADIAN INDUSTRIES

1939 and 1944

(1949 = 100)

	1939	1944
Gross Domestic Product	60.2	103.0
Manufacturing	48.7	106.1
Durable Manufacturing	42.7	128.3
Wood Products	54.0	76.1
Iron & Steel Products	39.1	118.4
Transportation Equipment	37.7	235.7
Non-ferrous Metal Products	58.4	130.9
Electrical Apparatus & Supplies	28.4	85.5

Page 18

APPENDIX "B"

TABLE I

CANADIAN DEFENCE EXPENDITURES AGAINST PRIME CONTRACTS PLACED IN CANADA FOR FOUR MAJOR INDUSTRIES BY AREA, FISCAL YEAR 1960-61

Area	Electronics	Aircraft	Instruments	Shipbuilding	Total
	Industry				
	$000	$000	$000	$000	$000
Maritimes	2,933	5,595	—	4,935	13,462
Montreal	27,074	101,081	8,695	6,928	143,778
Other Quebec	182	1,793	—	4,066	6,041
Total Quebec	27,257	102,874	8,695	10,994	149,819
Toronto	13,375	57,186	3,642	1	74,204
Niagara	6,957	779	—	—	7,736
Other Ontario	12,024	1,055	6,840	49	19,970
Total Ontario	32,356	59,021	10,482	50	101,909
Winnipeg	—	3,621	—	—	3,621
Other Manitoba	—	—	—	—	—
Total Manitoba	—	3,621	—	—	3,621
Saskatchewan	—	—	—	—	—
Alberta	—	3,016	5	—	3,021
Vancouver	18	343	—	5,119	5,481
Other B.C.	—	—	—	—	—
Total B.C.	18	343	—	5,119	5,481
Total Canada	62,564	174,470	19,182	21,098	277,313

Figures do not balance exactly because of adjustments caused by rounding.

Page 19

APPENDIX "B"

TABLE II

CANADIAN DEFENCE EXPENDITURES AGAINST PRIME CONTRACTS PLACED IN CANADA FOR FOUR MAJOR INDUSTRIES BY AREA, FISCAL YEAR 1962-63

INDUSTRY

Area	Electronics	Aircraft	Instruments	Shipbuilding	Total
	$000	$000	$000	$000	$000
Maritimes	2,460	5,777	—	6,674	14,912
Montreal	22,052	75,128	10,148	9,563	116,890
Other Quebec	267	1,005	—	12,055	13,328
Total Quebec	22,319	76,133	10,148	21,618	130,218
Toronto	18,022	36,277	7,469	—	61,768
Niagara	7,802	1,184	1	—	8,987
Other Ontario	14,996	3,238	6,124	58	24,415
Total Ontario	40,821	40,699	13,594	58	95,172
Winnipeg	—	4,615	8	—	4,623
Other Manitoba	—	—	—	—	—
Total Manitoba	—	4,615	8	—	4,623
Saskatchewan	—	—	—	—	—
Alberta	—	2,637	—	—	2,637
Vancouver	6	204	—	5,069	5,279
Other B.C.	—	—	—	6,408	6,408
Total B.C.	6	204	—	11,476	11,686
Total Canada	65,606	130,065	23,750	39,826	259,247

Figures do not balance exactly because of adjustments caused by rounding.

The CHAIRMAN: We have with us Mr. Drury, the Minister of Defence Production, Mr. Hunter, the Deputy Minister, and Mr. William Huck, the Assistant Deputy Minister. I believe Mr. Drury has a few remarks that he would like to make at the beginning and then we will proceed to the questioning.

Hon. C. M. DRURY (*Minister, Department of Defence Production*): My remarks will be very few, Mr. Chairman.

The paper which was circulated some considerable time ago to the Committee is manifestly a scholarly work. It does attempt to examine in a broad and general way the impact of defence spending on the economy of Canada, and it deals with this in four quite different time periods, which are also quite different phases of economic activity with, as a consequence, quite differing impacts.

The paper, then, examines in a general way some of the possible future impacts of defence spending on the economy without reaching any specific recommendations or suggestions as to directions which might be taken. In this case, it is analytical rather than a statement of either past policy or future policy.

I would like to draw to the attention of the committee the fact that at the time this paper was issued some fair amount of attention was manifested by the press in what is essentially a superficial analysis of the regional impact. I would like to emphasize again to members of the committee that the statements made and the figures given are related to only four categories of spending out of a total number of categories in which the department is interested, although these are the major categories of defence expenditure comprising more than half of the total amount of defence production spending, but perhaps more importantly that the addresses of the contractors are the head office addresses and, secondly, that these relate only to prime contracts not to subcontracts. I would ask the members of the committee to bear in mind that in a number of instances the location or address given of the prime contractor does not in itself necessarily reflect where the actual work is carried out.

This is particularly true, of course, in the case of oil companies. The economic impact of an oil contract bears little relation to the head office address of the oil company, manifestly, and I would emphasize again that these are only in relation to prime contracts, not the location of subcontracts. As the members of the committee I am sure are fully aware, virtually every major prime contract is, to a greater or lesser degree, largely subcontracted.

I am told, by way of example, that when a contract is awarded for a ship to a specific shipyard, clearly the expenditure is related to the address but that only some 40 per cent in round figures of the total value of the contract is spent in the shipyard; the rest is spent elsewhere either directly by the government or by way of subcontract from the shipyard operator.

With these two reservations as to the regional aspect of this paper, I would be delighted to try, with the aid of my officials, to answer any questions that may be in the minds of members of the committee.

The CHAIRMAN: Before we proceed to the questioning I would like to ask the committee members, first of all to try to restrain their questioning to the subject matter of the paper before us. We have dealt with a number of other topics involving the Department of Defence Production and there may be some unanswered questions still outstanding, but if you could hold those questions over for another meeting and limit your questions to the paper I think the meeting will be conducted more expeditiously.

In the questioning I will not restrict anybody in time but I would ask you to remember that there are a number of people who will wish to ask questions and after a certain reasonable amount of time, if you have explored one line of argument, perhaps you can release the floor and let someone else proceed and then later we may be able to come back to you.

Our first questioner will be Mr. Lambert.

Mr. LAMBERT: Mr. Chairman, in order to start this off on a general basis I would like to ask the Minister, not only as Minister of Defence Production but as Minister of Industry, whether he considers it is a valid concept that defence expenditures should be used as an economic tool to stimulate the economy in times of recession, say, or the reaching of a plateau.

Mr. DRURY: I am not sure, Mr. Chairman, whether Mr. Lambert has in mind that the level of defence expenditures should be varied according to the necessity or desirability of an economic stimulus.

Mr. LAMBERT: In part, yes.

Mr. DRURY: I think generally all governments of Canada, successive governments, have taken the line that the level of defence expenditures should be determined by defence needs and not by the state of the economy as needing or not needing stimulus or indirect assistance.

An attempt has been made and continues to be made to relate defence expenditures directly to defence needs, and then it lies with other agencies of government to see that measures are taken in other fields either to counteract the adverse effects or to enhance the lack of economic stimulus. Generally speaking, defence expenditures have not been regarded as a major instrument in economic policy.

Mr. LAMBERT: This is what I wanted to establish as a starting point. In other words you, as the Minister responsible for this department as well as the Department of Industry, do not consider defence spending as an economic tool and that, being based on the defence requirements, those expenditures should go forward for that reason and that reason only? I think from the experience of the past ten years defence expenditures have been relatively constant. There have been some variations in defence expenditure but there have been no great wide variations which would have an economic impact.

I put my question to you because it is often urged that defence spending does give industry a shot in the arm. On the other hand, do you think the same should not apply in times of economic pressure such as the Korean period when an expansion of defence spending certainly provided some of the pressure for an increase in price index and contributed materially to the shortages of certain types of materials and to manpower?

In those circumstances do you say that in a boom period you should lay off defence expenditures in order to relieve some of the pressure?

Mr. DRURY: Unfortunately I do not quite see how one can. The rise or fall in defence expenditures, I suggest, is governed not by the economic condition of Canada but by the necessities of international relations, and unfortunately these do not always coincide—and Korea is a case in point—with our economic desiderata. During the Korean period an emergency did arise which called for substantially increased defence expenditures in Canada, which were clearly contrary and not at all helpful to the stability of our economy.

Mr. LAMBERT: We accept that as a basis or a national premise, but does the same apply regionally—and I am considering the conclusions of the paper and that the impact of defence spending regionally certainly does contribute to quite a stimulus over a recession.

Mr. DRURY: There are two kinds of what you might call defence expenditure. One is the expenditure made directly by the Department of National Defence in terms of pay, allowances, local supplies and so on. This is determined regionally to a large degree by the location and size of defence establishments. One must assume that these are placed—rise or fall in size and in importance—as a consequence to military rather than regional economic considerations. This flows from the earlier premise. That does account for quite a large volume, as members of the committee are well aware, of the total amount of money voted for defence, pay, allowances and feeding.

The other aspect or category, of course, is equipment required by the armed forces. It has been, as is laid out in the act governing the Department of Defence Production, the policy of the department in conformity with the act to acquire for the Department of National Defence its equipment needs, and in equipment I include the whole range of items that we purchase for the Department of National Defence, to acquire these in a way to secure the best possible value for the defence dollar. To this end, the Department of Defence Production has over the years been moving as steadily and as rapidly

as practicable to a system of competitive price bidding under which the item or items will be supplied by the manufacturer or contractor who offers the lowest purchase price consonant with satisfactory delivery and quality.

Mr. WINCH: Mr. Chairman, I am in some difficulty at the moment because of page differentials in my copy of the paper.

Mr. SMITH: Then perhaps Mr. Winch would like to pass until he has them sorted out!

Mr. WINCH: The document on defence expenditure and its influence on the Canadian economy is one that members of our committee have had in their possession for some weeks. I have read it twice. On the basis of my reading there is a question I would like to ask the Minister.

Sir, I am first of all going to refer to the second paragraph under "Influence on the General Level of Business" in which this statement is made:

> 1939-1945—In September 1939, Canada was still suffering from the great depression of the 1930's. Unemployment was estimated at no less than 11.4 per cent of the labour force. Gross national product stood at about 5.6 billion and there is evidence that considerable excess plant capacity existed.

May I now draw attention to the next statement which says:

> The problem was to mobilize these under-employed resources and set them to work to satisfy military as well as mounting civilian demands.

To that may I add the first sentence under "Defence Spending and Industry".

Mr. DRURY: Where are you now, Mr. Winch?

Mr. WINCH: It is No. III.

Mr. DRURY: That is page 5.

Mr. WINCH: It reads as follows:

> From the standpoint of industrial development, world war II was probably one of the most important periods in Canadian history. It was during the war years that this country emerged from its traditional position as a supplier of basic materials to become an industrialized state.

With the utilization of those two quotations I would like to ask the Minister, in relation to defence expenditure and its influence on the Canadian economy, if he will give this committee his opinion or viewpoint on the expenditures on defence. In a wartime economy or a peacetime economy are those expenditures of such a nature that it is not possible economically to make a change without the disruption of the economy of Canada?

Will the Minister, as a responsible minister, state that economy-wise, despite a period of disruption, our economy would not be better if we utilized expenditures for civilian purposes?

Mr. DRURY: Mr. Chairman, if I understand the question correctly Mr. Winch would like me to say yes to what are two apparently conflicting statements. First he would like me to agree that we cannot change things from their present state without serious disruption—

Mr. WINCH: Right.

Mr. DRURY: —if I understood the first part of his question correctly.

Mr. WINCH: That is correct.

Mr. DRURY: And the second statement was that economy-wise we would be much better off to make a change.

Mr. WINCH: Right.

Mr. DRURY: Well, either one of those obviously must be wrong.

Mr. WINCH: What is your position?

Mr. DRURY: I think perhaps I should go back to the point that Mr. Lambert made, namely that defence expenditures are related not to the state of the economy of the country; these are expenditures made necessary by the facts of international relationships and our interdependence with other countries of the world. Of necessity, in the kind of world in which we live today if we wish to continue to participate in world affairs we are committed to a certain participation in joint defence—joint defence in the western world. The type of defence and the level of this defence must of necessity be governed by these international relationships. It is then perhaps idle to examine or try to analyse what might be or what might have been had we pursued, for instance, a policy of isolationism.

If we as a country were to become isolationist then we would be free, theoretically at any rate, to raise or lower, or indeed even abolish our defence expenditures. But it is in a sense an exercise that leads nowhere to try to analyse what would be the consequences of a unilateral abolition of defence expenditures by Canada.

Mr. WINCH: Mr. Chairman, I am very sorry but I think the Minister is trying to lead me down the garden path of evasion. We now have before us a document on defence expenditure and its influence on the Canadian economy, and I am asking a direct question of the Minister. Is the relationship of defence expenditure of such a nature that you would be afraid of tackling the problem if defence expenditure became a part of civilian expenditure? This is the document we now have before us.

Are you saying to us in this committee that defence expenditure is of such a nature that, irrespective of policies of international commitments, we have to maintain this expenditure because of the effect on the Canadian economy if we made any change?

Mr. DRURY: No, I am saying precisely the opposite.

Mr. WINCH: Then will you explain this brief and its maintenance on defence expenditure.

Mr. DRURY: I come back again to the point made by Mr. Lambert that the level and type of defence expenditures are related to the international policies of Canada.

Mr. WINCH: I am sorry, Mr. Drury, perhaps I am putting it incorrectly. This paper is entitled "Defence Expenditure and its Influence on the Canadian Economy". Are you saying we have to maintain the defence expenditure because of its relationship to the economy of Canada and that we would be in serious trouble if there were a change?

Mr. DRURY: No, I am saying precisely the opposite. I am saying that we are not required to maintain defence expenditures in order to support the Canadian economy. I am saying that the level of defence expenditure is determined not by Canadian economic conditions but by our international relationships with the rest of the world. The task of the government is to try in the best possible way to accommodate those necessary defence expenditures to have the most beneficial and, where one can, the least damaging effect on the Canadian economy.

Mr. WINCH: Mr. Chairman, the Minister is one of the smartest men I know in getting away from what anyone is trying to get at.

The CHAIRMAN: I do not think we should suggest in our questioning that the Minister is trying to lead you down the garden path or get away from the point of your questions. I think you should ask the question and—

Mr. WINCH: I am not prepared at all times to accept the answers of the Minister, Mr. Chairman.

Mr. MARTINEAU: Surely the Chairman is not suggesting that when the Minister has given an answer we cannot discuss it further?

The CHAIRMAN: Not at all, but I think it is not open to suggest that a witness is trying to avoid answering or is giving misleading answers.

Mr. MARTINEAU: It is unparliamentary to suggest the Minister has not answered a question. These would be new rules and I am sure the Minister would not want to be bound by them.

Mr. DRURY: On a point of privilege, Mr. Chairman, I think Mr. Winch did suggest that I was being evasive—cleverly evasive. I must admit that I do not like that very much and I do appreciate the intervention of the Chair.

The CHAIRMAN: I believe, Mr. Winch, you are perfectly at liberty to challenge any answer or seek further information or point out any contradictions, but I do not think we should impute motives to the witnesses.

Mr. WINCH: I have said before and I will repeat that we are considering "Defence Expenditure and its Influence on the Canadian Economy". I have read this document twice. I would like to ask the Minister if it is his opinion that defence expenditure must be continued because of its influence on the Canadian economy irrespective of the fact that there may be a hiatus in handling a problem if we reduce our defence expenditure? I do not think I can put it more directly than that. Is that your opinion?

Mr. DRURY: I repeat again, no.

Mr. WINCH: Then why do we have this document and your opinion?

Mr. DRURY: The reason we have the document is that the committee asked for an analysis of the impact of defence expenditure on the Canadian economy. The committee asked for that and the department has produced it.

Mr. WINCH: Then may I just ask a last question on this phase?

Is it your opinion as the responsible minister in the cabinet that a reduction in defence expenditure could not be applied in a period of time to a greater benefit to our Canadian economy?

Mr. DRURY: I think unquestionably that is so. As this paper points out, there are some economic advantages of defence expenditure; there are some economic disadvantages. There are some categories clearly in which, if the expenditures were not made on defence account, could be more usefully made on straight civilian account directed to another purpose. On the other hand, there are some defence expenditures which have a very beneficial effect on the economy as a whole and probably could be more advantageously made through the medium of defence equipment acquisition than any other way.

Reference has been made to the impact of defence expenditures on the economy generally at the time of the Korean crisis. These expenditures were in the global sense disadvantageous because these were additional demands made on an economy which was operating at a high level of capacity, and the additional expenditures tended to force it a bit and produce inflationary pressures, not only pressures but also inflationary results.

Mr. WINCH: May I ask one final question and then I will pass.

May I ask whether or not the decisions on defence expenditure and its influence on the Canadian economy are made on a political basis because of its effect on various constituencies and the numbers employed in defence work, or are they made on a policy basis in connection with what is best for the economy of Canada?

Mr. DRURY: The answer to that is neither of these considerations, Mr. Chairman. I reiterate again that defence expenditures are made on the basis

of defence policy considerations and what are the necessities of defence, not how this is going to benefit the economy or whether it is going to help out one constituency or another.

Mr. WINCH: Has any thought been given to your knowledge of a plan or examination to convert some of the defence expenditures to civilian purposes? Is any study being made of that?

Mr. DRURY: There are a number of studies which have from time to time been made of what might be done should defence expenditures disappear. These have been carried out by some foundations in the United States. Indeed, we have one foundation in Canada which is devoting some thought to this also.

Mr. WINCH: Can these reports be filed with this committee?

Mr. DRURY: I have not got them; they are the property of the foundations rather than the property of the government.

The CHAIRMAN: Mr. Winch, we have a paper prepared by Professor Rosenbluth dealing with this. This is getting into a new area and I would suggest that there are other people who would like to proceed.

Mr. SMITH: I am sure Sir John A. Macdonald would be interested to know what is on page 5 and what the Minister says about war making Canada an industrialized state because, after all, that is what he tried to do by tariff protection.

My questions relate largely to the tables on appendix "B" and appendix "C".

Would it be fair to state that if you want to reduce or change the direction of your defence spending or the emphasis on it that it would be best to do it in a time when there is generally a high level of employment outside the areas of defence production?

Mr. DRURY: I hope, Mr. Chairman, that members of the committee will not regard defence expenditures as a socio-economic tool. I repeat again that defence policy and, as a consequence, defence expenditures—and defence expenditures are merely an implementation of defence policy—are determined by international security and joint security considerations.

Mr. SMITH: I was not implying that—

Mr. DRURY: I am just going to go on. It is quite clear, however, that substantial changes in defence policy—

Mr. SMITH: Which happens from time to time.

Mr. DRURY: —and consequently substantial changes in defence production would be in some instances more easy to accommodate in a period of high economic activity—that is, an adjustment, a change of direction at the same level, would be more easy to accommodate at a period of high level economic activity—than at a period of very low level economic activity. Further, if defence policy were to take a substantial reduction this would be easier to accommodate or to absorb during a period of high level economic activity than during a period of low level economic activity. Conversely, however, if defence policy called for a substantial increase in activity this obviously would be of more use and would be more easy to accomplish during a period of low level economic activity than in the case of Korea when there was already a high level of economic activity.

Mr. SMITH: In defence procurement though there are requirements that are very urgent and requirements that are less urgent, there are requirements that become very urgent and there is a difference of priority for what you need and when you need it. Is that not so?

Mr. DRURY: That is correct.

Mr. SMITH: I think we would be unreasonable to suggest that the department ought not to relate the low priority items to the need for providing jobs. Would that not be a fair statement too?

Mr. DRURY: I suppose there are in a sense very complex factors in determining these priorities, and the superficial look at what are the apparent priorities may be misleading.

It is clear that if the sole purpose of a military expenditure, a capital expenditure, is to improve maintenance costs and there is no other military necessity, if you like, for it than merely the long term reduction of defence maintenance costs, then this would not be a high military priority; it would probably be more an economic than a military priority.

Clearly the desirability of capital expenditures at a time of high level economic activity or in an area where there is a high level of economic activity designed to improve the economic picture over the long run would warrant some question. Where, however, one is dealing with military or security priorities then perhaps these should be governing rather than economic convenience.

Mr. SMITH: You said, Mr. Drury, that appendix "B" ought to be read with some caution because certain parts of it are subject to misinterpretation. I suppose the best measure or the most accurate measure of the influence of defence expenditure on the Canadian economy would be the number of man hours of employment that it provides.

Mr. DRURY: That is one measure of influence.

Mr. SMITH: Is it not one of the better measures?

Mr. DRURY: As this paper endeavours to indicate, there are a number of consequences of significance to Canada arising out of defence contracts. One is the provision of employment. Given the essential task of all governments to create an environment in which there are jobs available for the willing labour force, this is a factor of high importance.

Another one, however, is the effect or the impact on export sales. One of our problems, as I am sure members of the committee are only too well aware, is our difficulty in relation to an adverse balance of payments on current account. This, then, is another significant factor. Another is the assistance or the encouragement which defence contracts can give in raising to a level commensurate with that of other highly industrialized countries—raising and consequently to a higher level than we now enjoy—the quantum as distinct from the quality, the quantum of research and development activity in this country. This is important and the paper does make reference to this.

I am not saying that unemployment or employment is of no significance; I am just saying that there are other factors.

Mr. SMITH: But the man hours measurement is a pretty accurate measurement, even in relation to export, and should be taken into any consideration of the balance of payments on current account.

Mr. DRURY: I would agree with the general proposition.

Mr. SMITH: Would it be such a difficult task to relate the man hours of employment provided by defence expenditures in Canada—

Mr. WINCH: And to tie it in with our economy?

Mr. DRURY: To convert these dollars—the common denominator here—into man hours?

Mr. SMITH: No, not to convert dollars into man hours. I think Mr. Rutledge would agree, however, that most shipyards have a fairly accurate measurement of the number of man hours that are applied at a shipyard. Would it be such a problem to relate the defence expenditures to the man hours of jobs provided?

Mr. DRURY: That is converting the dollars.

Mr. SMITH: Part of the dollars. There are profits and other items.

Mr. DRURY: Yes, I think this could be done. Would this be very important? I ask this because there are two ways of doing it. There are a number of general indices that have been worked out which will give you rough general conversions. The only thing we know for sure is dollars. We maintain no statistics in respect of man hours.

One has either to engage in an analysis, which would be a difficult task even for the computers and which would require the recasting of all our statistics in terms of man hours instead of dollars—and it would be a very large job indeed, I can assure you—or one has to make use of some rules of thumb. The kind of thing I have in mind is that to support one scientist on an annual basis who will turn in, one assumes, roughly eight hours a day for 300 days a year, 2,400 man hours, for a sum of $30,000—

Mr. SMITH: I am not thinking of that. In your total that provides a fairly small proportion to shipbuilding, aircraft construction and electronics. You have indicated to us that we could easily misinterpret the figures that are in the Montreal area and the Quebec area. I presume in Quebec there is quite a lot of shipbuilding, and a considerable amount of the shipbuilding that was built in Quebec was subcontracted out of Quebec. For example, I believe the boilers for the *Provider* were made in St. Catharines. I am not sure about that but I do know they have provided a lot of boilers.

In aircraft and in shipbuilding a great deal of the equipment that goes into the ships comes from outside Canada altogether.

I do not know, but I am not completely in agreement that it would be in the main areas such a horrendous or difficult task to relate defence expenditures to man hours of employment because I am not so concerned about the $15,000 scientist who does one job. However, I think it might be important for the department to know where the jobs are going and how many jobs there are or how many man hours work there are related to these things because then, if they are making shifts or reductions, they would know more closely and more accurately where the effect or impact was. It is not a matter of the impact on the executive, it is the impact on the hourly rated employees. I think I am accurate in saying that, for instance, a shipyard could give you very close figures of how many man hours are applied at the shipyard on any particular vessel.

It seems to me that that type of information would be very useful. Maybe your department knows this and maybe it is only we who do not know it, but if they do not have it it would seem to me to be a very useful part of the analysis of the impact of defence expenditure. I am not speaking of the esoteric regions of research but of the fellow who has no job security and who has to go out and get another hourly rated job somewhere.

Mr. DRURY: As this paper indicates, figures have been given only for prime contracts. The fact of the matter is that we have not yet been able to assemble an analysis of the dollar—let alone the man hour—distribution of subcontracts. This is a big statistical job. In some areas, as Mr. Rutledge indicated the other day, we have this with a fair degree of precision. In shipbuilding this is known. I am not sure whether the figures were given or not.

Mr. J. C. RUTLEDGE (*Director, Shipbuilding Branch, Department of Defence Production*): They were not given specifically.

Mr. DRURY: I understand they were not specifically given for subcontracting in respect to shipbuilding. Well, the shipbuilding branch has this information.

The electronics branch, which comprises very substantial expenditures with literally hundreds of firms involved, has not had a statistical follow-up

or follow-through of subscontracts in terms of tabulating them all. It is a big job and something we have not done in the past.

Mr. SMITH: I have one final question—perhaps it is not a question, perhaps it is a statement.

I am quite sure that everyone who bids on government work, either competitively or by proposal for non-competitive work, makes a very close and accurate estimate of their labour costs and the man hours of work that it will take before they make their proposition or their bid to your department. I am quite sure they have a very close estimate. I have talked to two or three people who have prepared tenders in the shipbuilding industry and they know; they have even gone to the extent of making sure that their union contract runs through the term of the proposal they are making to the department.

Would it be so very difficult to have contractors indicate with their bids or at the time the contract is made how many man hours will be entailed and where those man hours are likely to be applied, or in what locality they are likely to be applied? Would that be an impossible requirement?

Mr. DRURY: This is the way generally, as you point out, the shipbuilding people estimate their costs. They estimate on man hours times the labour rate. That is how the aircraft people estimate their repair and overhaul costs.

I come back again to the electronics industry. They do not do it on a man hour basis but on figures of dollar cost, principally dollar cost of components. Man hours do not figure in the electronics business.

Mr. SMITH: They do figure but they are not provided?

Mr. DRURY: Well, I suppose in the final analysis if you get down to the man who is manufacturing the most elemental of the components he has to compute some relation of product to man hours. But this industry, by and large, tends to think in terms of dollars in cost of components. What you are suggesting would create quite a change and would be quite a problem.

Mr. SMITH: It might mean a little embarrassment in some instances.

Mr. DRURY: Well, if you award a contract for the production, for example, of a radar set to a major electronics company I would feel that in a number of instances the subcontracting would go down through five levels before you finally get to the man who is manufacturing a resistor; that is the elemental resistor. All the way up those four above him are unaware of and pay no attention to the quantum of man hours involved; they only get a price figure, a dollar figure. Certainly in this field the attempt, if it were made, to convert dollars into man hours would have to be done on a pretty arbitrary basis or on the basis of a number of assumptions unless you were to revolutionize the whole cost calculations of this industry.

Mr. SMITH: I think it might be quite well to do so!

The CHAIRMAN: Mr. Harkness.

Mr. HARKNESS: I would like to refer back to a statement Mr. Drury made to the effect that the aim of the department is to secure the best value for the defence dollar.

I agree that that is the general aim, but I think there has to be a considerable amount of qualification in regard to that. I would refer particularly to the shipbuilding industry.

Is it not the situation that you could get the best value for the defence dollar by placing all shipbuilding contracts in the United Kingdom or some area such as that—

Mr. WINCH: Japan right now.

Mr. HARKNESS: Yes, or Japan—rather than building ships in Canada.

Mr. DRURY: I think probably in respect of an individual contract at a specific period of time one might get the lowest cost for that item, and that is why I was careful to use the term "the best value for the defence dollar" rather than the lowest possible cost at a particular time.

A secondary duty of the Department of Defence Production is, in addition to getting the best value for the defence dollar, the obligation as specified in the act to ensure that there is in Canada an adequate defence production base to meet Canadian defence needs.

Mr. HARKNESS: This is the very point I was coming to. One of the considerations in addition to getting the best value for the defence dollar is to maintain in Canada a defence production base, particularly in so far as the shipbuilding and aircraft industries are concerned.

Mr. DRURY: That is quite correct. Perhaps I should have elaborated a little more in answering the first question on the whole of the functions.

Mr. HARKNESS: This is the point I want to bring out.

Mr. SMITH: You do not always maintain your base in the right places.

Mr. HARKNESS: In so far as the shipbuilding industry in particular is concerned, one of the aims is to maintain this in different geographical locations, is it not?

Mr. DRURY: It would be hazardous from the military point of view to concentrate and maintain the whole of our shipbuilding and ship repairing facilities in one location.

Mr. SMITH: Hear, hear.

Mr. DRURY: If one were to do this, given the nature of present day weaponry, there would be the risk of having this aspect of our defence base wiped out at one stroke.

Mr. HARKNESS: Therefore, in allotting contracts for shipbuilding you are prepared to pay more for a ship, we will say, for example produced in Halifax than perhaps you would have to pay for it if it were produced at Sorel.

Mr. SMITH: Or Collingwood.

Mr. HARKNESS: You would be willing to do this to ensure that you have a shipbuilding industry maintained at Halifax? That is an example; I am not saying it is an actual case. You are prepared to do that?

Mr. DRURY: I would phrase it in rather more general terms. We have an obligation to ensure that all this particular activity is not concentrated in one location. Some premium would be payable if necessary to ensure that there is not a concentration in one location.

Mr. WINCH: Give us a few more contracts on the west coast.

Mr. HARKNESS: In actual fact—and I will say this as Mr. Winch has brought up the west coast—you have a few contracts on the west coast which have cost you considerably more money than they would have cost if you had let them in some other place? Is that not the case?

Mr. WINCH: I do not believe it.

Mr. DRURY: Contracts have been let on the west coast which have produced probably, in respect to shipbuilding, a higher cost than would have been the case had they been constructed in eastern Canada.

Mr. HARKNESS: But this again is justified because of the necessity of maintaining a shipbuilding base, particularly for defence purposes, in that area.

Mr. DRURY: That is correct.

Mr. MARTINEAU: May I ask a supplementary question?

The CHAIRMAN: Mr. Martineau.

Mr. MARTINEAU: May I ask Mr. Drury who makes the decision on that. Is it a ministerial decision or a cabinet decision?

Mr. DRURY: Who makes the decision on what?

Mr. MARTINEAU: Who makes the decision to award a contract to one area rather than to another in order to favour the economic position?

Mr. DRURY: The general policy as to the kind of framework there should be in Canada is manifestly for government or cabinet decision. Specific recommendations are made by the Canadian Maritime Commission to fit specific contracts into that general framework. This is to some degree at any rate a technical-statistical operation.

Mr. MARTINEAU: Is the final decision then with the Canadian Maritime Commission or with the minister?

Mr. WINCH: On defence?

Mr. MARTINEAU: On specifics.

Mr. DRURY: The final decision rests with a committee of cabinet known as the treasury board.

Mr. HARKNESS: So that there might be no confusion over the questioning which just has gone on, the primary consideration in this regard is to maintain the defence potential capability in addition to obtaining the best value you can at the same time, and another factor enters in from time to time; that is, the matter of the employment situation in particular.

Mr. DRURY: Clearly, if all other things are equal, the factor of employment or unemployment will come into play.

Mr. HARKNESS: Even if other things are not equal, does it not come into play from time to time?

Mr. DRURY: Well, I can say that in the past it has entered into the picture.

Mr. WINCH: May I ask a supplementary question. The minister said that the final decision is that of the treasury board. There is now—although it was wiped out for two or three years—a defence committee of cabinet. Does the defence committee of cabinet make the recommendation to the treasury board or to the cabinet?

Mr. DRURY: No.

Dr. WINCH: Will you please explain the process.

Mr. DRURY: The cabinet defence committee is concerned with the framework of defence policy. In broad general terms the defence committee obviously as a committee of cabinet reports to cabinet. The treasury board is concerned with expenditures in implementation of the general policy. It also is a committee of cabinet and reports to cabinet.

Mr. HARKNESS: I might be able to clear up your difficulty by saying that the defence committee is concerned with the matter from the military point of view and not from the point of view of how much money goes into a particular area or anything along that line; this is dealt with by, shall be say, cabinet as a whole and/or treasury board.

Mr. WINCH: And there is no recommendation in respect of cost.

Mr. HARKNESS: No. The cabinet defence committee is concerned with military policy and not with these elements.

If I might continue, in respect of the aircraft industry, which is more dependent than any other on defence contracts, how much of an aircraft industry would we have or could we support without defence contracts?

Mr. DRURY: If there were no requirements for the Department of National Defence?

Mr. HARKNESS: Yes.

Mr. DRURY: It would be very modest indeed.

Mr. HARKNESS: It would practically disappear.

Mr. DRURY: Well, there has been one firm in Toronto which has been remarkably successful in the whole operation of design, development, manufacture and sale of aircraft to users other than the Department of National Defence of Canada.

Mr. HARKNESS: A good many of those users are users for military purposes.

Mr. DRURY: Yes. If your question is how large an aircraft industry could Canada support if there were no requirements for military aircraft anywhere in the world, the answer is it would be even more modest.

Mr. HARKNESS: This is the point I am getting at. So far as the aircraft industry is concerned, if we are going to maintain an aircraft industry in this country we have to give it some defence contracts either from our own government or from other governments.

Mr. DRURY: We have to ensure that they participate in defence work; this is only too apparent. Successive governments with some success have done this; we are continuing to do it. However, I would suggest perhaps the level of the aircraft industry in Canada is and should be dictated by defence policy rather than defence policy dictated by the aspirations of the aircraft industry.

Mr. WINCH: Which one rules today?

Mr. DRURY: Defence policy.

Mr. HARKNESS: I would fully agree with this, and this is one of the areas in which it is difficult to ensure that this always happens; there always will be pressures in the opposite direction.

Mr. DRURY: It is true, as in almost any business, there are conflicting pressures.

Mr. HARKNESS: I will let somebody else proceed.

Mr. LLOYD: Mr. Drury, on the subject of statistics, a good deal of course depends on what use you are going to make of the statistics you compile. Generally speaking I think I would like to see some statistics for judging the over-all effect of defence expenditures. Could that be provided through d.b.s. rather than through your department?

Mr. DRURY: Most of the figures in this paper have been obtained from the dominion bureau of statistics. As you know d.b.s. is quite a large organization as it is. Continuously they are being asked for more statistics covering more areas. They cannot say yes to all of them. As a matter of fact we have suggested they should be prepared to furnish us with statistics of subcontracts; that is their job.

Mr. LLOYD: I recognize, Mr. Drury, the obvious difficulty of tracing the defence dollar from prime contractors down to subs and to off-site suppliers, to use a contractor's term. We have the on-site contractor which in your case is analogous to a prime contractor, and all the off-site subcontractors and suppliers of materials would be very difficult to trace down from the prime contractor. It occurred to me that the questionnaire of d.b.s. sent to the industries of Canada would produce acceptable data directly from those engaged in defence production or work. It would be much easier for us to look at this information obtained directly through d.b.s. from all the industries engaged in defence production. I think it is impossible to trace it the other way.

Mr. DRURY: I might point out there is one difficulty. To get back to the example of the resistor, when an order is made on a small firm in Halifax to produce 100 of these resistors, this particular manufacturer or supplier is not told what this resistor is going to be incorporated into; it may be for export; it

may be for either a military or a civil account. When d.b.s. asks him how much work he is doing on military account, he does not know.

Mr. LLOYD: The illustration you give would not occupy too great a volume of the statistics we would be seeking in respect of distribution of the defence dollar, would it?

Mr. DRURY: No, but on the other hand the dominion bureau of statistics likes to be able to give precise figures—this is what they are in business for—rather than roughly right or mostly right, or this kind of information. I think statistical information should be accurate and limited in so far as it can be to a minimum of guessing.

Mr. LLOYD: For the purpose of determining the distribution of the defence dollar to the economic levels of Canada, surely the billings to the Department of Defence Production from each industry thus engaging would be sufficient for our purposes. At least we would get the distribution of the dollar across the nation fairly readily. It is only a matter of compiling their dollar billings in respect of the Department of Defence Production.

Mr. DRURY: No. The billings to the Department of Defence Production are for prime contractors. The billings by subcontractors are to the prime contractor and by the sub-subcontractor to the subcontractor.

Mr. LLOYD: So, the subcontractor in New Brunswick, for example, would not necessarily know that these components were for defence production purposes, but usually he would know.

Mr. DRURY: Not necessarily. It would depend on the field in which he was operating. I suppose there was a time when virtually everything in the way of military equipment used by the military was uniquely military, but as military equipments and weapons systems become more and more complex, the components tend to be more and more the same as those going into civilian articles. There is this significant difference, and I do not know how widespread this may be; there tends to be a much tougher specification for most military components than there is for civilian components. This may give a number of subcontractors and sub-subcontractors a clue of what is military and what is non-military.

Mr. LLOYD: If you need these statistics for purposes of accountability to parliament, if you like, by your department, it would mean organizing the statistics for the future from the industry that produces; you cannot do it from the practices of the past.

Mr. DRURY: In that connection I might point out that most of the contractors who are in business and who have to take account of the cost as againts revenues in response to our request for this kind of information clearly indicate how much it would cost and expect us, the government, to pay you for it; they will not do it for nothing.

Mr. LLOYD: The statistics could be obtained. It is a question of organizing and assessing the need for such statistics in a parliamentary organization.

Mr. DRURY: Yes.

Mr. LLOYD: That leads me to my next question. You have many negotiators and all of their work finally gets presented in a package through you to the treasury board or the cabinet. I wonder, Mr. Drury, whether you could outline to us some illustration of the checks and balances which exist in ensuring the general integrity of this operation.

The CHAIRMAN: I believe that question deals more with the specific details of the operation of the department than the economic. Would you hold that question for a later meeting?

Mr. LLOYD: As you wish, Mr. Chairman, The reason I am asking the question is not so much in the sense of being a bloodhound merely to perform the role of

a watchdog over government expenditures, which opposition members and backbenchers must fulfil, but I am trying to see how in this very complex organization we discharge our obligation on the subject of accountability.

This brings us next to the policies in respect of defence expenditures which may require a gradual transition. When you look at the world today and see the kind of defence policies we may have to orient ourselves to, it is not difficult to foresee the complete closing out of economic activity in some areas of Canada as a result of necessary changes in the defence policy. I wonder whether you can advise the committee how you view the orientation; what should be the orientation of your department to the possible changes in the future?

Mr. DRURY: Let me say first that very rapid technological changes are continuously going on. The department is concerned with this; it has to take it into account and do what it can in the best possible fashion to accommodate these changes.

One I might mention is the—if not disappeared—very substantial reduction in the total defence picture of gun and small arms manufacture and ammunition. During the last war a very high proportion of our total defence resources were devoted to the production of guns and gun ammunition. Since the war the methods both of delivering high explosives and the value of those high explosives have changed very materially with the result that the tremendous energies and capacities we have at the end of the war for the production of guns and gun ammunition have become virtually not needed any more. This has led to the decision of the government some time ago to dispose of the substantial elements of The Canadian Arsenals complex.

This is an example of the changes which we have to face up to continuously which are brought about by advances in technology. I am sure that technological changes likely are to be more significant in terms of impact than the kind of change which one might envisage as a consequence of a major change in defence policy.

If I might mention this, another broad example has been the matter of manned aircraft. Not only have the numbers of manned aircraft required by the defence forces of the world gone down in total very substantially since the last world war, but the makeup of the aircraft itself has changed very materially indeed. The aircraft itself has become vastly more sophisticated and vastly move expensive, calling for quite different techniques, skills and machinery to deal with it. Also the air frame which used to be the whole of the aircraft with the addition of minor items of equipment for navigation and fire control and relatively modest engines, now has converted itself into a relatively cheap structure designed to carry very expensive and very complex electronic equipment, including computers, miniaturized computers for navigation and very sophisticated miniaturized communication equipment covering a broad range of communication needs. This is all very different indeed; one might almost say revolutionary from the kind of flying machine we had in 1945. This is going on continuously. Of necessity the department is very conscious of this, tries to keep ahead of these changes and endeavours to ensure that manufacturers are aware of this and are getting ready for these changes.

Mr. LLOYD: In essence, Mr. Drury, and in answers I think to previous questions presented by Mr. Winch and others, you are saying that the emphasis is on defence production to satisfy defence policy, and with this comes a clear message to the entire industry of Canada that it must have an alternative capability if it wishes to continue the operation of its plants and organizations.

Mr. DRURY: That is correct.

Mr. MCMILLAN: In respect of the four industries to which you refer, I think on page 7, in the fiscal years 1960, 1961, 1962 and 1963, I notice the city of Montreal receives practically half of the prime contracts and if you take

the province of Quebec it receives about 54 per cent. Is that due in some degree to the amount of unemployment in the areas concerned?

Mr. DRURY: I think it would be hard to argue that there was very intense unemployment in the Toronto area. No; this is a reflection of the industrial growth of Canada. The dominion bureau of statistics has advised us that the manufacturing capacity in the four major industries they have mentioned in these tables is as follows: In the Atlantic provinces the percentage of employees is 4.6 per cent, in the prairie provinces 2.6 per cent, in British Columbia 3.3 per cent, and in the provinces of Quebec and Ontario the number of employees engaged in this activity is 89.5 per cent. This is merely a measurement of how and where this type of manufacturing has grown up in Canada. The figures in respect of the selling value of shipments made by these four industries by regions correspond very closely to the numbers of employees. In the case of the maritime provinces, as a percentage of the total value of shipments, it is 2.3 per cent, in the prairie provinces 2.2 per cent, in British Columbia 3 per cent and in the provinces of Quebec and Ontario 92.5 per cent.

Mr. WINCH: And it is alleged that we are persecuting Quebec.

Mr. MCMILLAN: It is alleged that in the shipbuilding industry the firm contractor retained roughly 60 per cent of the contracts and we let out 40 per cent.

Mr. DRURY: I think it is the other way around; the shipyard is 40 per cent.

Mr. MCMILLAN: How about the aircraft industry?

Mr. DRURY: You must assume that 100 per cent of the expenditures made in the aircraft industry remain in the aircraft industry. In respect of any particular firm or any particular prime contractor there is a similar set of percentages with reference to the amount of work done by him as distinct from a subcontractor. I am subject to correction on this. In respect of air frame prime contractors, the subcontracting will run as high as 70 per cent of the total amount of the contract. This is not a standard figure, but it does go as high as that and it will vary down lower. In the electrical industry there is a very substantial amount of subcontracting also. The same, of course, is true in the case of prime contractors in the electronics or in the instrument field; it is probably less in the instrument field than in the other three.

Mr. MCMILLAN: You mentioned that you do some purchasing and looking over of bids in other departments. Do you do so in the Department of Transport?

Mr. DRURY: You have reference, Dr. McMillan, I think to evidence given by Mr. Hunter the other day.

Mr. MCMILLAN: Yes; the new gates on the Welland ship canal, for instance —the technical aspect of that.

Mr. DRURY: I do not know, and I do not know whether Mr. Hunter knows offhand, whether there has been consultation in respect of the new gates on the Welland canal. I do know that the officers of the Department of Defence Production and the defence industry are widely consulted by the technical officers of other government departments.

It is only natural that they would make use of the specialized knowledge of the officers of these two departments.

The CHAIRMAN: I have Mr. Deachman and Mr. MacLean.

Mr. HARKNESS: May I say, in collaboration with what Mr. McMillan has said, that there appears to me to be an unduly high proportion of these defence contracts in Quebec and Ontario, as you have said, and that it is to a large extent dependant on the fact that the Canadair plant in Montreal had the 104 airplane contract during this period?

Mr. DRURY: The 104 contract—that is entirely correct. It acocunts for a very substantial fraction of the total of the aircraft items, and also for the total of them all.

Mr. HARKNESS: That is the basic reason why the Quebec figures are so much higher than we might expect to find them.

Mr. DRURY: This accounts for the high level.

Mr. DEACHMAN: I have a question which is almost supplementary to what was asked. My questions are very much along the line which Mr. Harkness just referred to, namely, the fact that the aircraft industry in Quebec accounts for a good deal of the disparity, or for the high concentration of industry in the east, and the very light concentration of defence industry elsewhere.

Let us take a look at the shipbuilding figures. If the government were interested to bring about any equalizing of this matter, would there have been 90 per cent of the industry concentrated in Quebec and Ontario? Would they not use some of the $21 million that we have here in the shipbuilding industry to equalize their difference in the maritimes and on the British Columbia coast? When I look at the cost I find in the totals which we have been given in reply to the question we are looking at, that about three or four per cent of this business of defence is on the coast which normally in the Canadian economy accounts for about 10 to 15 per cent in given items of the economy.

Mr. DRURY: May I interrupt you?

Mr. DEACHMAN: Yes.

Mr. DRURY: When looked at as a group of the aircraft, electronics, instruments and shipbuilding activities, the province of British Columbia respecting all accounts, military and civil, represents something which is in excess of three per cent of the total productive capacity of Canada.

Mr. WINCH: On contracts let to British Columbia?

Mr. DRURY: No, no. These figures on cost have the number of employees and the value of the shipment on all accounts obtained from the dominion bureau of statistics respecting these four industries grouped together. It must be a fact well known to the members of the committee that the electronics industry is not a major item of activity in the province of British Columbia. There are relatively few electronic companies or firms in British Columbia.

Mr. DEACHMAN: May I ask you this: How is it historically that Canada has concentrated 90 per cent of its business in Ontario and Quebec, whereas in the United States the vast defence industry has sections in the west to balance the defence industry which has grown up in the east? Did the government of Canada throughout the history of the growth of this industry never lend encouragement to the growth of defence industries anywhere except in Quebec and Ontario? We end up with only three per cent of the productive capacity. Why did they not go out and lend encouragement to the west?

Mr. SMITH: To those who have it shall be given.

Mr. DEACHMAN: Do they say that where growth was, more growth came?

Mr. DRURY: Under the free enterprise system—and this is true for the United States as well as Canada—industry tends to locate and grow as a consequence of individual corporate decisions. The qualities of British Columbians have been devoted largely to the kind of economic activity which to them is attractive and natural.

Mr. WINCH: You are saying they are hewers of wood and drawers of water.

Mr. DRURY: I hope Mr. Winch is speaking for himself. I refer mainly to resource based industries. Now, there is a very high proportion of the total

economic activity related to fishing which is concentrated on the Pacific coast. But there are very substantial elements of the total Canadian activity related to lumber, pulp, and paper making as well concentrated in the province of British Columbia.

Mr. DEACHMAN: We know that pulp and paper making are also concentrated in the province of Quebec, yet we also find concentrated in the province of Quebec about 50 per cent of the defence production industry. We in British Columbia now would be happy to develop secondary industries. Do you feel that we are so much of a primary industry area that we are precluded from the field of secondary industries? I suggest to you and to other eastern members that you just try us to see whether or not we are interested in developing some of the business which is now held to the extent of 90 per cent by Quebec and Ontario. The only conclusion we can come to is that efforts have been made to concentrate or centralize it.

Mr. WINCH: We are fed up with being the low province on the totem pole, because we are 3,000 miles away from the central government.

Mr. SMITH: Normally I would not like to associate myslef with Mr. Deachman's proposition, because surely one of the reasons for locating the defence industry is whether there are available the skills necessary; and another reason I would think they should concentrate it in Quebec and in the Toronto area is that you would not want to have your industry completely based on defence production. Therefore, it seems to me, for economic reasons, the arguments for establishing that industry in a certain location are that surely defence production should only supplement normal production. I think that is one of the things we learned from the unhappy experience of Avro.

Mr. LESSARD (*Lac-Saint-Jean*): May I ask a question?

The CHAIRMAN: If it is a short supplementary.

Mr. LESSARD (*Lac-Saint-Jean*): Yes. In the shipbuilding figure of $21 million for Quebec, does it include the *Provider*, which amounts to $60 million by itself?

Mr. DRURY: There would be part of the cost of the *Provider* in the fiscal year 1960-1961; but this does not represent the total amount in contract, obviously. The *Provider* was not made all in one fiscal year, so consequently there would only be part of it in there.

The CHAIRMAN: It is now just about one o'clock.

Mr. LLOYD: I have a supplementary question.

The CHAIRMAN: Mr. MacLean has a question he would like to ask. If the committee would give approval to it, I suggest we sit over a little bit to complete our questionning.

Mr. LLOYD: I would like to have one additional piece of information. Could we have the amount of defence dollars spent on the armed forces personnel, and how they are distributed in Canada? I think this is germane to the whole thing—for example, on the east-coast vis-à-vis the west coast.

Mr. DRURY: The committee could address that question to the Minister of National Defence.

The CHAIRMAN: We can do it for you when the information is provided.

Mr. SMITH: Could it be placed in the committee records at this very spot when it is printed?

The CHAIRMAN: I will see if we can get the information in time to incorporate it in the record, as it is relevant.

DEPARTMENT OF NATIONAL DEFENCE

(ESTIMATED) EXPENDITURES BY PROVINCE FOR FISCAL YEAR 1963-64

	Pay and Allowances	Civil Pay	Travel	Suppliers	Miscellaneous	Total
	$	$	$	$	$	$
Newfoundland	4,350,149	2,652,634	270,886	2,156,239	176,617	9,606,525
Prince Edward Island	6,178,401	874,311	258,929	1,635,715	242,677	9,190,033
Nova Scotia	70,595,357	25,781,970	3,001,882	45,693,050	2,801,139	147,873,398
New Brunswick	24,829,971	5,940,118	1,129,312	10,261,981	1,078,818	43,240,200
Quebec	51,129,568	25,472,607	3,158,542	202,895,850	4,126,316	286,782,883
Ontario	150,162,445	69,689,240	7,750,889	239,067,350	12,743,113	479,413,037
Manitoba	33,743,700	8,703,789	1,407,581	18,915,795	1,498,289	64,269,154
Saskatchewan	7,990,113	2,751,017	570,064	6,173,770	479,208	17,964,172
Alberta	39,099,762	12,515,110	1,894,487	26,391,688	2,236,412	82,137,459
British Columbia	41,321,965	20,954,458	2,055,746	33,723,383	5,247,092	103,302,644
Yukon	2,156,713	2,563,532	116,427	1,546,705	15,214	6,398,591
Northwest Territories	1,304,496	37,127	40,303	200,725	5,166	1,587,817
					GRAND TOTAL	1,251,765,913

NOTE:—The estimated expenditures are separated into selected categories to show major expenditures *directly identifiable* with each province, together with estimated total amounts.

Mr. MACLEAN (*Queens*): I am grateful to the committee for agreeing to stay over, and I shall try to be as brief as I can. The witness stated that it was defence needs and not economic considerations which dictated the volume of defence expenditures, and with that I agree. I think that during the course of evidence the statement was made that the job of the department is to get the best value for the defence expenditure dollar in the way of equipment. But surely this is limited by various other considerations, and in some cases it has overridden all other considerations. The minister has stated there is the responsibility to obtain an adequate defence base, and it is in this connection that there has been increasing complexity and sophistication of defence equipment. But is it not a fact that it has become more and more difficult for relatively small countries like Canada to maintain a defence base chiefly because of the very complicated equipment, the cost of which is almost astonomical if the number of units produced is small? Would you agree that there is increasing difficulty in obtaining a defence base?

Mr. DRURY: It would be impossible for a country like Canada to do this in any satisfactory way if it were not for the production sharing and defence sharing arrangements which have been made, and which are designed specifically and explicity to make it possible for the Canadian defence base to produce not only for the needs solely of the Canadian armed forces but also for the armed forces of other countries. That is the way in which we are endeavouring to secure the volume which is needed to make manufacturing in Canada or development indeed in Canada practical.

Mr. MACLEAN (*Queens*): Is it not true that the objective of the department is to cause the minimum of disturbance in the economy of the country in its assignment of defence contracts? For example, to take an extreme case: Suppose

that all defence contracts were let in one town or city. Would this not be very undesirable because the economy of that place would be very much disturbed by an increase or by a cutback of defence expenditures? You want to try to spread them *pro rata*.

Mr. DRURY: If one were to concentrate to the point of overexpanding the economy of a particular locality, surely it would not be long before prices, and costs, in that particular locality would become very much out of line. And if the Department of Defence Production were not mindful of this, and did not take a rather longer view than the immediate occasion demanded, we would not have secured the best value for the defence dollar.

Mr. MACLEAN (*Queens*): I would like to ask a question about the ultimate stimulation of activity by laymen, considering the balance of payments. This is difficult, and there is certainly another matter which has been brought into consideration in letting defence contracts. In this connection I wondered if the effect of the balance of payment countries which have troops stationed in other countries is brought into the equation.

Mr. DRURY: Well, when you say brought into the equation, the only country with which we have an agreed equation is the United States. There are no specific agreements with any other country than the United States. In the course of the production sharing agreements with the United States pay and allowances and other expenditures relating o the American forces stationed in Canada would not enter into this equation.

Mr. MACLEAN (*Queens*): And in the case of France and Germany it does does not enter in at all.

Mr. DRURY: Well, we have no costs or production sharing agreement with France. When we are talking to the French about the possibility of their looking to Canadian sources for their equipment, mention obviously is made of this particular fact. But it is nothing more, if you like, than an additional selling argument.

Mr. MACLEAN (*Queens*): In conclusion in letting defence contracts surely the final consideration must be the real cost rather than the apparent cost of defence production, or perhaps the gross cost, or rather the net cost rather than the gross cost. Surely, when a contract is let in Canada for materials or components of a ship which is being built in Canada, and which are produced in Canada, it is desirable and it has to be taken into consideration rather than, for example, than having a ship built in Japan, for no other considerations than the dollars expended generate industry in Canada bring back dollars to the treasury in the way of income taxes, sales tax, and many other item which would not occur it the contract were let outside the country. Surely this is a very important consideration in letting defence contracts?

Mr. DRURY: This is a consideration. There are obviously a great many factors which enter into a decision of this kind. Another one might be the undesirability of establishing in Canada a temporary manufacturing activity for which there would be no further use at an early date, the undesirability of establishing—if one can avoid it—what would be clearly an uneconomic activity. So that possibly there would be an advantage in certain specific cases, even in business, in a kind of production sharing agreement, for you to look abroad for the supply, or for the production of some specialized items of equipment.

Mr. MACLEAN (*Queens*): I would like normally to pursue some of these points further. However, I appreciate that time is of the essence.

The CHAIRMAN: Our next meeting will be on Thursday.

Mr. WINCH: May I direct a question to you, as Chairman?

The CHAIRMAN: Very well.

Mr. WINCH: Will you as Chairman take under consideration the calling of a further meeting of this committee to discuss what was obviously to be our major discussion today? Our discussion today has been most interesting and informative. But the reason basically that the minister, and Mr. Hunter are here, was defence expenditures, and their influence on the Canadian economy; and you must tie in with it what is the impact on the economy if there are any reductions in defence expenditures. We have not basically discussed that important principle, and I am going to say that unless the committee does so, we have not got the guts to face up to a damned important issue. So I ask you if we might have a further meeting when we could get down to what was originally intended for the meeting today?

The CHAIRMAN: Mr. Winch, this problem falls into two parts. The first is the impact on the economy, and then you move from that and see what might happen in the reduction.

We have two papers on these topics, one by the Department of Defence Production which we have discussed today and one by Professor Rosenbluth on the other area, which I hope we will deal with in due course.

Mr. WINCH: We have not actually discussed the impact on this brief. It is most interesting and most informative, but we have not dealt with the major purpose for which we have been meeting for the last two hours.

The CHAIRMAN: Our purpose was to discuss the paper before us, which I think we have done.

Our next meeting will be held at eleven o'clock, in this room, on Thursday when Mr. Golden from the Air Industries Association of Canada will be the witness.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 23

THURSDAY, NOVEMBER 26, 1964

WITNESSES:

From Air Industries Association of Canada: Mr. David Golden, President; Air Vice Marshal J. L. Plant, Chairman of Board; Mr. G. Wooll, Vice-Chairman; and Mr. T. E. Stevenson and Mr. J. E. Smith, both members of the Association.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21568—1

SPECIAL COMMITTEE
ON
DEFENCE

Chairman: Mr. David G. Hahn

Vice-Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—(24).

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, November 26, 1964.
(37)

The Special Committee on Defence met at 11.10 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Béchard, Asselin (*Notre-Dame-de-Grâce*), Deachman, Hahn, Harkness, Lambert, Laniel, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, MacRae, Martineau, McMillan, McNulty, Pilon, Smith, Temple and Winch—18.

In attendance: From the Air Industry Association of Canada: Mr. David Golden, President; Air Vice Marshal J. L. Plant, Chairman of the Board; Mr. G. Wooll, Vice-Chairman; and Mr. T. E. Stevenson and Mr. J. E. Smith, both members of the Association.

The Chairman introduced the representatives of the Association and invited Mr. Golden to present the Association's submission.

Mr. Plant spoke briefly as an introduction to the showing of "slides" which indicated the magnitude of the *Canadian Air Industry*. Mr. Smith gave the commentary, accompanying the showing of the slides.

The Chairman presented the Eleventh Report of the Steering Subcommittee as follows:

> The Steering Subcommittee recommends that the Committee meet at 11.00 a.m. Tuesday, December 1, 1964, with the Minister of Defence Production and the President and General Manager of the Canadian Commercial Corporation in attendance.

On motion of Mr. Winch, seconded by Mr. McMillan.

Resolved,—That the above-mentioned Eleventh Report of the Steering Subcommittee be now concurred in.

The Committee proceeded to review the presentation of the Air Industries Association, with the witnesses answering questions thereon.

In reply to a request, respecting Defence Expenditures, at the November 24 meeting, the Chairman tabled *"Estimated Defence Expenditures, by Provinces, for fiscal year 1963-64" (Note: that information is printed in Proceedings No. 22 of this Committee).*

At 1.00 p.m. the Committee recessed.

At 4.00 p.m. the Committee resumed its consideration of the submission of the Air Industries Association of Canada. The witnesses were questioned thereon and on related matters.

At 5.35 p.m. the Committee adjourned until 11.00 a.m. Tuesday, December 1, 1964.

E. W. Innes,
Clerk of the Committee.

Note—The evidence, adduced in French and translated into English, printed in this issue, was recorded by an electronic recording apparatus, pursuant to a recommendation contained in the Seventh Report of the Special Committee on Procedure and Organization, presented and concurred in, on May 20, 1964.

21568—1½

EVIDENCE

THURSDAY, November 26, 1964.

(*Text*)

The CHAIRMAN: Would you come to order, please. We have here today representatives of the Air Industries Association of Canada who are going to make a presentation to us. We have, as witnesses, Mr. Golden who is president of Air Industries Association on my right, next to Mr. Golden we have Air Vice Marshal Plant, Chairman of the Board of Air Industries Association of Canada. I am also going to give you the industry affiliations of these gentlemen. Air Vice Marshal Plant is General Manager of Collins Radio Company of Canada Ltd., Toronto. Next to Air Vice Marshal Plant we have Mr. Stevenson, a member of Air Industries Association of Canada and President of United Aircraft of Canada Limited at Longueuil, Quebec. Next to Mr. Stevenson is Mr. Wooll, Vice Chairman of Air Industries Association of Canada and Managing Director of Genaire (1961) Limited at St. Catharines. Sitting in the background is Mr. Jim Smith, Vice President of Computing Devices of Canada Limited, Ottawa.

We will open with a statement by Mr. Golden. I believe copies of the statement have been distributed to everyone.

Mr. Golden, if you will proceed.

Mr. DAVID GOLDEN (*President, Air Industries Association of Canada*): Mr. Chairman and gentlemen, the Air Industries Association of Canada is a nation wide trade association of some 91 member companies serving the aerospace industry of Canada. We welcome this opportunity to acquaint members of the defence committee with aeronautical products made in Canada, and to describe the capabilities and scope of the Canadian aerospace industries.

It may be of interest to make a few historical comments. By 1950 Canada was among the six countries in the world with a well-balanced, fully integrated aviation industry. We shared this distinction with the United States, the Soviet Union, Britain, France and Sweden. At that time (1950) the aviation industry in France and Sweden did not have the essential depth which existed in our Canadian industry. This efficient post war Canadian complex was at hand to accept the challenge that came its way at the time of the Korean war and the subsequent build up of Western defence industries.

In more recent years, the manufacturing section of the industry has continued to diversify its products and markets and has won substantial export orders against larger and more powerful competitors. Examples are engines, aircraft, simulators, communications and navigation equipment, etc.

The aerospace industry is an asset of national importance to our Canadian economy. Our member companies realize that in order to maintain our current position we must make sincere efforts of our own to justify our continued existence on the present scale. Unless we are successful we will suffer the loss of technical people and their skills to other countries; we will reduce our export capabilities; we will lessen our ability to conduct research and development which plays such an important part in an industry like ours.

It is not always recognized at home and abroad that Canada is one of the few countries in the Western world with an aerospace industry capable of advanced research, design, development and production of complete aircraft

and the associated systems. In terms of manpower and facilities, already in existence, we are surpassed only by U.S.A., U.K., and France. We believe the qualifications of our scientists and engineers in our specific areas of technology are as high as those abroad—this we have proven by our competitiveness in the fields we have entered up to this time.

Size of the Industry

The employment in the Canadian Air Industry today is approximately 34,000 people. This includes only those people directly involved in air industry production, i.e., for those companies which have other activities as well, only the air industry employment is included. This direct employment includes a significant number of highly skilled scientists, engineers and technicians.

Regional Distribution

The majority of the companies are situated in Ontario and Quebec. There are exceptions. One company operates in Vancouver, British Columbia, one is situated in Edmonton, Alberta, two are situated in Winnipeg, Manitoba, three operate in the Maritimes, which are Enamel & Heating, E.M.I. Cossor, Fairey Canada Ltd. Of the companies which are situated in Ontario and Quebec, the majority are in the Toronto or Montreal areas, but there are some exceptions. Several of these are, Canadian Car & Foundry in Fort William, Computing Devices of Canada Limited and Electronic Materials of Canada Limited in Ottawa, Boeing of Canada Ltd., in Arnprior, Leigh Instruments Limited in Carleton Place, Dominion Rubber Company Limited in Kitchener, Fleet Manufacturing Limited in Fort Erie, Genaire (1961) Limited and Thompson Products Limited in St. Catharines, Renfrew Aircraft & Engineering Company Limited in Renfrew, Canadian Flight Equipment Cobourg Limited in Trenton, and Aircraft Industries of Canada Limited in St. John, Quebec. In addition, one of our companies has branch facilities in Calgary, Alberta.

Value of Production

The total value of production by the companies of A.I.A.C. in the calendar year 1963 was over 500 million dollars. Of this amount a significant portion was accounted for by the manufacture of aircraft, engines, simulators, electronics and electro-mechanical equipment, accessories and ground support equipment. A lesser amount is accounted for by repair and overhaul.

Exports

In recent years the air industry in Canada has been a large exporter of its products. These exports in the calendar year 1963 ran at approximately 50 per cent of its total production. In the first six months of 1964 exports of aircraft and parts (not including any electronics) were worth $122,300,000. This represented a rise of 136 per cent over the same period in 1963. No other Canadian secondary manufacturing industry exports in this volume, and at such a high percentage of its total production. This has been achieved against large competitors, some of whom have very great government assistance for their export sales efforts. These exports include aircraft, engines, simulators, communications and navigation equipment, and a variety of products and components.

Customers

Like all air industries all over the world, the Canadian air industry is heavily dependent on government assistance. The largest single customer is the Department of Defence Production, procuring on behalf of the Department of National Defence. The next largest customer is the United States. Department

of Defence, either directly or as sub-contractors to American prime contractors. The proportion of total output which is produced for and paid for by the Department of National Defence has, however, been steadily decreasing. The proportion of total output being produced for and paid for by customers other than the military departments of Canada and the United States has been steadily increasing. These customers include other governments, foreign and domestic airlines, and foreign air industries.

Research and Development

This is an industry which is based in large part on advanced technology and consequently absorbs a significant amount of research and development money. These funds are derived from government contracts, the companies themselves or a combination of both. Some notable successes in research and development have been achieved by this Industry both in meeting Canadian requirements and in satisfying world markets. No company can over the long term afford to engage in meaningful research and development programmes unless it has other activities from which to generate the funds which such participation in research and development requires.

Reasons for having an Air Industry

A strong and vigorous air industry is possible only with significant government support. It is fair to ask, then, what the country receives in return. There are four headings under which this can be answered:

(*a*) Support for the armed forces. The operation of modern equipment requires the back-up of modern industry. It is hard to conceive of a country without a modern industry using modern weapons in its forces. No requirement exists for blind adherence to a rigid made-in-Canada philosophy. There does, however, exist a requirement for a broad-based air industry with reasonable competence in the areas which are covered by our military commitments. Military commitments not only imply, but demand corresponding industrial capabilities.

(*b*) Contribution to advanced technology. Many processes, products and skills originate in advanced air industry programmes, and then filter through to other industries. In addition, some companies retain such "technological fall out" in their own plants and thereby diversify their product range and their industrial capabilities. Skilled labour trained in the Canadian air industry has contributed a great deal to the success of many new industries in different fields.

(*c*) Exports. There are not many mature, efficient air industries in the world. There are many export opportunities in both the defence and the non-defence fields. Some of these exports represent very complex and expensive items of the kind which very few industries can duplicate. The few countries which export any appreciable amount of air industry products do so from a strong home base. An air industry with a strong home base can market abroad a significant portion of its output. An industry without a strong home base will soon become non-competitive in export markets, and thereafter non-competitive in its own home market. Most exports are generated after the product has received domestic acceptance.

(*d*) Employment. If more secondary manufacturing is a Canadian requirement to absorb new entrants into the labour market, then the air industry is here and does not have to be created. While not a large industry in absolute terms, in relation to Canadian

secondary manufacturing industries it is sizeable, efficient, internationally competitive and provides employment at home for trained scientists, engineers, technicians and labour.

Conclusion

(a) A close partnership between the Canadian defence forces and industry in which the industry is permitted to help in advance planning, can serve national interests beyond those of defence alone.

(b) Research and development in an industry which is engaged in defence work can have great advantage to the country in the field of exports, and can also contribute in great measure to the advancement of technological know-how in industry generally.

(c) The Canadian air industry is an aggressive and efficient segment of secondary manufacturing. Its costs are competitive. Its capabilities are of the first order. The Industry plays a significant role in the Canadian economy.

Abercorn Aero Limited,
Montreal, Quebec

Aeroquip (Canada) Ltd.,
Toronto, Ontario

Aircar Canada Ltd.,
Dorval, Quebec

Aircraft Industries of Canada Limited,
St. Johns, Quebec

Aircraft Welding & Sheet Metals Co. Limited,
St. Michel, Quebec

Alcoa International Canada, Ltd.,
Toronto, Ontario

Alloy Metal Sales Limited,
Toronto, Ontario

Aviation Electric Limited,
Montreal, Quebec

Aviation Electric Pacific Limited,
Vancouver, B. C.

Bancroft Industries (62) Inc.,
Montreal, Quebec

Bendix-Eclipse of Canada Limited,
Toronto, Ontario

Boeing of Canada,
Arnprior, Ontario

Bowmar Canada Limited,
Chomedey, Quebec

Bristol Aero-Industries Limited,
Montreal, Quebec

Brunswick of Canada Limited,
Cooksville, Ontario

A. J. Campbell Division—Esna Limited,
Montreal, Quebec

Canadair Limited,
Montreal, Quebec

Canadian Aviation Electronics Ltd.,
Montreal, Quebec

Canadian Curtiss-Wright Limited,
Toronto, Ontario

Canadian Flight Equipment Cobourg Ltd.,
Trenton, Ontario

Canadian Marconi Company,
Montreal, Quebec

Canadian Skf Company Limited,
Scarborough, Ontario

Canadian Steel Improvement Limited,
Toronto, Ontario

Canadian Westinghouse Company Limited,
Hamilton, Ontario

Cannon Electric Canada Ltd.,
Toronto, Ontario

Carriere Technical Industries Ltd.,
Scarborough, Ontario

Central Dynamics Ltd.,
Pointe Claire, Quebec

Collins Radio Company of Canada Ltd.,
Toronto, Ontario

Computing Devices of Canada Limited,
Ottawa, Ontario

Daystrom Limited,
Cooksville, Ontario

DCF Systems Limited,
Malton, Ontario

DE Havilland Aircraft of Canada Limited,
Downsview, Ontario

Dilworth, Secord, Meagher & Associates Limited,
Toronto, Ontario

Douglas Aircraft Company of Canada Limited,
Ottawa, Ontario

Dominion Rubber Company Limited
Kitchener, Ontario

Dowty Equipment of Canada Limited
Ajax, Ontario

Drummond, McCall & Co., Limited
Lachine, Quebec

Dunlop (Canada) Limited
Toronto, Ontario

Electronics Materiels of Canada Limited
Ottawa, Ontario

Emi Cossor Electronics Limited
Dartmouth, N.S.

Enamel & Heating Products Limited
Amherst, N.S.

Fairey Canada Limited
Dartmouth, N.S.

Field Aviation Company Limited
Toronto, Ontario

Fleet Manufacturing Limited
Fort Erie, Ontario

Philip French Sales Ltd.
Montreal, Quebec

Found Brothers Aviation Limited
Rexdale, Ontario

Garrett Manufacturing Limited
Rexdale, Ontario

Genaire (1961) Limited
St. Catharines, Ontario

Grant & Russell, Limited
Montreal, Quebec

Godfrey Engineering Company Limited
Lachine, Quebec

The Goodyear Tire & Rubber Company of Canada Limited
Toronto, Ontario

Hawker Siddeley Canada Ltd.
Toronto, Ontario

Heatex Limited
Montreal, Quebec

Heroux Machine Parts Limited
Longueuil, Quebec

Honeywell Controls Limited
Leaside-Toronto, Ontario

Horizon Aviation Limited
Toronto, Ontario

Imperial Oil Limited
Toronto, Ontario

Instruments (1951) Limited
Ottawa, Ontario

Jarry Hydraulics Limited
Montreal, Quebec

Walter Kidde & Company of Canada
Montreal, Quebec

R. J. Landry Associates Ltd.
Ottawa, Ontario

Lasalle Engineering Limited
Montreal, Quebec

Leigh Instruments Limited
Carleton Place, Ontario

Litton Systems (Canada) Limited
Rexdale, Ontario

Lockheed Aircraft Corporation of Canada Ltd.
Ottawa, Ontario

Lucas-Rotax Limited
Montreal, Quebec

McDonnell Aircraft Corporation
Ottawa, Ontario

C. M. Newhall Limited
Dorval, Quebec

Normalair (Canada) Ltd.
Toronto, Ontario

Northwest Industries Limited
Edmonton, Alberta

Precision Rubber Products (Canada) Ltd.
St. Therese, Quebec

Prenco Progress & Engineering Company
Toronto, Ontario

Railway & Power Engineering Corp. Limited
Montreal, Quebec

Ranar Industries Limited
Montreal, Quebec

Rankin-Strite Limited
Hespeler, Ontario

RCA Victor Company Ltd.
Montreal, Quebec

Renfrew Aircraft & Engineering Company Limited
Renfrew, Ontario

Rolls-Royce of Canada Limited
Dorval, Quebec

Seeley Publishing Company Ltd.
Montreal, Quebec

Shell Canada Limited (Aviation Department)
Toronto, Ontario

S. Smith & Sons (Canada) Limited
Don Mills, Ontario

Sperry Gyroscope Ottawa Limited
Ottawa, Ontario

Standard Aero Engine Limited
Winnipeg 21, Manitoba

Terry Machinery Company
Ottawa, Ontario

Thompson Products Limited
St. Catherines, Ontario

Timmins Aviation Limited
Dorval, Quebec

United Aircraft of Canada Limited
Longueuil, Quebec

Varian Associates of Canada Ltd.
Georgetown, Ontario

Vickers-Sperry of Canada Ltd.
Rexdale, Ontario

Walbar Machine Products of Canada Limited
Toronto, Ontario

York Gears Limited
Toronto, Ontario

The CHAIRMAN: Before we proceed with the questioning, I believe there is a further presentation that the association wishes to make and I will ask Mr. Golden to proceed with that.

Mr. GOLDEN: Well, sir, Air Vice Marshal Plant would like to carry on from here.

Mr. WINCH: Is this a brief or is it extemporaneous?

The CHAIRMAN: This is extemporaneous.

AIR VICE MARSHAL PLANT (*General Manager, Collins Radio Company of Canada Ltd., Toronto, Ontario*): Mr. Chairman and gentlemen, I am the chairman of the board of Air Industries Association of Canada, and as such I suppose one might say I am an elected member. I am responsible, therefore, to all the 91 members of the association, and I should like to make it very clear that the association does not represent a lobby of any kind on behalf of any one of the companies who are members.

I should like to say, also on behalf of the association, that we subscribe wholeheartedly to the statement made by Mr. Drury recently to the effect that the defence posture and the defence requirements should govern and not the requirements of the industry.

However, we do consider ourselves, in effect, to be an integrated part of the defence force of our country and it may well be that immediate military requirements do not necessarily require that construction of any particular kind of equipment is now needed but would be needed sometime in the foreseeable future.

It would be desirable, therefore, if the industry could put its house in the necessary shape in order to plan for any future requirements. I would like to repeat once more, however, that we consider ourselves as a supporting part and in fact an integrated part of defence in this country.

It was my good fortune this spring to be a member of a trade mission, consisting of several members of the Air Industries Association of Canada, to Australia and New Zealand and Japan. With us was Mr. Jim Smith of Computing Devices of Canada Limited. We thought, while we were on this tour, that a slide presentation covering as widely as possible the capability of our industry would be useful. It was well received in Australia and it was received as a surprise, I think, to most of the people that our industry is as broad as it is. Most people think the aircraft industry consists of someone who builds an airframe and some people who build engines and forget about the other ancillary equipment.

If you will bear with us, I would like to ask Mr. Smith to give you basically the same slide presentation which we presented to the officials in Australia, New Zealand and Japan.

I should like to inform you that Mr. Smith worked very hard at this on the tour. He spent the whole of the first day in Tokyo with an interpreter and had his whole presentation translated into Japanese so that those to whom he was speaking could, in fact, understand him.

Mr. J. E. SMITH (*Vice President, Computing Devices of Canada Limited*): Gentlemen, as Mr. Plant indicated, this collection of slides was made particularly to cover the scope of the industry in Canada and not to highlight any particular activity or product line. The slides are arranged in sequence which give typical views of some of the factories and plants in the industry; to cover some of the aircraft programs and the engines, and then continue through the line of accessories, electronic equipment and on into some of the newer and more diversified projects under way in this country at this time.

This first slide is a view of the de Havilland aircraft plant at Downsview. This is the home of the Beaver, the Otter and Caribou and now the new Buffalo aircraft.

This is the de Havilland plant at Malton where de Havilland are now undertaking a major program in co-operation with Douglas Aircraft in the United States for the manufacture of a significant portion of the new medium range DC-9 jet transport aircraft. As you know the DC-9 is an aircraft which will be used in Canada by Air Canada.

This is a view of the Canadair plant near Montreal. Canadair is a large scale producer of such aircraft as the T-33 trainer for the R.C.A.F., and a large number of F-86 aircraft for both Canada and export applications. They currently have been producing the CF-104 aircraft for the Canadian air force. They also produce a number of that aircraft for a joint United States-Canadian military aid program. Canadair developed and produced our Argus antisubmarine aircraft and CL-44 swing tail transport.

This is the United Aircraft of Canada Limited plant located at Longueuil, Quebec. United Aircraft produces here most of the current requirements, for worldwide applications, for spare parts for Pratt-Whitney piston engines for aircraft. They have developed, in these facilities, the new Canadian PT-6 turbo prop engine and are currently producing the CHSS-2 helicopter for the Canadian navy.

This is a view of the Computing Devices of Canada Limited plant near Ottawa at Bell's Corners. This slide shows the typical type of facilities that are in use across the country by the suppliers of electronics and accessories for the industry.

This is a view of the Canadair CL-44 transport aircraft. Those of you who travel extensively around the world will be quite surprised to find aircraft of this type being loaded or unloaded at most of the major international terminals in the world.

This is a view of the de Havilland Beaver aircraft in the foreground and the Otter at the back. De Havilland have produced over 1,600 Beaver aircarft, mostly for the export market. They have produced over 800 of the Otter, the larger one at the rear there.

This is the de Havilland Caribou produced for the United States army, in service with the Canadian air force, and with a large number of export customers. During the trade mission, the first three of this type of aircraft arrived in Australia for the Royal Australian Air Force.

This is a view of the PT6 engine. This engine was designed and developed in Canada and is currently undergoing evaluation for about 14 different applications in marine vessels, landcraft and aircraft of both the fixed wing and rotary wing types. The engine is a very strong contender for the new large scale programs under consideration in the United States for their counter insurgency type of aircraft.

This is an aircraft of which those of us in the industry are very proud. This is the Turbo-Beaver, the first completely Canadian designed and developed commercial aircraft. It is a de Havilland Beaver in a modified form with a United Aircraft PT-6 engine. This aircraft aroused considerable interest in the Far East during our tour this spring.

A new aircraft currently under development, and again wholly Canadian, is the new de Havilland Twin Otter. This is a growth version of the Otter aircraft with two United Aircraft PT-6 engines, again of considerable interest for short haul airlines in export areas such as New Guinea.

This is a view of the de Havilland Buffalo, a much larger short take-off aircraft.

This is the Canadair CL-41, jet trainer. Approximately 190 of these are in production as a trainer for the R.C.A.F. and considerable interest in a number of versions of this basic aircraft has been shown in many export countries—South America and the Far East, including at the present time countries such as Malaysia.

A new development program, and following on the extremely good reputation that the Canadian industries have achieved in the vertical or short take-off field, a program at Canadair, is the CL-84 Tilt wing VTOL aircraft. The first prototype of this aircraft is due to be rolled out at Canadair on December 9th of this year. This program has been supported as a joint program between the Canadian government and Canadair.

This is one application of such an aircraft, the CL-84 as an assault transport capable of landing without runways in undeveloped areas.

Moving to engines, this is the J-79 assembly line at Orenda Engines near Malton. Orenda have, over the years, developed and produced a large number of engines for both Canadian and export applications. They developed and built the engines for our CF-100, the Canadian version of the F-86 aircraft, and more recently have been producing the J-79 for the Star Fighter or CF-104 program, and the J-85 engine for the Canadair CL-41 trainer.

Orenda also have an industrial gas turbine engine program. The engine, called the OT-4, is being produced for some requirements initiated by the United States forces for applications on navy vessels and also for industrial turbo electric generating sets.

Now, dealing with accessories. This is a view of an undercarriage. This particular one was for our Arrow program—designed and produced by Dowty near Ajax. There are two firms in Canada specializing in this field and capable of meeting any requirements domestically. These firms are, in fact, meeting export requirements in undercarriage and advanced hydraulic equipment.

Fuel controls. This particular slide shows a fuel control produced by Aviation Electric for the CF-104. A wide range of fuel pumps and fuel controls are being produced to meet domestic requirements.

Power drive equipment, York Gears Limited in Toronto. This particular set of accessories is designed and produced for the swing-tail assembly of Canadair CL-44. York Gears also produce the special high power reduction gear assemblies for the Orenda industrial turbine program.

Backing this up, we have a wide range of sources of precision castings and forgings. This slide shows an example of such parts for the automotive and aircraft engine industries produced by Thompson Products Limited.

This is an ejection seat produced by LaSalle Engineering in Montreal. This seat is produced in Canada for the F-104.

Permanent mould castings from Canadian Steel Improvement Limited. They still supply these precision components for domestic and United States requirements.

The next slide shows also complex aluminum forgings produced for the air industry by Canadian Steel Improvement Ltd.

Jarry Hydraulics in Montreal have been very successful in the penetration of the hydraulic power-survo field. They have developed and produced components for Canadian aircraft requirements and are producing components for such aircraft as the large Lockheed jet transport produced in Georgia, and are also producing similar items for aircraft such as the Northrop F-5 made in Hawthorne, California.

Dominion Rubber has established a large facility for the production of fuel cells for both Canadian and major United States programs.

Moving to ground support equipment, Terry Machinery is one of a number of suppliers covering the whole range from air conditioners, ground handling equipment, ground starting units and ground power equipment.

Mr. Golden mentioned earlier flight simulators. This is a slide showing the operator's console of a flight simulator for training on the F-104 aircraft. This simulator was developed by Canadian Aviation Electronics in Montreal and is being supplied to the Canadian services and is also supplied in substantial quantity to members of the European consortium who are operating F-104 aircraft.

This is a view of the Argus simulator for training the operational crew, pilots and also the tactical personnel in all of these functions of the Argus aircraft as it is applied to antisubmarine reconnaissance.

Moving into the electronic area, this is a solid-state power supply developed by de Havilland and supplied to the Canadian Navy.

This is a view of a crash position indicator initiated by the National Research Council and now being further developed and supplied to world markets by Leigh Instruments at Carleton Place. This slide shows the tumbling aerofoil unit mounted in the rear section of an R.C.A.F. Yukon transport.

Genaire (1961) Limited have recently moved into a new product line, the production of skis. This slide shows the size range currently in production, the smallest one being held by the young lady.

This is another view of Genaire's range of aircraft skis. Genaire are producing these with approximately a 60 per cent export volume.

This is a unit known as an airborne profile recorder. It has application in photogrammetric surveys and the survey of air routes. A number of these have been sold on the export market. It is a development of de Havilland in Toronto.

This is a view of the assembly of a number of photo reconnaissance pods designed and produced in Canada initially for the R.C.A.F. and now going into production for sale to such countries as Spain, Finland, Norway, India and Australia.

This is a view of some of the electronic components, and camera controls, which are mounted in the pod.

In the communications field this is a special ultra high frequency transceiver developed and produced by Collins Radio and applied to special ver-

sions of the F-104 aircraft used by the National Aeronautical and Space Administration in the United States for high altitude research.

This is a Collins produced ARC 552, packaged for the Canadian F-104 aircraft, being supplied by Collins Radio Company of Canada Ltd. for a large number of the European aircraft programs and currently being produced under licence from Canada in countries such as Japan for similar applications.

This is a five channel single side band communications set developed by Collins of Canada. Over 800 of these were built and sold in the international market.

One area of considerable specialization in Canada in the air industry has been in the over-all field of air navigation. This is a view of the Canadian Marconi doppler antenna. Canadian Marconi, working initially with the Defence Research Board, has developed a series of two doppler sets, one for fixed wing aircraft and one more recently for helicopters which have met with substantial international success in the United States and Europe, and which are installed on commercial aircraft in countries such as New Zealand and Australia.

This slide shows a view of one piece of electronic equipment typical of this type of advanced system. This particular one relates to their new helicopter system. This doppler system is used in aircraft to measure velocity. Measuring velocity and direction, one is able to compute, aircraft positions.

Another method is to measure aircraft acceleration in all directions and compute distance. The equipment to do this is known as an inertial system. Such a system is used in the F-104. Litton Systems produced the LN-3. The computer for this system is shown here.

The next slide shows the inertial platform itself. Litton produced this equipment for the Canadian services and currently supply a more advanced version for a United States aircraft being produced at Mcdonnell aircraft.

This is a view of a navigation system designed and produced in Canada. At the present time there are over 3,000 such sets in the international market.

This equipment is a Position and Homing Indicator. It is in production in Canada and in production under licence in Italy, France and Germany. A more advanced navigation system is shown on the next slide—This is a new version for helicopters—particularly for a tactical helicopter. This particular equipment has successfully completed trials in Germany, France, Italy, and the United States.

Heavy aircraft systems, again in the navigation field, developed in Canada. Equipment of this general type is flying in the Canadian Argus and Neptune aircraft. This particular set is currently flying in the United States government Orion aircraft for an evaluation on their advanced programs.

This is tank navigation equipment developed for the Canadian army by Aviation Electric Limited in Montreal. This equipment, while initially aimed at a Canadian requirement, is showing signs of becoming a major export product for Europe and for United States applications.

An airborne digital computer. We have the capability to develop equipment in this field and this type of system is now being installed in advanced aircraft for evaluation in this country.

Types of displays. This particular system, a map display system, has been evaluated in England and is being flown next month in France. A version of this is under evaluation in the United States for one of their Marine Corps programs. This is another view of this equipment. It enables the pilot to fly anywhere within a 2,000 nautical mile by 2000 nautical mile area and have a continuous presentation of the ground contour.

Another new type of display is called a head up display. This has become a requirement on most new aircraft, both military and commercial. This system projects information on a combining glass in front of the pilot and is valuable when operating under conditions where the pilot does not want to take his eye off the outside world to look at information in the cockpit. All the necessary information for him to safely command the aircraft are presented on the wind screen.

Another version of equipment of that type projects the information on to a plotting table and has applications in navy, army and air force systems for the European and North American markets.

Moving to the more advanced research field, in Quebec city, Canadian Armament Research and Development Establishment have done extensive work and are doing extensive work in space research, particularly in the high velocity field.

This is a view of an industrial light gas gun facility capable of firing objects at velocities in the order of 25,000, 30,000 feet per second to study the effects of that type of particle impact. This information has application to the satellite and the space vehicle design field.

This is another view of that facility showing the measuring tank and some of the specialized equipment such as flash X-ray necessary to make these observations. This type of facility has been engaged in work for the United States government and companies and aircraft firms engaged in the advanced space field.

This next slide is the Canadian Allouette satellite, a major joint program between government agencies and a number of members of the industry. As you know, this was launched approximately two years ago and is still operating satisfactorily in orbit. One of the unique features of this satellite is the stem unit originally developed by the National Research Council and produced by De Havilland Aircraft. That box being held is capable of producing 75 feet of self-supporting antennae and retracting the antennae after use. There are a number of these systems currently in orbit as the result of launchings from the space agencies in the U.S.A.

This is a view of an infra-red fuse. There are a number of firms in Canada qualified in infra-red technology and one of the members of the industry is undertaking a major program for the United States.

Another combined program is the Black Brant sounding rocket initially developed by Canadian Armament Research and Development Establishment and currently being tested at Fort Churchill. It is a combined program carried on by Canadair and Bristol Aero-Jet in Winnipeg.

This is the Canadair CL-89 reconnaissance drone. Its application is to be able to automatically fly a controlled path, record photographically what it has passed, and return back to the launch point to provide this information for interpretation. This is a jointly supported program between Britain, the United States and Canada. This next slide shows the Canadair Dyna Track articulated vehicle being developed for the U.S. Army.

This is a view of the new Canadian Navy hydrofoil. In this instance, deHavilland are the prime contractors. There are shipyards involved and a number of firms in the industry are supplying equipment varying from propulsion to on-board tactical systems. The program has been under way in its preliminary phases for approximately one year.

Finally, this is a view of the Argus aircraft. This aircraft has been and is highly successful in its anti-submarine role. Both aircraft equipment and on-board tactical equipment were developed in Canada. I might indicate to you

that the Canadian industry has achieved quite a substantial position as a member of the specialist teams working in the anti-submarine area within the western world.

Thank you very much.

Mr. PLANT: We have endeavoured to give you a broad description of the extent of the Canadian aerospace industry. In making a presentation of this kind there is a tendency for anyone of us in the industry to use words and terms which we are completely familiar with, which I might refer to as our own jargon. In case there are any of these terms which leave you mystified, we would be pleased to endeavour to explain it to you. We would be most happy if we could extend an invitation to the committee to visit some of the facilities in Canada so that you could see at first hand what, in fact, our industry consists of.

This is one piece of hardware I have brought along, one module of one of these radios which is in current use in the R.C.A.F. today. This is one of 13 modules which is contained in UHF radio. This was designed about 1955 and was in full production by about 1956 or 1957. There has been a further development of radios the size of this generally to the present development. If you are interested in having a look at this, I will pass it along to you. This shows a development of thin volume circuits going through various steps ending up with one module down in the corner. Two of these modules will replace this one big one.

This is the type of development that is going on in very many areas today. I endeavoured to put a covering over the corner so there would be no company affiliation or association with what I am showing you.

I think we are now at your disposal, Mr. Chairman.

The CHAIRMAN: We are now ready to proceed with questioning. Before we do, I have a Steering Subcommittee report I would like to put forth for your approval.

As you probably know, last Thursday there was a motion passed by the Committee that the President and General Manager of Canadian Commercial Corporation appear before the committee. The subcommittee's recommendation is as follows.

The subcommittee recommends that the Committee meet at 11.00 a.m. Tuesday, December 1, 1964, with the Minister of Defence Production and the president and General Manager of Canadian Commercial Corporation in attendance.

Can I have a motion of acceptance of that, please.

Mr. WINCH: Yes.

The CHAIRMAN: Agreed.

We will proceed with the questions. Before we do, could I remind the members of the committee that I have a reasonable list of questioners and I would ask you to be as quick as you can with your questions.

Mr. Winch is first.

Mr. WINCH: Mr. Chairman, I appreciate what you have just said. I had the privilege of being a member of this committee when it first formed and also had the honour of being a member of the first examination made of the Public Accounts committee a few years ago.

I have noticed, Mr. Chairman, because of the limited time we are not able almost always to complete presentations made to us. So, I wonder if yourself and the committee would allow me to perhaps introduce a new procedure and see how it works. We have now had a presentation by the Air Industries Association of Canada, and instead of asking one question, shooting a series

through. I will do it as briefly as I possibly can because I think by so doing we may get answers of the entire presentation at least in part. Have I permission to do that?

The CHAIRMAN: I think the only concern I have is that everybody has an opportunity to ask the questions that they wish to ask. So, I would suggest, Mr. Winch, that you proceed and if I, looking at the list in front of me, think I should proceed to someone else, I will ask you to await another turn.

Mr. WINCH: As speedily as possible I will try to go through this. Could I ask this. On page 1 where we are told in the last paragraph about the manufacturing; there is mention of aircraft. Could we have, on this mentioning of aircraft, an explanation of the relation of the sale of aircraft to production, related to the activities of private enterprise, as represented by all the companies, of which you have given us the names, and the governments. What is the relationship and how do you co-ordinate? That, sir, would be my first question.

My second question would be this. As you will find on page 2 in the second paragraph:

> It is not always recognized at home and abroad that Canada is one of the few countries in the western world with an aerospace industry capable of advanced research, design, development and production of complete aircraft and the associated systems.

I would like to tie that in with page 5. Under paragraph 6 it says:

> This is an industry which is based in large part on advanced technology and consequently absorbs a significant amount of research and development money.

In view of this submission and the slides which have just been shown, I would be interested in knowing if we can be, as a committee, informed on your production and sales. What is the amount, percentagewise, that your company spends on research and how much are you dependant upon government research in its various aspects?

This matter, as you know, arose in the House of Commons and in the press a few days ago.

What percentage do you spend, as private corporations, on research and how does it compare with the results of research which is done by government boards under their auspices.

If I may ask one other question.

The CHAIRMAN: I think we should try and answer as we go. For our witnesses to try and recall the questions later would be difficult.

Mr. WINCH: You would like me to stop?

The CHAIRMAN: Let the witness answer the first question.

Mr. GOLDEN: Mr. Chairman, if I can read my notes and if I understand Mr. Winch correctly, the first question is, what sort of co-ordination is there between industry and government and what is the relationship between industry and government in sales of aircraft.

The answer to that, sir, is almost as diverse as the nature of the product and the nature of the market. There are some things that can only be sold with the most active co-operation between government and industry. There are other products which industry is quite capable of selling, and does sell, on its own.

Mr. WINCH: Can you give us any relationship between what you sell on your own as compared with what you sell, outside of Canada, in co-operation with the government.

Mr. GOLDEN: If you mean a quantitative one, I cannot give you that. I want to say that there are different elements of the government involved as well. There is the trade commissioners' service of Trade and Commerce which is available to everybody. There is the Department of Defence Production which presumably concerns itself only with export promotion of defence projects and so on.

I think I would answer your question by saying that the relationship can be as varied as the type of product you are talking about. There are some products that can be best sold by private enterprise alone and there are some products only successfully sold as a result of a partnership between industry and government.

Mr. WINCH: I just asked on that one point only. It is not only my suspicion but I think my contention that some things that you sell directly as a private enterprise are included in the amounts that are reported to the House of Commons as being under defence production sale. Can you make any comment on that?

Mr. GOLDEN: Of course there are. If I understand you correctly, you are saying that the Department of Defence Production lists as sales under the production sharing program, sales which in some cases were largely, or perhaps entirely, consummated by a company. I have never pretended otherwise. I did not realize that there was any suggestion otherwise.

The second question, sir, is can we relate the statement on page 2, dealing with research and development, to the statement on page 5. How much dependence is there on research and development in government and research and development in industry, and how much do we spend. We have just received a report which was commissioned some time ago. To try to answer the last of that question, we have not had a chance to digest it as yet. These figures have not been available up to now, as an industry. I think individual companies can tell what they spend. As an over-all industry, we do not have those figures. The conclusions of this study, which was commissioned some time ago, have just been delivered to us. We have not had the time to get at them.

Mr. WINCH: Can you give us an estimate?

Mr. GOLDEN: No. We hired an outside consultant to do this.

Mr. WINCH: You have a report now?

Mr. GOLDEN: Yes. We would be glad to give you the results of the study we commissioned. It does deal with these questions.

Mr. WINCH: Within a few days?

Mr. GOLDEN: Yes. The honest frank answer to that part may sound evasive but it is not. Here, again, it is as diverse and varied as the nature of the product. Let me give you this example. Some of the products we sell were developed entirely in government laboratories; some of the products the government laboratories never had anything to do with them. Some of the products, the initial thinking came from government laboratories. Some of the products came about as a result of jointly funded efforts between government and private enterprise.

If your question deals in general with the approach to research and development, I think it would be the view of this association that this country probably does not have enough research and development in industry compared with other advanced nations.

Mr. WINCH: Can you give the committee any indication of how much, basically, all these companies are subsidized by the government? Do you pay for the government research in any way at all?

Mr. GOLDEN: Yes. I tried to indicate, sir, that there are some programs which are jointly funded and usually 50 per cent. There are some programs

which are entirely government funded. There are some programs which are entirely contractor funded.

Mr. WINCH: If it is wholly government, do you make any contributions to the government upon which you are now going to reap benefit on the production?

Mr. GOLDEN: Yes. These contracts vary very much. Usually, if it is entirely a government funded program, the rights are owned by the government, and of course it is a different relation.

Mr. WINCH: Do you pay the government because of this research of which you are taking advantage in your production?

Mr. GOLDEN: There are types of contracts where if there are sales, a proportion of the sale price is refunded to the government.

Mr. WINCH: I have one more question. I appreciate, sir, that you have allowed me to do it this way. I would like to ask one more question and it is not a smear or anything. It is something that would be of value if you can tell us.

I am very happy that you have, sir, Mr. Plant on your right.

Can you, in any way, clarify reports or suspicions—I will put it that way—that very high service personnel in the active force, be they an air vice marshal or a lieutenant general or a vice admiral, in voluntary or involuntary retirement, then go into industry of the defence production nature.

I am asking you, is that because of their high technical knowledge or is there some basis that because of their active service contacts that it will be of advantage to a company? I am putting it as bluntly as I can and as honestly as I can because I think an answer will mean a lot in view of certain reports that I have read and I know you have too. I would like to have this answer if I could.

Mr. PLANT: If I may, I can only answer this on a personal basis. It has really little to do with the industry per se.

As far as my own case is concerned, I joined the industry after I retired from the service. My associations with my former brother officers were more of a disadvantage, as far as promoting any sales was concerned, than an advantage.

I say this in complete and utter honesty, as I left the service as a senior officer is was dynamite for me to try and talk to anybody in national defence headquarters because I was regarded too senior to be talked to.

Why did I join a company and why do other officers of the armed forces join companies which are associated with the defence industry? Obviously, because those of us, who are now in the industry, have contacts with a great many of the senior officers of the armed forces. We know that they are going to be available. We recognize they have the kind of qualifications, of a technical or administrative nature, that we can use. I think I can say, without any fear of contradiction, that in no instance did any firm hire any officers of the armed forces with a view to having an "in".

In view of having an association which is a start, to be able to introduce people, nobody could say that this is not so.

Mr. WINCH: Is this, what the committee is now being told, correct in all these companies? By the way, you know and we know the number of retired active service personnel who are now in these various companies as directors, vice presidents and general managers. Would you say, sir, to this committee that it is not because of their previous contacts to assist the company. If it is correct, what we have been just told—that it is an obstacle to meet with those you were previously in contact with—why do you hire them? That is just exactly the way the question is noted.

Mr. PLANT: I think you will appreciate that it is quite impossible for me to answer the questions pertaining to employment of other people in other companies. I left it on the purely personal basis. If it was a disadvantage from this point of view, why in the world would I be hired by the company concerned?

Mr. WINCH: Because you told me it was a disadvantage.

Mr. PLANT: It is a disadvantage, if this was what I was hired for, to act as sales—

Mr. WINCH: I am awfully sorry. I did not want it that way.

The CHAIRMAN: I think it would be better if you let him finish.

Mr. STEVENSON: Being a member of this organization who has not served in the armed forces, I think it is generally true when going through the roster of managers, officers and directors of the companies on that list that there are not a significant number of senior military officers in that list. Air Vice Marshal Plant happens to be the exception.

Mr. WINCH: Are you saying in an executive position?

Mr. STEVENSON: Yes.

Mr. WINCH: Would you produce that.

Mr. LLOYD: Mr. Winch, I think in all fairness to Mr. Plant he should complete his statement and then the generalities could be continued with.

Mr. SMITH: Is it not the case of a shoemaker sticking to his last? These are things he knows best. Is not that the answer really?

The CHAIRMAN: I believe this is the answer that has been given, Mr. Smith, by Mr. Plant indicating that because of the skills and so on acquired in the service.

Mr. PLANT: I served 25 years in the Royal Canadian Air Force, the last 10 and some extra in the supply and logistics. Therefore, I would say that the best thing I would be qualified for would be something in that line.

The question I thought Mr. Winch framed was with a—

Mr. WINCH: It was not framed to you.

Mr. PLANT: Whether there was something other than the technical knowledge of the individual that influenced—I think I can say in honesty that that is generally not true with senior officers I know of.

The CHAIRMAN: I think we have probaby explored that area beyond anything that the witnesses could add.

Because of the number of committee meetings and we have only one shorthand reporter, I think we should have a recess for a few minutes.

Recess.

The CHAIRMAN: Could we come to order, please. Before we proceed with our questioning I would like to say that I still have a large number of people who would like to ask questions. It is now 25 minutes past 12. The witnesses would be available this afternoon. I would suggest that we maybe proceed until a quarter to one. Those who still wish to ask questions should come back this afternoon. I know this poses a conflict with other commitments.

Mr. WINCH: This is a most important subject and I suggest we come back this afternoon.

The CHAIRMAN: Let us see how far we get. If the people asking questions try to be as brief as possible, it would be helpful. I realize this is an area which does require a certain amount of exploration.

I have on my list Mr. Harkness, Mr. Smith, Mr. Temple and Mr. McMillan and Mr. Lessard. Mr. Harkness would you continue.

Mr. HARKNESS: I was interested and quite impressed and delighted to see the impressive increase in exports in the first half of 1964. Are there any particular reasons for that 136 per cent increase over the same period of 1963? Also, as part of the reasons, are there one or two three types of aircraft or particular types of equipment that have been responsible for the increase?

Mr. GOLDEN: I think a good proportion of the increase can be accounted for in the heavy deliveries of several large contracts entered into earlier. Yes, I think this is so.

Mr. HARKNESS: What particular equipment or contracts are they?

Mr. GOLDEN: I would think F-104 export deliveries and the Caribou export deliveries would be the two major reasons for the increase.

Mr. HARKNESS: I was wondering if the F-104 particularly was responsible, to a considerable extent, for the remarkable increase?

Mr. GOLDEN: I think in a large measure.

Mr. HARKNESS: You would not expect to have this repeated?

Mr. GOLDEN: I think we would put it in reverse. If you want to export a lot, the orders have to be placed a considerable period in advance and we are now reaping the advantages of orders placed earlier.

Mr. HARKNESS: Until there is another contract of that kind, you would anticipate some reduction in recent export?

Mr. GOLDEN: Yes, I think that is probably it.

Mr. HARKNESS: On page 7 you say:

> Most exports are generated after the product has received domestic acceptance.

Could you give us some examples of that?

Mr. GOLDEN: Well, I think the classic example relates to the major systems. The decision by the Royal Canadian Air Force to buy the F-104—it was only as a result of that that it was then possible to have a joint Canadian/American arrangement to ship the F-104 abroad. The decision to build the F-104 simulator—Canadian Aviation Electronics in Montreal thereby opened up the opportunity which was seized upon and successfully concluded to deliver those simulators to all of the European members of the consortium.

The Caribou is another example where there was joint assistance to the company which then made it possible for substantial export orders to be met. The Litton navigation system, which was built in Canada for the F-104, ultimately found export orders.

Mr. HARKNESS: I would be rather doubtful that the example of the Caribou is a good one. I think this is an example of which the company managed to sell these considerable number of planes abroad before any were bought by the Canadian government at all.

Mr. GOLDEN: I would not. I was using "domestic acceptance" not only to mean buying it but also as a joint effort—there was Canadian government participation in the original building of the Caribou.

Mr. HARKNESS: What I was coming to was, without Canadian government acceptance of aircraft which can be produced in Canada, do you think you can export to any material extent?

Mr. GOLDEN: It is more difficult.

Mr. HARKNESS: You would not like to go any further than that?

Mr. GOLDEN: I would have difficulty in going any further because one can prove exceptions to what I have been saying and what you have been saying. This is certainly more difficult.

Mr. HARKNESS: I think, undoubtedly, that is the case.

In your conclusions 8(a) you say:

> A close partnership between the Canadian defence forces and industry in which the industry is permitted to help in advance planning, can serve national interests beyond those of defence alone.

To what extent do you think it is practical to have industry participate in decisions as to what type of defence equipment will be secured?

Mr. GOLDEN: I do not think that you could go that far, to participate in decisions. I think you can go a great deal further than we have so far found practical in this country, in assisting in the planning. I think there is no real role that industry can play in making the decisions. It is in the planning and in the interplay that you can get at that stage that I think, for example, the British and Americans would be better than us.

Mr. HARKNESS: What exactly do you mean by this, by participation in planning?

Mr. WINCH: Under 8 (a)?

Mr. GOLDEN: I would say that we have not yet exhausted the possibility of exchanging views between government and industry for the formulation of policy.

Mr. HARKNESS: The reason I asked is that on my own personal experience—

Mr. GOLDEN: I am giving you an answer based on my own personal experience.

Mr. HARKNESS: I do not see how this thing can be done. I do not know how it could be worked.

Mr. GOLDEN: Perhaps I can answer it this way, that it is my understanding that the British and Americans have been able to go somewhat further than we have found it advisable to do in this country without going anywhere nearly as far as participating in making decisions, which I understood you to say earlier. It is my understanding that they have been able to go further than we have found it advisable to do in this country.

The CHAIRMAN: Perhaps I might be allowed in clarification to say, in terms of discussions between industry and defence are you thinking of evening out the peaks and valleys of industry or specifics of what types of equipment should be ordered.

Mr. GOLDEN: I think in the specifics, about particular types of equipment, you are in very real trouble. There is a lot you can do before you get down to that in exchanging ideas on what the services have in mind and how this would relate to the capabilities of an industry; when you might place an order; and so on. In addition to that, a better understanding of what the long term planning is. This has disadvantages as well as advantages. You might go off and do something because you think the long term planning will go one way, and with the full consideration of all the problems it might go the other way. I will admit that it is our view that we have not gone as far as it appears that other countries have been able to do in this field.

Mr. WINCH: Exactly what do you mean by private industry—in the conclusions 8(a)—can serve national interests beyond those of defence alone?

Mr. HARKNESS: The thing I am getting at is whether or not it is practical and really a good thing, we will say, to have the aircraft industry exerting sufficient pressure through their putting forward their ideas and so on to act

as a determining feature in the type of equipment which is required for certain specific military purposes? I see a considerable damage in this.

Mr. GOLDEN: You have added one or two adjectives which are not in our brief.

Mr. HARKNESS: I want to know what you mean.

Mr. GOLDEN: That is not what we had in mind.

Mr. WINCH: Under 8(a) you have said "can serve national interest beyond those of defence alone." You have made there a definite statement. Are you prepared to back that up?

Mr. GOLDEN: Yes. Are you asking this question?

The CHAIRMAN: I believe Mr. Harkness has the floor.

Mr. HARKNESS: Thank you. I think we have gone far enough in that particular line.

There is one other question I would like to ask. To what extent have you been able to secure sales in Australia and particularly in regard to their new program of re-armament which is fairly extensive for Australia. Are there reasonable prospects of participation apart from sales of Caribou?

Mr. GOLDEN: I could not answer that.

Mr. STEVENSON: The C-41 trainer is a contender in training. Other than the Caribou that is the largest, I believe.

Mr. HARKNESS: It is still a contender?

Mr. STEVENSON: I understand so.

Mr. HARKNESS: On the basis of Prime Minister Menzies speech in the house, I thought it was not. That is one of the reasons I asked this question.

Mr. PLANT: Mr. Wooll was the leader of the mission to the far east.

Mr. HARKNESS: I thought Australia was one of the areas to which we should be able to sell more goods than we have been able to sell in the past. I thought as a result of your mission, particularly as Australia is engaged in a considerable re-armament program, the aircraft industry might get a better share than they have in the past.

Mr. WOOLL: They were greatly surprised that Canada had the depth of industry that we are talking about today. We were encouraged to acquaint ourselves with the air attache in Washington. There were two specific cases. These are things you do not find out if you do not go.

One of our companies had a simulator which was of interest to Qantas, a large Australian airline. They did not realize that this type of equipment was made available in Canada and they would have never known it if we had not shown the slides produced here today.

The safety device on the tail end of the Argus, which was shown, they were not aware of such a device. Both governments gave invitations that when their representatives went to the United States that they would travel the extra miles to come to Ottawa to see both these companies.

Further, we had Ian Fleming, who was on defence research, in Canada back in July. This was a follow-up of a visit we had with him, and he toured some of our facilities.

We, on the mission, are quite certain there is going to be more interest in Australia and New Zealand as a result of the mission.

These people are now aware of our capabilities and are willing to deal with us if the price and product is right. It is up to us to meet the requirements.

Mr. SMITH: I would gather from the presentation and what we have seen that the Canadian air industry is perhaps supplementary or complementary to the United States, that there are a great deal of components, and many are of American origin and related to American built.

Mr. GOLDEN: That is one aspect of the situation. It is not the whole story. But certainly it is true. It is one aspect of it.

Mr. SMITH: It seems that air industries in Canada have taken a turn and no longer are trying to produce the prestige weapons that have acceptance in another country. They are rather producing equipment that is perhaps—I do not mean prestige in the sense of quality but the type where our national pride is involved and limiting their field to what is more suitable for a country the size of Canada.

Mr. GOLDEN: I do not think that is a decision that industry makes. That is very largely a decision which government makes.

Mr. SMITH: It would seem to have been made in some because I do not notice that we are producing—I do not like the use of the word Arrows.

Mr. GOLDEN: I gave the answer. Private companies do not build Arrows on their own. They only do it when they get contracts from government departments.

Mr. SMITH: You speak of a large amount of exports. A fair percentage of the exports come as a result of defence sharing and international agreements, is that right?

Mr. GOLDEN: That is so.

Mr. SMITH: Is there any way of determining what counter balancing percentage of purchases which we have been required to make from other allied countries in order to generate this dollar value of exports?

Mr. GOLDEN: We do not have any better figures than the ones published by the Department of Defence Production.

Mr. SMITH: In the research and development, I think maybe I am being inaccurate. I think a lot of the companies particularly in the electronics field are subsidiaries of American companies. For instance, Litton Industries is one that occurs to me. How is your research and development program? Is it these companies that do research? Is it tied in with the parent company, some sort of allocation of your research direction?

Mr. GOLDEN: This varies very much depending on individual companies. I think it is fair to say that many of the companies in the air industry in Canada are subsidiaries of British or American firms. That is so. I can only give you a general industry answer without getting into individual company cases which I am not competent to give or would not be proper for me to do. In general, it is my firm belief that there is no real impediment to doing research and development in Canada, as a result of foreign ownership. A significant amount of research and development is now going on in these companies.

Mr. SMITH: In research projects are they generated, generally speaking, by the military coming to you and saying, we want such and such a type of electrical equipment or something or do the individual companies think of it and go to the Department of National Defence and National Research and say we would like one of these? Which is the prime source?

Mr. GOLDEN: At the moment very litle Research and Development is generated from national defence, and the amount going to a company from D.N.D. is not important. There has been some discussion, as you know, as to whether it should start getting important again. At the moment it is not important. Historically it has been of very great importance and it may be again, but it is not at the moment.

The other part of the answer is, some of these ideas are generated by the company and some of them are generated jointly, and sometimes it is not the specific ideas, but it is a long term research and development program out of which things occur from time to time.

Mr. SMITH: Returning to exports for just a moment and relating again to the trade mission that went abroad, I would like to go back and ask one question. I suppose some of the American subsidiaries have been established in Canada directly resulting from defence sharing agreements and allocations?

Mr. GOLDEN: I would not like to speak off the cuff on that. I find it hard to remember any case of a company which was set up as a result of defence sharing. I cannot think of any company that was set up because of that.

Mr. SMITH: In the past, we have had a problem in the Department of Trade and Commerce and in other companies where the Canadian subsidiaries were forbidden—I am quite sure Mr. Golden is aware of those—to attempt to sell the product they were making in Canada if it was, in any way, in competition with the product the parent company was making in the States.

Mr. GOLDEN: We find Canadian controls quite restrictive enough. We do not need any others.

Mr. SMITH: You do not find any prohibitions from the parent company in this regard?

Mr. GOLDEN: No. The Canadian export permit situation is quite enough to cope with. I have never heard of anything else.

Mr. SMITH: The final question is, and this relates to Mr. Drury's evidence the other day, we were given a table which showed the spread, the allocation of defence spending and there was a certain amount of discussion in the committee about that. It was misleading in certain aspects because it spoke of dollars rather than of man hours. Mr. Drury said that the airplane manufacturers could easily supply man hour figures, that shipbuilders could easily supply man hour figures, but that the difficulty of getting that type of information and relating it to the impact of defence spending came from the electronic industry. I am quite sure the electronic industry forms a large part of the industry. Is that such a hard statistic to get?

Mr. PLANT: In an ordinary electronic concern manufacturing, 50 per cent of the cost includes all mark-ups and profits. Fifty per cent is represented in purchase of parts. In one equipment there are 64 parts. Those parts are made by various suppliers. It would be extremely difficult for me or any manager of any of the electronic companies to find out from suppliers what the man hours are that went into the supply of the numerous parts.

Mr. SMITH: You say it is a real practical difficulty?

Mr. PLANT: I think it would be extremely difficult to come up with anything as accurate as the aircraft manufacturers—so many man hours per pound of an airplane. It would be very difficult indeed because of the multitudinous suppliers and parts.

Mr. SMITH: That is the last question I had and it arose from the fact that you were trying to determine a more accurate method of finding out the impact of the spending on the general economy which I think can be best measured in the end by the number of man hour jobs it gives to employees somewhere.

The CHAIRMAN: Before I proceed with Mr. Temple, I think it is most unlikely that we will conclude our questioning by one o'clock and I would suggest, with the agreement of the committee that we might adjourn. It is now 10 minutes to one.

Mr. TEMPLE: Could we proceed until one?

The CHAIRMAN: Yes.

Mr. TEMPLE: I am glad to see that the exports are up. Tell me about the domestic market, is it up as well?

Mr. GOLDEN: No. The domestic market is down.

Mr. TEMPLE: Now, on page 2 at the bottom you speak of the competitiveness in the field that you have entered up to this time. I suppose it is a question of actual dollar loss—that is one type of competition—than originality of design, the design itself, and the quality. Do we, in Canada, specialize in the originality of design and quality?

Mr. GOLDEN: Oh no. I would not make a claim like that. I do make the claim that we are genuinely and internationally competitive when you compare apples with apples and do not go off and compare apples with oranges. We do have a general capability in original design and in research and development. We are trying to point out that we are not in some of the most glamorous and most exotic aspects of the field. This is well known to the members. We do not cover the whole spectrum in those areas. We have these capabilities. We are not saying we are better than other people.

Mr. TEMPLE: I am talking of various types of components that go into it. The F-104 aircraft components are designed here in Canada. Are they a little better than the original ones designed in the United States?

Mr. GOLDEN: We must remember that the F-104 was a United States designed aircraft and not many changes were made. Some were made, but not many. Yet, it was produced in Canada. What I am prepared to say is, after pre-production costs were absorbed in this country our quality and performance in that aircraft was at least—I am putting the lowest denominator on it—as good as in the United States.

Mr. TEMPLE: I am going to talk about the fuel control pumps. Have we made modifications that we feel—

Mr. GOLDEN: I am getting out of my depth now.

Mr. PLANT: It is very difficult to deal with them as representative of the whole industry without talking about someone specifically. Let us talk of the ARC 522 radio which you saw there designated as 618WP. That is the radio designed and repackaged completely from an original design of 1955. It is a completely Canadian radio. It is not built anywhere in the United States. It is a first class piece of equipment. I use it as one example because I know it. I expect there are others. There are other pieces of equipment such as the PHI pilot indicator. It is a completely Canadian product. No one else has any device quite like it. It is made under licence elsewhere as Mr. Smith says.

Those are a couple of examples.

Mr. TEMPLE: Then we produce the 104, and we have been producing them? Can we produce them economically dollar for dollar as in the United States?

Mr. GOLDEN: Yes.

Mr. TEMPLE: Can we produce them more economically?

Mr. GOLDEN: Yes sir.

Mr. TEMPLE: How is the hydrofoil coming along? When are you expecting a prototype?

Mr. PLANT: I do not believe anyone knows.

Mr. STEVENSON: It is on schedule. We are supplying the power plants.

Mr. WINCH: Do I understand that the hydrofoil was a Canadian development—are you saying that? Of the companies we have here there is only one Canadian company which is concerned with this?

Mr. PLANT: I did not understand the question.

Mr. SMITH: He has left us too.

The CHAIRMAN: I did not hear that statement.

Mr. WINCH: I got the answer from you that there was one part that you know of, that is the engine.

The CHAIRMAN: There was only one representative amongst the witnesses who knows.

Mr. SMITH: This is being developed jointly with the Canadian navy.

Mr. HARKNESS: The defence research board has been working on this for a number of years, extending back to 10 years. It has drawn up various types of plans and has investigated hydrofoils. It came up with a specific program which was then adopted a little over two or three years ago. This is the one that is now being worked on.

Mr. TEMPLE: How many companies have the commercial version of the C-44?

Mr. GOLDEN: There are four that come to my mind, four companies. I can think of four companies, in two separate countries; but perhaps there are more.

Mr. TEMPLE: Are countries and companies still interested in purchasing the C-44?

Mr. GOLDEN: I would hope so, but I do not know the answer.

Mr. TEMPLE: That completes my questioning.

The CHAIRMAN: It is just about one o'clock. Before we recess, there are a couple of items of business.

First of all, with the statement made this morning by Mr. Golden there was a list of member companies of Air Industries Association of Canada that I think probably we should include with the report, with the permission of the committee.

Agreed.

There is one other item. At the last meeting the committee asked for some information of the breakdown of the Department of National Defence expenditures by province across the country. I now have that information and will table it now, and it will be included in the report of our last meeting.

Mr. MACLEAN: As an appendix?

(*See Appendix "A" to Issue No. 22*)

The CHAIRMAN: We agreed it would be included at the point it was referred to in the Evidence.

We will meet immediately after the orders of the day. It is rather difficult to say what time—perhaps about 3.30.

The CHAIRMAN: Gentlemen, I call the meeting to order.

Dr. McMillan is the next questioner on my list.

Mr. MCMILLAN: To what extent do imports of parts and of material enter into the production of aircraft?

Mr. GOLDEN: They play a greater or lesser role depending on the type of item you are talking about.

Canada imports almost all of its light aircraft of the kind flown by individuals. Canada imports all of its large aircraft used by T.C.A. and C.P.A. and so on.

Mr. MCMILLAN: I did not mean that; I was referring to production in Canada.

Mr. GOLDEN: Yes, there is a significant foreign content of many of the things produced in Canada.

Mr. MCMILLAN: I think you said there were 34,000 men employed in the industry. Are they pretty well employed all the time? Have they steady employment?

Mr. GOLDEN: No, this is a variable figure; it goes up and down. It has been higher and it has been lower.

Mr. McMILLAN: In the first six months of 1964 two or three people here have referred to the fact that the exports were up by 136 per cent to $122 million.

Mr. GOLDEN: Yes.

Mr. McMILLAN: It is hard for me to arrive at that $500 million mathematically.

Mr. GOLDEN: The exports to which I am referring are mentioned on page 4. The total value includes the very substantial exports of electronics components in our industry.

The Dominion Bureau of Statistics does not keep its figures in that way and that is why in paragraph 4 on page 4 the exports of the first six months of 1964, which represent a rise of 136 per cent over the same period of 1963, exclude electronics. The Dominion Bureau of Statistics do not keep their figures in a way that can include the electronics portion.

Mr. McMILLAN: That could be very considerable?

Mr. GOLDEN: Yes.

Mr. McMILLAN: Would you say from your experience over the years that you have any criticism or could make any comment on the awarding of contracts with the defence procurement—

Mr. PLANT: That is a pretty tough one for a former deputy minister.

Mr. McMILLAN: —having in mind the competitive bids of the products and so forth.

Mr. GOLDEN: I think Mr. Stevenson's answer is the right one. Individual companies do not like it when they lose, but I do not think the industry has any complaint to make in that regard.

Mr. McMILLAN: You are subsidized to a certain extent in research?

Mr. GOLDEN: Yes, sir.

Mr. McMILLAN: But in no other way?

Mr. GOLDEN: We tend to think of it not as a subsidy but certainly it is a monetary contribution by the taxpayer; there is no question about that.

Mr. McNULTY: It is a stimulus?

Mr. GOLDEN: It is a stimulus, yes.

The CHAIRMAN: Mr. McNulty.

Mr. McNULTY: Is membership in the Air Industries Association voluntary? Can any company who wishes to explore or work in this field join this association?

Mr. GOLDEN: Yes.

Mr. PLANT: Subject to the approval of the board of directors. It is not a dogmatic thing.

Mr. McNULTY: What requirements would the board of directors demand of a new member?

Mr. GOLDEN: We have several classifications of membership. The major classification is for companies which are actually engaged in the manufacture, repair, overhaul and maintenance of aircraft, aircraft electronics, communications, navigation equipment and so on. Then we have other classes of membership which include people who are associated with the industry. For instance, several of the oil companies which deal very extensively with the aircraft industry are associate members of the association.

Mr. McMILLAN: May I ask a supplementary question?

The CHAIRMAN: Dr. McMillan.

Mr. McMILLAN: Would the steel industry, making heat resistant steel, be eligible?

Mr. GOLDEN: Yes, sir, and in fact several companies which are suppliers of materials to the aircraft industry are members of Air Industries Association.

Mr. McMILLAN: Canada Steel?

Mr. GOLDEN: Yes, and Drummond McCall and so on.

Mr. McNULTY: This is not a closed shop? Any industry having the proper qualifications and equipment and everything could request membership? For example, McKinnon Industries could request membership?

Mr. GOLDEN: Yes, sir.

Mr. McNULTY: What proportion of the member companies are United States subsidiaries or foreign subsidiaries?

Mr. GOLDEN: I cannot answer that but I think it is common knowledge that many of the major companies in the industry are either British owned or British controlled or United States owned or controlled. I cannot go much further than that.

Mr. McNULTY: Is there any impetus in the industry or the association among the membership that the endeavour should be to include more Canadian content?

Mr. GOLDEN: This is not a matter with which, as an association, we have ever concerned ourselves. A company that qualifies under the terms of our charter and which is accepted by the directors becomes a member, and that is it.

The CHAIRMAN: Mr. Winch.

Mr. WINCH: Mr. Chairman, I have three questions which I would like to put to the witnesses, but in order to ask my three questions I want to be completely fair to Mr. Golden and I would therefore ask first of all, because it is not on our record and I think it should be, whether Mr. Golden would be good enough to tell us on what basis he is submitting this brief by Air Industries Association of Canada. What is your position on that?

In the second place, what has been your business occupation this last 25 years?

Mr. GOLDEN: I will be glad to tell you both of those things.

I am submitting this brief because I am the paid, full time president of Air Industries Association of Canada.

The last 25 years takes you back to 1939. In 1939 I was a law student at the University of Manitoba law school.

Mr. PILON: Did you pass your exams?

Mr. GOLDEN: Yes, sir, in 1941 I passed my exams and in the same week I enlisted in the Winnipeg Grenadiers. I was then shipped to Jamaica and then to Hong Kong. I was discharged from the army in December of 1945.

I commenced the practice of law in Winnipeg on January 1, 1946. I went to Oxford university in the fall of 1946 and came back in the summer of 1947. I resumed the practice of law at that time, and at the same time I taught law at the University of Manitoba.

In 1951 I joined the Department of Defence Production as director of the legal branch. In 1952 I became the associate general counsel of the Department of Defence Production. In 1953 I was appointed assistant deputy minister, and in 1954 on September 1, I was appointed deputy minister of defence production.

In 1962, on July 1, I resigned as deputy minister of defence production and was appointed president of Air Industries Association of Canada. I relinquished that position on July 25, 1963, on appointment as deputy minister of

industry. I resigned as deputy minister of industry on July 1, 1964, and was reappointed president of the Air Industries Association of Canada.

Mr. WINCH: Thank you very much. I think you realize the importance of this.

So your experience is in legal practice. However, you are presenting this brief to our committee as the president of Air Industries Association of Canada?

Mr. GOLDEN: Yes.

Mr. WINCH: That is the official capacity?

Mr. GOLDEN: Yes.

Mr. WINCH: I therefore, Mr. Chairman, have three questions to put to the witness.

This morning you also presented to our committee some members of Air Industries Association of Canada.

Mr. GOLDEN: That is so.

Mr. WINCH: If my addition is correct, there are 91 members of the association.

Mr. GOLDEN: That is so.

Mr. WINCH: That is correct?

Mr. GOLDEN: Yes.

Mr. WINCH: Ninety-one members?

Mr. GOLDEN: Yes, sir.

Mr. WINCH: From your knowledge as president of Air Industries Association of Canada could you tell this committee—and in particular of course, Mr. Deachman and myself—if you have any knowledge of the potentialities and capabilities of the province of British Columbia as, let us say, from the last world war when we had the Boeing aircraft and we had the production of the Beaufort guns on behalf of the United Kingdom. We did to my personal and confidential knowledge at that time a great deal of electronics works. Will you tell me if there is any basic reasoning or understanding which you can convey to this committee why of 91 members of the association there is only one from British Columbia? Are you telling me that British Columbia can only have one member?

Mr. ASSELIN (*Notre-Dame-de-Grâce*): They are very selective!

Mr. GOLDEN: I have not answered the question yet and therefore I am not telling you anything.

Mr. WINCH: I am asking you if you can tell me.

Mr. GOLDEN: All right This is a voluntary association of companies engaged in the air industries of Canada. It is not a part of the association job to deal with this matter.

If you are asking for my opinion as an individual, I am quite prepared to give it, but I have no opinion as president of Air Industries Association.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): May I ask a supplementary question?

Can the witness tell us whether he turned down any application for membership from British Columbia?

Mr. GOLDEN: No, I did not.

Mr. WINCH: In view of the fact that 2.9 per cent of all defence contracts go to British Columbia as compared to over 90 per cent to Quebec, can you give us any indication from your knowledge of the capabilities of British Columbia? Or is that an unfair question?

Mr. GOLDEN: All I know is that where the companies are located, and presumably that is why these companies get the contracts, but it is not a matter with which the association as such has concerned itself.

Mr. LAMBERT: On this point, Mr. Golden, as a former member of the Department of Defence Production can you say if you published every fortnight a list of contracts?

Mr. GOLDEN: The department did.

Mr. LAMBERT: And the department still does?

Mr. GOLDEN: And it still does.

Mr. LAMBERT: It is on the basis of home adresses that the statistics are compiled.

Mr. GOLDEN: That is so.

Mr. LAMBERT: And you will agree that those are quite misleading? For instance, every blessed gallon of fuel oil and fuel that Imperial Oil sells is either listed from Ottawa or Toronto even though it is produced out on the west coast and on the prairies.

Mr. GOLDEN: That is so.

Mr. LAMBERT: Therefore those statistics as they are compiled are often meaningless?

Mr. WINCH: Will you agree with that?

Mr. GOLDEN: The statistics I think can be very meaningless, yes.

Mr. LAMBERT: Not meaningless—misleading.

Mr. GOLDEN: Misleading, yes.

Mr. WINCH: I will now ask my second question.

Of the 91 companies which are voluntary members of the Air Industries Association of Canada I notice two, Imperial Oil Limited of Toronto, Ontario, and Shell Canada Limited, aviation department. Of all the oil companies in Canada—and there are many—there are only two here. Both of these, if my knowledge is correct and I think it is, are foreign owned. Imperial Oil is owned in the United States by Standard Oil and Shell Oil of Canada is owned in the United Kingdom and Holland and elsewhere.

May I ask what is the type of work they are doing in connection with air industries? I presume it is on aviation fuel. However, both—and I repeat, both —are completely foreign owned and they are the only two that you mention as being members of your association.

May I ask you this, Mr. Golden? The work of the members of your association must be research work or something that has a connection with aviation. In the case of the oil companies mentioned one, Imperial Oil, is owned by Standard Oil in the United States and the other, Shell Oil of Canada, is owned by companies in two or three countries of the world. On what basis are they members of your association? And what kind of work do they do?

Mr. GOLDEN: I am not familiar enough with all their operations to give you a definite answer, but as far as I know neither of them is engaged in any research which is directly related to the activities of the Air Industries Association, although they may be.

Mr. WINCH: Will you stop right there?

Mr. GOLDEN: Yes.

Mr. WINCH: You say to your knowledge there are only two of the 91 companies, and as you as president say you have no knowledge of any research that they are doing which connects them with the air industry. I then ask on what basis are they members of the Air Industries Association?

Mr. GOLDEN: They are members because they qualify under our charter as companies which are involved with air industries. They are major suppliers to major contractors, and they support the work of our association as they do the work of the many associations to which they belong.

Mr. WINCH: Can you explain how they support the work of your association if they are not, as you say, to your knowledge connected in any way with air association research or otherwise?

Mr. GOLDEN: I have forgotten now whether they are associate or affiliate members. We do have a classification—there is no reason why I should hesitate to give it to you.

Mr. WINCH: Are all these 91 members direct or associate members?

Mr. GOLDEN: There are three classifications of membership. I will tell you exactly what they are.

Imperial Oil is an affiliate member and Shell Oil is an affiliate member; and that is a classification of people who have no vote, who cannot serve on the board of directors, but who wish to associate themselves with the work of the association.

Mr. WINCH: You have no information of any research?

The CHAIRMAN: Mr. McNulty had a supplementary question.

Mr. MCNULTY: I was just wondering whether these oil companies could not be working on commercial fuel which might indirectly benefit the industry.

Mr. GOLDEN: Yes, I am not saying they do not do the most exciting and exotic research in the world. All I am saying is that I do not know of any research they are doing which I, as president of Air Industries Association of Canada, would necessarily know about. They are members of our association and they have joined with the others in the work of our association. They are affiliate members.

Mr. WINCH: You cannot tell us, as president of the association, what they are doing which has a direct connection with the air industries of Canada?

Mr. GOLDEN: Except, as I have said, as major suppliers to the aircraft industry.

Mr. WINCH: Not on research?

Mr. GOLDEN: I am not going to say they are not, but not to my personal knowledge.

Mr. WINCH: Would it be possible for this committee to ask the witness to ascertain this information?

Mr. GOLDEN: I do not think I have any status to ask them.

Mr. WINCH: You are the president.

Mr. GOLDEN: Yes, I am the president of the association but I do not have authority to question people about their private affairs in that way. I do not know, Mr. Chairman, but I will do whatever you rule.

The CHAIRMAN: I do not think we can ask Mr. Golden to inquire of a private company their activities. I have some doubts as to the relevance of the information in any event.

Mr. WINCH: Mr. Chairman, the relevance is this. We have now received this morning a most comprehensive brief from Mr. Golden, presented by him as president of the Air Industries Association of Canada, in which as president he outlines certain aspects and asks indirectly—if I may put it that way—for our support. Two of the companies are oil companies. I am asking just what is their relationship with the aircraft industry.

Mr. Chairman, I thought that would be a reasonable question.

The CHAIRMAN: I think, Mr. Winch, Mr. Golden has answered that. There are certain classes of company that are associate members of the association who are suppliers to the industry. Both of these companies I know, both from personal knowledge and from Mr. Golden's statement, supply fuel to the industry and therefore they are qualified for associate membership.

I think perhaps it might be cleared up if Mr. Golden could give us a description of the categories of membership under which they fit.

Mr. GOLDEN: I could and should, but I do not think I have it with me.

We have three classes of membership. We have ordinary industrial members, we have associate members and we have affiliate members. The two oil companies referred to by Mr. Winch are affiliate members and, as it happens, affiliate members do not have a vote and cannot sit on the board of directors.

Industrial and associate memberships are not greatly different, but the ordinary difference is than an industrial member is someone who is actually engaged in the manufacture or production of an air industry product. An associate member is one, in many cases, who is a supplier to the manufacturer.

Mr. WINCH: Mr. Chairman, may I then come to my third question? I admit this may be a rough question.

I went over the 91 companies listed in the luncheon adjournment. Am I correct, Mr. Golden, in saying that every company concerned in aircraft production is a member of your association? Am I correct in that?

Mr. GOLDEN: I do not think that is right. There is an Avian Company in Canada and they are not members of the association.

Mr. WINCH: They work on production of aircraft?

Mr. GOLDEN: As you well know, production has a technical meaning. They are building an aircraft.

Mr. WINCH: I mean the actual building of an aircraft.

Mr. GOLDEN: They are building an aircraft and they are not members of our association.

Mr. WINCH: Is every major aircraft production company a member of your association?

Mr. GOLDEN: Yes.

Mr. WINCH: Then this is my question, Mr. Chairman: I have been most disturbed—and I will put it in that way—with regard to the pattern of contracts allocated by the Department of Defence Production through the orders of the Department of National Defence. They appear to have to buy not only two aircraft or 30 aircraft or 75 aircraft but also they have to buy material supply. We have had evidence that on two Comets they had to buy $1 million worth of supplies.

Would you tell this committee whether or not it is a part of any contract in buying planes that you must buy, as part of that contract, certain amounts or a certain percentage of replacement parts? Will you give us a straight answer on that?

The CHAIRMAN: May I ask for clarification on that. When you say "must" do you mean that the buyer insists or do you mean that there is such a requirement?

Mr. WINCH: No, I am asking whether the supplying firm lays it down as a principle that if you buy a certain number of aircraft you have to buy a certain number of replacement parts.

May we have the answer to that.

Mr. GOLDEN: I am sorry, sir, I do not think I am an expert witness in this regard. I have never heard of it. There are generally accepted standards of spares which one buys when one orders aircraft or engines, but I have never heard it suggested that one must buy, nor are many vendors in a position to lay down such conditions.

Mr. WINCH: Could you tell us then, from your knowledge as president of this association, what you anticipate will be the requirement on a purchase order for a given number of planes—supplies in case of crash or otherwise.

Mr. WINCH: Could you do it on a percentage basis?

Mr. PLANT: Yes, but percentages vary, depending on whether it is intended for commercial or military use.

Mr. WINCH: I am talking about military.

Mr. PLANT: It varies between airplanes and engines.

Mr. WINCH: Well, I will wipe out the engines. Let us say on a straight aircraft itself?

Mr. STEVENSON: It is 25 to 30 per cent.

Mr. PLANT: This would include electronic equipment and test equipment, and everything else, Mr. Winch. I think that your question was, does the supplier insist that the procuring authority purchase so and so, and I think the answer could be in a flat negative.

Mr. WINCH: Fine. This is the first time I have ever got a direct answer.

Mr. PLANT: The seller, he is entirely in the hands of the company.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): The purchaser usually insists on having available a supply of spare parts. Would that not be the situation in most cases, that the purchaser requires this?

Mr. PLANT: Well, in dealing with the supplier, the purchaser establishes an organization, or a committee, which they call a spares provisioning committee and these are the users who, having regard to their experience and the advice that they get from the supplier, draw what might be called lifetime spares, two year spares, or whatever it might be. Now this is is always a matter of judgment, particularly in new equipment. Who can say whether this tube is going to burn out or whether these tires are going to stand up to ten landings or 50 landings? It is a matter of judgment.

Mr. GOLDEN: And it is also a matter of judgment as to how long the line will be in existence. If the line producing something goes down or out, of course, if you wish to keep the equipment in use over the years, you have to buy lifetime spares at the first stage.

Mr. WINCH: Mr. Chairman, I think this is the first time in this committee, or any other committee, that I have got a direct answer. You were saying, sir, that as far as the supplier is concerned they never include any demand or requirement on the purchase of replacements. Are you saying that, sir?

Mr. PLANT: Mr. Winch, when my sales people try to sell something they never put any demand on the customer in that respect.

Mr. WINCH: Then I will give give you an example of two Comets; we got $1 million of spares then. That is the order of the Department of Defence Production; it is not a requirement on the purchaser. Would you said that?

Mr. PLANT: This is a requirement presumably laid down by the user of the airplane, the air force, who then require the Department of Defence Production to procure these spares.

Mr. WINCH: You said it may go between 15 and 35 per cent. Now, does the producer of the aircraft in Canada advise the Department of National Defence,

or the Department of Defence Production what they think might be the possible required replacements in the event of a crash?

Mr. STEVENSON: Yes, they do.

Mr. WINCH: How do you base it at 15 to 35 per cent?

Mr. STEVENSON: It depends on the type of aircraft, the number, the usage and so on.

Mr. WINCH: When I say you, I am sorry, I do not mean you personally, but as the Air Industries Association do you make a recommendation to the defence department?

Mr. GOLDEN: The Air Industries Association never negotiates contracts, never deals with contracting parties, has nothing to do with individual products. It is merely a trade association. Individual companies do all the things you are speaking about.

Mr. WINCH: You are before this committee representing all these companies, so I presume that you know their basis of negotiations?

Mr. GOLDEN: As long as it is understood we tell you what we think companies do.

Mr. WINCH: In your 91 members here do you make recommendations, or do you not?

The CHAIRMAN: I wonder, Mr. Winch, if in this area we would not get better answers from the people in the Department of National Defence who actually set up the requirements for spares? They are the ones who have the whole knowledge of the whole range of spare requirements. For instance, there is not an airframe manufacturer represented here who could answer how his branch of the industry carries on.

Mr. WINCH: I am sorry, Mr. Chairman, but we now have the president and his colleagues of the industry, and they represent 91 companies, and you know, quite bluntly, I am going to get some answers from them as to who are the suppliers. We can get certain answers from the department, yes, but we may get more information today.

Mr. GOLDEN: Sir, we will answer anything you think we should answer which lies within our field of competence, but I think I must say again that we do not negotiate for contracts, nor deal with contracting departments. Any answers we have given in the last few minutes come from our own personal knowledge, and the fact that some of the gentlemen here operate companies, but the association does not deal with matters like that.

Mr. WINCH: Mr. Golden, then should we completely ignore your brief this morning, because this brief has to deal with the matter of procurement, the matter of sales, the matter of relationship of export and domestic. It has to do with every phase, so it surely must be based on your own knowledge of company operations.

The CHAIRMAN: Their brief is a brief dealing with policy for an industry as a whole, which is a vastly different thing from details of the individual members forming component parts of that industry.

Mr. WINCH: How do you separate the industry as a whole from its component parts?

Mr. PLANT: Mr. Winch, I thought I did say this morning that I am the elected representative, or the chairman of the board of the Air Industries Association and under no circumstances does this association represent as a lobby any one particular company, and Mr. Golden I think has made it very clear that under no circumstances does the industry enter into any contractual negotiations with any of the procurement authorities, be they civil or government.

Mr. WINCH: You are speaking on behalf of 91 companies.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Could we get on to the business?

Mr. LAMBERT: All this heckling is wasting time.

The CHAIRMAN: I suggest, Mr. Winch, we do have at least half a dozen other people who would like to ask questions, that we could move along.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I would like to question Mr. Plant in French. I am sure he speaks French.

Mr. PLANT: A little.

Mr. LESSARD (*Lac-Saint-Jean*): Mr. Plant, my questions will be quite brief.

(*Text*)

Mr. PLANT: I am very sorry. I did not hear the first part of the question.

The CHAIRMAN: How much of the $500 million is with the government?

Mr. GOLDEN: I do not think I can give that answer, because there are a number of different ways of dealing with the government. There is the prime contract and subcontract, and we do not segregate our figures in that way. The major contracts are always listed by the Department of Defence Production, and then are published regularly. We aggregate all the contracts, but include subcontracts as well, and we do not segregate our figures in that way. We try to segregate them between home and export.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): In the brief the president submitted this morning a figure of $500,000,000 is mentioned for the business turnover of all your companies in 1963. Could you tell us what percentage of that business was transacted with the government?...

Very well, there is a question I want to ask in that connection and I shall revert to it later. You are not able to give us an approximate figure? For instance, if I suggested that your companies do 50% of their business with the Canadian government would that be exaggerated?

(*Text*)

Mr. GOLDEN: My machine is not working, and my French is not good enough.

The CHAIRMAN: The question, Mr. Golden, was could you give any approximate idea? If Mr. Lessard said 50 per cent of your business was transacted with the government would that figure be too high?

Mr. GOLDEN: With the Canadian government?

Mr. LESSARD (*Lac-Saint-Jean*): Yes.

Mr. GOLDEN: Recently it is not that high; historically, perhaps, it is correct, but recently it is not that high.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): You mentioned exports a while ago. You have stated in your report, I think, that 50% of your business was in exports. With regard to the $500,000,000 of production could you give us an idea of what percentage of items were imported in that amount? For example, with regard to an aircraft produced in Canada and sold to the United States or elsewhere, what percentage of the parts would be imported and not actually produced in Canada? Would it be just part of the assembly? Could you give us a rough idea?

(*Text*)

Mr. GOLDEN: Yes, well it is easier to agree with a general proposition than to give exact figures. It is perfectly true that there is a foreign content in almost every aircraft produced, or engine, but after you agree with the general proposition, I do not know where you go from there, because it varies enormously. If you get a long production run, the foreign content is likely to be very low, if you get a short production run, the foreign content is likely to be correspondingly higher, because you have a smaller number of products against which to amortize the cost of setting up to do it, and the only answer I can give to that question is that there is such a foreign content in most of these products. It varies from a very small foreign content in some items, to a substantial one in others, and correspondingly and conversely there is a Canadian content in a large number of foreign aircraft, just as there is a foreign content in a large number of Canadian aircraft.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): Then if my understanding is correct and if I relate your statement to the one Mr. Drury made last week, when the government lets contracts to a Canadian aircraft firm it is to some extent as if we were also subsidizing the American industry since, for the contracts we are going to let to the Canadian firms, we are going to pay for parts manufactured in the United States or elsewhere even though I recognize that on the rebound we make a profit on the Canadian production sold to the United States. Do you recognize that?

(*Text*)

Mr. GOLDEN: Well, I hesitate to comment on a statement of Mr. Drury's, which I have not seen, but I would say that we believe in the industry what we have said in our brief, that there is no requirement for a rigid made-in-Canada formula, which would be wasteful of both taxpayers' and private citizens' money, and it is possible to carry this through to a conclusion where everything is made in Canada, but we do not feel, as responsible citizens, this is the sort of policy we should be recommending. On the other hand, as we have said in our brief, we believe there should be a reasonable competence in the Canadian air industry, and it is true to say that when a Canadian aircraft is bought it can or may include some American parts in it, but this is not true only of aircraft, this is true of many things in Canada.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): In another connection, since these industries seem to be concentrateed in Quebec and Ontario and as you recently stated that it was favouring Quebec and Ontario could you tell us how many of your employees reside in Quebec? You have 32 establishments, the names are listed here, located in Quebec, and 53 in Ontario. Could you tell us how many employees of these establishments are employed in Quebec and in Ontario?

(*Text*)

Mr. GOLDEN: No, sir, we do not have accurate figures of the kind that you can define with great accuracy. We believe, though, it is roughly half and half Ontario and Quebec, of the portion of the industry which is in Ontario and Quebec, which is most of the industry. It is roughly half Ontario and half Quebec, as far as employment is concerned.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): Now, there are some questions I want to ask you, but of course if you do not wish to answer I shall not hold it against

you. What was the total amount of profit your group of companies made in 1963? These are public figures you understand. Did your 91 companies make a considerable amount of profit in 1963? You cannot give us that information?

(*Text*)

Mr. GOLDEN: No. Well, I cannot give them. No, I would have to consider whether I had the right to give them, but I do not have them.

Mr. LESSARD (*Lac-Saint-Jean*): And I suppose that you cannot say, also, the taxes that are paid by those companies to the federal treasury.

Mr. LAMBERT: A number of these companies are private companies.

Mr. GOLDEN: Oh, yes.

Mr. LAMBERT: And therefore their earnings, and whatever they do, is no public business.

Mr. GOLDEN: A number of the companies are publicly held, and publish annual statements; a number of them are not.

Mr. LESSARD (*Lac-Saint-Jean*): So the government should not give them contracts out of public funds.

(*Translation*)

Mr. Chairman, I would like to ask one final question. To what extent are your companies under American control? Can it be said that the 91 companies operated here are partly controlled by Americans?

(*Text*)

Mr. GOLDEN: I would like to confine my reply to the specific terms in which you have put your question, and that is to say to deal only with the air industry, members of the Air Industries Association of Canada, and not in connection with industry generally, and in my experience there has not been, I am not aware of any detriment which Canada has suffered by virtue of some of these companies being owned either in the United States or the United Kingdom.

Mr. LESSARD (*Lac-Saint-Jean*): I cannot share your point of view, but I respect your right to it.

Mr. DEACHMAN: Mr. Golden, as your industry grew up, did it largely centre in the city of Montreal and the city of Toronto, as far as its factories are concerned? Is this where it is centred, or are these just head offices?

Mr. GOLDEN: No, sir, this industry is actually centred in the Toronto and Montreal area.

Mr. DEACHMAN: And we are going to find most of its employees in this industry, and most of its factories, in the Montreal and Toronto areas?

Mr. GOLDEN: Yes, sir.

Mr. DEACHMAN: What about the sub-industries you deal with? Are they closely located right in the same area?

Mr. GOLDEN: Not necessarily when you talk about materials, and so on.

Mr. DEACHMAN: Component parts?

Mr. GOLDEN: Yes, there is that tendency, yes.

The CHAIRMAN: Mr. McNulty has a supplementary.

Mr. MCNULTY: I was just wondering whether any of these member companies have branch operations, say in British Columbia, C.P.A., Bristol, and so on?

Mr. GOLDEN: Yes, I think one of the best examples is Field. I think their main office is in Toronto, but they have a facility in Calgary, and something in Vancouver.

Mr. DEACHMAN: But this is not a major part of it.

Mr. GOLDEN: No.

Mr. DEACHMAN: The question I want to ask surrounding that first question then is this: Has the government at any time dealt with your industry on the question of the dispersal of that industry? Is there any danger involved in having virtually the whole of this industry heavily concentrated in two cities, and has the wisdom of dispersal been discussed with the industry by the government?

Mr. GOLDEN: Not since I have become associated with the Air Industries Association. The question has not been raised with us as an association in the time I have been with the association.

Mr. PLANT: There has been in the past a policy with respect to repair and overhaul, whereby other than the prime contractor would do it. Repair and overhaul would be done by other than the supplier. In the event of strikes, or demolition of the main supplier, there would be a set of spares to enable the organization to keep functioning, and repair the equipment that had not been destroyed in the event of a bomb blast, or whatever you have.

Mr. DEACHMAN: But as far as the whole basic industry is concerned itself, the question of dispersal of this industry has never been a subject for major discussion or planning between your industry and the government?

Mr. PLANT: Not as far as I am aware.

Mr. DEACHMAN: It has been allowed to grow up in the city of Montreal, grow in the city of Toronto, and concentrate in those two major, eastern Canadian cities, without any question of the factor of dispersal coming into it?

Mr. PLANT: I think we must go back in history a bit, and see what happened. In 1939 to 1946, the industries grew in the place where the populations were; the factories were there; and the air fields were there; and after the war was over most of these industries became completely privately owned companies. The companies concerned purchased the assets, and they then became privately owned companies, struggling to get along by selling their products, or convincing the customer to buy their products.

This is the way it occurred.

Mr. DEACHMAN: But we do have a situation, however it may have grown in history. The point is that we do have a situation where today there is a lack of planning for dispersal of the industry, and it could be taken out with virtually a couple of shots.

The CHAIRMAN: You may ask a question, but you are also making a statement along with your question.

Mr. DEACHMAN: Let me go on to another area then. What about labour in the Toronto community and in the Montreal community? What has been your experience in acquiring a skilled labour force for your industry? Have you had difficulty in drafting skilled labour into your industry and in training them?

Mr. PLANT: You have asked the question. I think the main desire of any of us who are here today is to get people who are skilled with the minimum amount of further training. I think I can say that all of us have had difficulty. But if we are talking about engineers, I would say we are having tremendous difficulty.

Mr. DEACHMAN: What about skilled technicians at the level immediately below the professional or university trained person?

Mr. STEVENSON: We have quite a difficulty getting trained people of any sort. Our company runs continuous courses in collaboration with the Quebec department of education to try to upgrade our people.

Mr. WINCH: What company is that?

Mr. STEVENSON: United Aircraft.

Mr. WINCH: You say you are not able to obtain skilled technicians?

Mr. STEVENSON: And shop people as well.

Mr. DEACHMAN: You say you have great difficulty in maintaining shop people?

Mr. STEVENSON: That is right.

Mr. DEACHMAN: When you say you have difficulty, can you describe what that difficulty is? Can you give us a roundup of what you mean by difficulty?

Mr. STEVENSON: Well, I might say that we have been running between 50 and 100 people short in our factories for over a year, and that of the applicants who come to our employment office, we can only accept one in 11.

Mr. WINCH: Do you mean machinists, electricians, or what?

Mr. STEVENSON: We use basically machinists.

Mr. DEACHMAN: Do you believe that Canada has been short of the facilities with which to train its own people for existing industry?

Mr. STEVENSON: Do you mean if the supply has been short?

Mr. DEACHMAN: Has the country been short? Are we short of the facilities with which to train workers for our own industry, and what has caused such a shortage? Is it because of the industry growing faster than our capacity to train? Or to what do you attribute this?

Mr. STEVENSON: It is both. There is a continuing increase in the skilled level required, and there has been a shortage of technical schools. But this problem is being rectified in the province of Quebec at a very high rate at the present time.

Mr. DEACHMAN: What about Ontario?

Mr. STEVENSON: We operate in the province of Quebec.

Mr. DEACHMAN: Is that because we export our men?

Mr. WOOLL: I can speak for the repair and overhaul field now. You had people employed in this industry for the 1939 to 1945 war, but when it ended they left the industry and took up work of some other type. Then when the Korean war came along, and the aircraft industry tried to obtain a group of men, those men left at the end of that incident and went to some other industry. They went into garages or factories. That is the problem. There are only two or three times when a fellow wants to make such a change. Our industry has to compete with much larger corporations, and especially in the repair and overhaul field many of the skills are more elaborate than they are in many of the manufacturing operations. I think it is fair to say that in the repair and overhaul part of our industry we too are short of people.

Mr. WINCH: What endeavour do you make as a company to hold these men with these skills in your employment?

Mr. WOOLL: It is very difficult to hold a man in the aircraft industry if the factory is going to cutback its production, and to compete with organizations of the size of General Motors and Ford. There might be a difference of as much as 30 cents an hour to our company.

Mr. WINCH: Have you ever discussed this matter with the machinists' union?

The CHAIRMAN: Mr. Deachman has the floor.

Mr. DEACHMAN: I would like to have the floor. I am merely exploring the area of labour here and the training of it. When you mention that Ford

and the major motorcar industries are competitors for the kind of people you use, are you speaking of Canadian companies? Is there a shortage in these companies as well?

Mr. PLANT: I do not know whether I can say there is a shortage in somebody else's company.

Mr. DEACHMAN: How about men going to the United States? Do your skilled labour tend to move off to the United States? Are you not in very sharp competition with them to maintain highly skilled labour?

Mr. PLANT: Fairly little. There is a bit of a gamble a man must take when he goes to the United States. To begin with he has to obtain his visa and all the rest of the things, and he has to leave his job and take a gamble and find another one when he gets there.

Mr. GOLDEN: We are affected by shortage of engineers as well.

Mr. DEACHMAN: If there were to be a surge, your industry would be hard put to it to find them in order to meet that surge?

Mr. GOLDEN: No, I do not think that is a fair statement. The industry is an extremely varied one, and the level of skilled labour is also extremely varied. There are many significant parts of our industry which could increase their production substantially without running into a skilled labour problem at all.

Mr. DEACHMAN: Does this involve a lack of from 50 to 100 men in your establishment?

Mr. GOLDEN: Mr. Stevenson manufactures engines, which require many types of skills.

Mr. DEACHMAN: If there were a surge in the aircraft engine business, would you be hard put?

Mr. STEVENSON: We are in and out.

Mr. DEACHMAN: Do you think you could meet the labour requirements in that field right now?

Mr. STEVENSON: It means an undue amount of overtime, but corrective measures are being taken in the province of Quebec with their technical school programs.

Mr. WINCH: Do you operate your own training system?

Mr. STEVENSON: No. We use the schools, and we put our own instructors in as well.

Mr. LLOYD: I was not present at the beginning of the questioning today. Did you place on the record a general statement of the services that you render to your members? If not, would you care to do so?

Mr. GOLDEN: Yes. We are a trade association which is interested in furthering the interests of the air industry component of secondary manufacturing in Canada. We are not concerned with the individual fortunes of companies which belong to the association. We are interested in the advancement of the air industry field in general

Mr. LLOYD: What methods do you employ to bring about this aim?

Mr. GOLDEN: We do a number of things both internally as well as externally. Internally we have a number of committees which meet and exchange views and ideas among themselves.

Mr. LLOYD: They exchange ideas about what?

Mr. GOLDEN: We have committees which concern themselves with research and development, for instance, with export promotion and so on. Then externally

we are interested in presenting the story of what we believe to be the importance of this industry, and of the role it plays in the economy of the country, and as a support to the Canadian armed forces.

Mr. LLOYD: One of the witnesses replying to a question a few moments ago indicated that there were some ups and downs in this industry over the years. I suppose you do concern yourself to see if measures might not be taken to stabilize it? Is this a big problem today?

Mr. GOLDEN: Yes, sir, it is a problem in an industry like this which, although it is trying very hard to diversify, still finds that a significant proportion of its efforts relate either to the Canadian armed forces or to the armed forces of our allies.

Mr. WINCH: What is the percentage?

Mr. LLOYD: A term has been used to describe the current efforts of the Department of Defence Production. The term I refer to is rationalization of the air industry. Can you give us your appraisal of what is meant by such a term as it is applied today?

Mr. GOLDEN: The only thing I think of when somebody speaks of rationalization is putting somebody out of business. It may be that there are other connotations of that term, but if there are, I do not know what they are.

Mr. LLOYD: So the way this term is used you do not know what it means.

Mr. GOLDEN: I want to be fair. I think that rationalization usually means fewer companies than there were before rationalization started. But I have no jurisdiction in that regard.

Mr. LLOYD: I asked you the question because I thought you had very close affiliation with the department, in looking after the point of view of the industry's side, and that perhaps there was an obvious need to reduce the capacity and size of aircraft production.

Mr. GOLDEN: No, I am not of that view. I do not think there is any obvious necessity to reduce the development of the aircraft industry in Canada at all.

Mr LLOYD: When you say there are prospects for increased volume of activity in the non-military sector, what do you mean?

Mr. GOLDEN: Yes, I think there are prospects for increased activity in the non-military sector. This has come about quite recently and I think it will continue to be the case, provided there is a base on which to build. It is very difficult to build without a base.

Mr. LLOYD: So your air industry association has a direct interest in the volume of military production that it has?

Mr. GOLDEN: That is so.

Mr. LLOYD: And you realize that the defence dollar provides the base for your industry substantially.

Mr. GOLDEN: This is so in a very large measure, yes. Every Canadian defence dollar, or the defence dollars of a number of our allies have this effect.

Mr. LLOYD: So next then you would be concerned with respect to the program of contracts and negotiation, and also you have already made it clear that you would encourage contracts. I presume your association provides an opportunity for your members to review contract negotiation procedures.

Mr. GOLDEN: Yes.

Mr. LLOYD: Have you had any reason recently to be concerned about any changes in direction in this field?

Mr. GOLDEN: I cannot answer that because I have only recently returned to the association. I do not think that since I have come back I have known of my own knowledge, or have been concerned with any changes in contract procedures, but that does not mean that they may not be going on. I do not know.

Mr. LLOYD: Well, the minister replied to a question at a previous meeting and indicated that it was the policy of the department to emphasize defence production to meet the needs of the defence dollar, and it was not concerned necessarily with the welfare of your members.

Mr. GOLDEN: We are quite agreeable to that.

Mr. LLOYD: That leads to the next question which has to do with the increasing practice to call as much as possible for competitive tenders. I was wondering whether or not this emphasis on policy had in any way brought new problems for your industry as a whole.

Mr. GOLDEN: I am sorry. I did not realize the point to which you are referring, that this was such a recent policy calling for these competitive tenders. I do not know if as an association we have ever objected to it.

Mr. LLOYD: I do not want to take up too much time of the committee, but I do have some evidence in that connection. I do not want to be accused of being parochial in this matter. I was just trying to find out the general viewpoint which your association held.

Mr. GOLDEN: I am not trying to be evasive. It is quite possible for a company to be a member of our association and still to make very violent objection to some government policy, and still not tell me about it.

Mr. LLOYD: I take it you do not have any criticism to make today of the present general practice of contract negotiations and tendering?

Mr. PLANT: I think that is rather a difficult question for us to answer, Mr. Lloyd. We do have a committee on contract administration which does meet with officials of the Department of Defence Production from time to time to make representations pertinent to certain aspects of the present rules and regulations with which our companies do not agree.

Mr. LLOYD: You do have activity in that field. I think that was your answer before.

Mr. PLANT: Yes.

Mr. LLOYD: What I was trying to find out was whether there were any particular procedures now which have caused your membership any concern.

Mr. PLANT: There are quite a number of things on which I could hold forth if I were speaking in a private capacity, but not as a member of the aircraft association.

Mr. LLOYD: In other words, if there was competition between them, there might be differences of opinion as to procedure.

Mr. PLANT: No, I did not mean any criticism of the administration of the Department of Defence Production which it would be appropriate to make here, but we do have committees which meet privately with the departmental heads, to make representations.

Mr. LLOYD: I accept your first explanation. It was rather a complicated matter, I admit. But do you not feel that you should bring this to the attention of the committee? If there are any contract or procedural problems, do you not think they should be brought to our attention?

Mr. PLANT: I think I would say to that question that we are not prepared to do any pleading before this committee about the manner in which we are treated by the Department of Defence Production.

Mr. LLOYD: We would like to think that the work of this committee is to get as much general illumination as possible on the basis of the defence department, on its policy, and on the procedures followed, and we give an opportunity to people like yourselves to express yourselves on the effect or the impact of any policy. But you say you do not have anything to add today?

The CHAIRMAN: I think it is up to the witness if he wants to say something or not. You may ask him once more, and then I think we should move on to something else.

Mr. LLOYD: I think this pretty well establishes it that they have nothing to offer by way of criticism of the present policy.

Mr. WINCH: I have a supplementary question.

Mr. PLANT: As far as contracts are concerned, I would like to say that the profits which are allowed are inadequate. I think I can say that for the whole industry, right across the board.

Mr. LLOYD: Do you mean this seriously?

Mr. PLANT: Yes.

Mr. LLOYD: Why do you say that they are inadequate? For what purpose are they inadequate? Do you mean inadequate for the investment, or inadequate for capital formation? Are you really serious about it?

Mr. PLANT: Yes.

Mr. LLOYD: If there were a larger opportunity to accumulate capital in your industry, would this mean expansion of new facilities and new research facilities?

Mr. PLANT: I think it would lead to better research if there were.

Mr. LLOYD: Under the federal Income Tax Act research expenditures are allowable as a deduction to any taxpaying corporation. Now, since the advent of this kind of consent, has there been an appreciable increase in research in Canada as a result of it?

Mr. GOLDEN: Not in our industry, no, and for two reasons: because in the base year, or the year in which the policy was initiated, substantial research and development were going on in this industry. Secondly because of necessity most research and development funds must be generated from profits, and the credit is given only against profits, and profits have not been very high all these years.

Mr. LLOYD: So in your industry it has not been effective.

Mr. GOLDEN: I would not say that it has been ineffective, but it has not been very effective.

Mr. LLOYD: Though I said that was my last question may I just put one more very short question on this matter of the division of the industry?

There is new aircraft production and there have been quite a number of companies engaged in aircraft overhaul, repair and modifications.

Mr. GOLDEN: Yes, sir.

Mr. LLOYD: Has there been a change in your industry? Because of the lessening volume of new aircraft production have those who have produced new planes been looking for work in the overhaul, repair and modification field to a greater degree in the last two or three years?

Mr. GOLDEN: I would think the answer is yes. I think so, yes.

Mr. LLOYD: Then that opens up one final question on dispersal—and this is the final question.

This kind of industry was located in relation to the bases for aircraft, for example on the west coast and in Halifax.

Mr. DEACHMAN: Not on the west coast; there is none out there.

Mr. LLOYD: I presume you have no disagreement with that policy of locating overhaul and repair and modification industries close to the location of the fleets.

Mr. GOLDEN: We have no policy on this subject, period.

Mr. LLOYD: You have no views on it?

Mr. GOLDEN: That is so.

The CHAIRMAN: Mr. Lambert.

Mr. WINCH: May I have a question after everyone is through? I have a supplementary question.

The CHAIRMAN: I still have two on the list.

Mr. WINCH: I will ask it afterwards.

Mr. LAMBERT: It would appear from today's meeting that the members of your industry do not only use their sandpaper on the work benches but apparently they use it on the hides of ministers. There is a story current that the ire of two ministers has been roused by the attitude of the aircraft lobby. However, I know what this refers to and I think you gentlemen do too and I will pass to a more serious question.

In reference to paragraph eight which is really the burden of your brief and which is something on which I have had some knowledge in the past, to what degree do you feel that the aircraft industry or the air industry, as well as other industries which cater to military requirements, should be brought into preplanning or planning as you suggest in your brief? In explanation earlier you indicated that this was done to a greater degree in Britain and in the United States than it is here. To what degree do you feel this should be done here?

Mr. GOLDEN: I cannot, Mr. Lambert, give it any more specific definition than I have tried to give it this morning.

Mr. LAMBERT: I missed that meeting.

Mr. GOLDEN: We do not feel that as much has been done as could be done. We are not suggesting that we or any other association or industry can be associated with the decision making functions of parliament or administration, but we think there is room in between the present system and going so far as to say "Let's sit down and decide what we are going to do." That sort of preplanning and consideration of industry capabilities and industry capacities in the tentative thinking on the part of ministers of national defence we think can have useful results without in any way blurring the essential distinction between an industry and a government.

Every country has to work this out to take advantage of the peculiar and special ways in which their governments operate. Not every country has a department of defence and a department of defence production and so on. These things have to be done differently here. We do feel there could, however, be more confidences exchanged and more thoughts extended on these subjects both in the long term and the more intermediate or short term planning.

Mr. LAMBERT: I would like to make it clear, Mr. Golden, that I agree with your thesis. What I want to find is to what extent your suggestion goes. How far does it go? Does it involve fitting in with you a little earlier in the game the service officers who are doing, shall we say, the early thinking for weapon requirements or technical requirements?

Mr. GOLDEN: Yes, we think that government-industry briefings do offer opportunities that should be explored.

Mr. LAMBERT: It has been my thinking that perhaps the sad experience of the Bobcat might have been avoided to some degree by earlier sitting-in with the industry rather than somebody, whether army or air force, coming up and saying, "We want a plane to do this particular job, do you think you can get it?" I mean starting right away with research and development. I may be oversimplifying the situation, but it seems to me that in so far as capacity is concerned, the financing and all that goes with it, that industry could come in a lot earlier, and I am glad to see that you have made this point, because I feel that it has been one of those things that have been lacking in the past. I am not afraid, actually, of the industries coming in and sort of taking a slice of the policy making.

Mr. GOLDEN: Well, I think the point we are making is the same as the point that you have just made, and the conclusion we would draw is that if the objective is recognized as sound, surely it is not beyond the wit of man to work towards that objective, taking into account whatever special circumstances exist in the way we have divided up this type of authority in this country.

Mr. LAMBERT: That is all I have to say.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Mr. Chairman, luckily Mr. Deachman, and to some extent Mr. Lloyd, have asked the questions I wanted to ask, but Mr. Golden, perhaps you might tell me if you feel there is anything in the nature of the industry which precludes it from greater dispersal than presently exists?

Mr. GOLDEN: I should quit now, while I am ahead. Yes, if you ask me this as a businessman, is there anything that, I would not say precludes, but if there is anything that makes it difficult to disperse, indeed there is. There are very very expensive facilities already in existence in this country, at a time when it is difficult to find work to keep them all busy, and it would be a very, very costly and disruptive process indeed. I am not saying it would preclude it, but it would be a very costly process indeed to disperse, and I am sure it is not a decision which private industry by itself could make. In addition, of course, there are some industries of which we have some representatives in our association, which are only partly air industries, and they operate their air industry as an integral part of a much larger operation, for instance, the air industry part of Canadian Westinghouse, in Hamilton, and there are many other examples of that type where they operate as an integral part of a much, much larger industrial complex. This, of course, would be even more difficult.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): I wonder, Mr. Golden, if you might now explain your answer to cover industry capacity to be established in the future, as opposed to that which is already existing?

Mr. GOLDEN: Well, I myself could not give any useful answer to a question like that, unless I knew what kind of industry. There is aircraft; there is engines; there is accessories; there is ground support equipment; there are communication and navigation aids; there is electronics of all sorts. They all require different reservoirs of skills; different types of plant; access to different types of raw material, subcontractors, and so on. I am just saying the obvious, but I think it is so.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Yes, it just seemed to me that the first part of your conclusion was a good one. I would think that the interests of defence might sort of be a little more served by dispersal. I also thought that in the national interests dispersal for economic planning purposes might also be advisable, and I was wondering if there was anything in the nature of the industry which would prevent close co-operation between government and industry towards this end?

Mr. GOLDEN: I would not think so, no, not in general.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): You are asking for closer co-operation in the field of planning and research and development, and holding but the carrot, so that maybe you would help the national economic interests.

Mr. GOLDEN: There is nothing inherently impossible in what you have just said.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): But do you feel that it would be an expensive process.

Mr. GOLDEN: Well, relocating existing facilities would be very expensive indeed.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): The kind of thing I was wondering was whether this kind of objection might exist. You would have to be close to component part manufacturers, for instance, in the assembly plant. That kind of thing. It seemed to me that maybe this would not be an objection.

Mr. GOLDEN: It is a factor in some cases; it sometimes tends to be overrated, but it is a factor in some cases. It is clear that where business judgment alone dictates the decision, there are an awful lot of plants of certain types that do go into the Toronto area, or the Montreal area.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): I would take it, then, that the in dustry would not accept with a welcome economic planning of the kind I have indicated?

Mr. GOLDEN: Yes, I see no reason why not.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Thank you very much, Mr. Golden.

The CHAIRMAN: I have Mr. Nulty and Mr. Winch, both of whom have been around once before.

Mr. MCNULTY: Mine have been answered.

The CHAIRMAN: Mr. Winch has one question, I think he indicated.

Mr. WINCH: Yes, Mr. Chairman, I have one question.

The CHAIRMAN: Right, we will take that one, then Mr. MacLean and Dr. McMillan.

Mr. WINCH: Mr. Chairman, I am going to say right off the bat I am a little bit troubled as to how to present my question, and I hope I will not be misunderstood in putting the question, but to me it is of such importance that I want to ask it. This is the first occasion, Mr. Chairman, that I have had the privilege of meeting Mr. Golden, and hearing his representation in his position as president of the Air Industries Association of Canada, but although the presentation, Mr. Chairman, made today by Mr. Golden as president of the Air Industries Association of Canada is my first occasion to meet him, I have heard a great deal about Mr. Golden before he came here today, and that applies to a previous honored position which he held. So, sir, this is my difficulty, but I wanted to put the question. I would like to ask Mr. Golden, because it is a matter before this committee, if Mr. Golden feels he could come before this committee after this meeting, at a future meeting perhaps next week, and explain from his knowledge, experience and responsibility as the deputy minister of defence production the relationship with the C.C.C., the Canadian Commercial Corporation, and the responsibilities, as he saw it at that time. I ask that question, sir, because from my information I have been told that if Mr. Golden were still in that job we would not have certain problems that are facing the department today.

Now, that is as nicely as I can put it. No, I will put it better, that that is what I am told, that if Mr. Golden were still there—

The CHAIRMAN: Well, first of all the question is out of order in terms of the material before us today. If Mr. Golden would like to answer it, he is of course at liberty to do so.

Mr. WINCH: It is one of the important matters before us, Mr. Chairman, this matter of the C.C.C., and Mr. Golden was the responsible deputy minister at that time.

Mr. GOLDEN: I would be happy to talk to you, Mr. Chairman, and Mr. Winch privately about this matter. I do not think I should do so at this time.

Mr. WINCH: Well, can I just say this, and I appreciate the fact that you are, but may I also add another conclusion to my question. When I leave my job I hope I have as good a reputation as you had on that job.

Mr. GOLDEN: Thank you.

Mr. MACLEAN: I have a couple of general questions: One is with regard to requirements, say for something like a tank navigational instrument. Now, this is a problem that arises. The methods by which the problem is met, are they specified by the Department of National Defence, for example, to some development contractor to produce an instrument to meet these requirements, or in some cases is the industry in a position to say that: "Oh, there is a much better way of doing this," and the industry comes up with an idea that is accepted by national defence. Now, which is the process?

Mr. GOLDEN: I think both, Mr. MacLean. There have been many cases where industry has made representations that a product is available, or can be developed, which will do thus and so, and people have been interested, both military and commercial customers. There are also other cases where the military start something, or defence research board, or one of the other labs on their behalf start something, and turn it over to industry, and there are other cases where they go direct to industry and say: "Can you do this, using this type of approach", and industry usually says: "Yes, we will be glad to have a go at it. We have this capability," and the contract is entered into. There are many different ways in which these matters do arise.

Mr. MACLEAN: And I suppose there is, at least in theory, the possibility of a further stage, where industry in working perhaps with one problem may come on what would be a neat solution for another problem, and put that up for acceptance?

Mr. GOLDEN: Yes, indeed.

Mr. MACLEAN: My other question is with regard to research and manufacturing processes, and so on, the skills that have been developed in the industry. Have they resulted in some cases in which a company may find itself competitive in the civilian field for some completely non-military product? I am thinking now of developments in the electronic industry, as an example.

Mr. GOLDEN: Oh, yes.

Mr. MACLEAN: As a result of research and development of what started to be a defence requirement has a new product come into being, and a new industry perhaps, or phase of an industry grown up in the civilian market?

Mr. GOLDEN: Yes, that is so. That is certainly so, and there are some cases where this is so to the extent of quite a major industry.

Mr. MACLEAN: Yes. Well, I think that this is a very important long range benefit that may flow from research and development.

Mr. GOLDEN: This is the point we try to make in that paragraph where we talk about the technological knowhow.

Mr. MACLEAN: Are there cases in which processes developed for defence production in the first instance are licensed to civilian companies for civilian processes, or uses?

Mr. GOLDEN: Oh, yes I think so. I think there are products which started out with no thought of anything but a military application.

Mr. MACLEAN: I would have expected that that would be the case.

Mr. GOLDEN: And I expect, also, you inevitably find as you go along, you machine something a little differently, first for military purposes because the tolerances are greater and the requirements more exact, and then you find you can continue doing that without paying any financial penalty for a commercial transaction.

Mr. MCMILLAN: You said the exports were up in the first six months of this current year, and the domestic sales were down.

Mr. GOLDEN: Yes, sir.

Mr. MCMILLAN: Do they pretty well balance?

Mr. GOLDEN: No, I would think the exports are up.

Mr. MCMILLAN: I mean is business about on a level?

Mr. GOLDEN: No, I think that today business is probably at a lower level than it was last year at this time. Oh, certainly, not probably, at a lower level over all. You have already heard from some witnesses that this is not so in some companies.

Mr. MCMILLAN: Would you say that the outlook is reasonably good?

Mr. GOLDEN: No, over all I would say that the outlook is quite uncertain at the moment, pending certain matters which have yet to be decided.

Mr. MCMILLAN: I think I am the last questioner, so I will carry on. I heard Mr. Golden give some of his autobiography. He said he attended Oxford, but he did not say he was a Rhodes scholar; and he did not tell us that his career was interrupted by being a prisoner at Hong Kong; and the reason he left his present position was that he was asked by the Prime Minister to help in setting up the Department of Industry.

I will put that in the form of a question. Is that right?

Mr. GOLDEN: I cannot deny it.

Mr. MCMILLAN: I am not accusing you of being evasive!

Mr. WINCH: Could I ask you just when you left the post of deputy minister?

Mr. GOLDEN: July 1, 1962.

The CHAIRMAN: That completes our questioning. May I on behalf of the Committee thank the witnesses for the time and trouble they have taken to come before us today, and for their presentations.

We will be meeting again next Tuesday, at eleven o'clock.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 24

THURSDAY, DECEMBER 3, 1964

Respecting

CANADIAN COMMERCIAL CORPORATION

WITNESS:

The Honourable C. M. Drury, Minister of Defence Production; Mr. M. H. Lamoureux, President, Canadian Commercial Corporation; and Mr. W. Harris, former Assistant General Manager of the Corporation.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21662—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—24.

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, December 3, 1964.
(38)

The Special Committee on Defence met at 11.10 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Béchard, Fane, Groos, Hahn, Harkness, Laniel, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, MacRae, Martineau, McMillan, Pilon, Smith, Temple and Winch—16.

In attendance: Honourable Charles M. Drury, Minister of Defence Production; Mr. G. W. Hunter, Deputy Minister of Defence Production; Mr. M. H. Lamoureux, President, Canadian Commercial Corporation; and Mr. W. Harris, former Assistant General Manager of the Corporation.

The Committee proceeded to an examination of the organization and operations of the Canadian Commercial Corporation.

Mr. Drury made a statement on these points and on related matters raised at previous meetings of this Committee.

The Minister, Mr. Lamoureux and Mr. Harris were questioned.

The Minister read, in part, and tabled Bylaw No. 7, of the Corporation, dated December 18, 1963.

Agreed,—That the said bylaw be included in the record of the Committee.

A request was made that all the bylaws of the Corporation be made available at the next meeting of the Committee.

At 1.00 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

Note—The evidence, adduced in French and translated into English, printed in this issue, was recorded by an electronic recording apparatus, pursuant to a recommendation contained in the Seventh Report of the Special Committee on Procedure and Organization, presented and concurred in, on May 20, 1964.

21662—1½

EVIDENCE

THURSDAY, December 3, 1964.

(*Text*)

The CHAIRMAN: May we please come to order; we have a quorum.

In accordance with the motion passed at our meeting of Thursday, November 19, calling for the appearance before this committee of the General Manager of the Canadian Commercial Corporation, we have Mr. Lamoureux of the Canadian Commercial Corporation here this morning.

Before we proceed with Mr. Lamoureux, Mr. Drury, the Minister of Defence Production has a statement to make. I believe copies of the statement are being handed out to members now. After the Minister's statement, we will proceed with questioning.

Mr. MARTINEAU: Are we going to proceed with questioning of the Minister, or of Mr. Lamoureux?

The CHAIRMAN: Mr. Lamoureux.

Mr. WINCH: Will Mr. Lamoureux make a statement following the minister's statement?

Hon. C. M. DRURY (*Minister, Department of Defence Production*): If I may speak for Mr. Lamoureux, having spoken to him earlier, I might say I do not think it is his intention to make a formal statement. He is here in response to a summons by the Committee to appear as a witness without, as I understand it, knowing too clearly what is the interest of the Committee.

I have produced a statement in respect of the operation of the Canadian Commercial Corporation which I thought might be helpful to members of the Committee, as an endeavour to produce in a single document the whole story.

With the indulgence of the committee, I now will read this statement.

At the committee's meetings on November 17 and 19 certain questions were discussed with regard to the integration of Canadian Commercial Corporation functions and staff into the Department of Defence Production. For convenient reference by the committee members I would like to point out that a review of current Canadian Commercial Corporation practices, activities and organization is contained in the corporation's annual report for FY 1963-64, of which copies are available here.

So far as organization is concerned, the transfer of Canadian Commercial Corporation staff to Department of Defence Production, which was completed during the first half of this year, was the last phase of a process which began when the department was formed in 1951. Since 1951 the corporation has increasingly utilized the experienced staff of the department in procurement for, and the negotiation of sales to, other governments. The Department of Defence Production has always been responsible for such international defence industrial development and production programs as Canada-U.S. defence production sharing and the related defence export sales activities. During 1962, to cope with the expanding workload related to foreign requirements, a reorganization was undertaken in Canadian Commercial Corporation to improve the services provided by the corporation and to bring about closer integration with Department of Defence Production. In 1963 the Glassco Commission report noted that the operations of the corporation were in all material respects integral to those of the department and therefore recommended that "The legal identity of Canadian Commercial Corporation be

maintained but its management and staff be provided by Department of Defence Production".

This recommendation is contained in volume 5 at page 106 of the commission's report.

In the interest of efficient management this recommendation has been implemented by the government and, with the exception of the president and his secretary, all Canadian Commercial Corporation personnel were transferred from the corporation to the civil service. The result has been the elimination of duplicate or conflicting policies, practices and procedures, and the establishment of an integrated and efficient organization to promote defence export sales, contracting, production and related services to other governments.

Mr. Winch was particularly interested in the events subsequent to my memorandum of October 28, 1963, which informed the staff of Department of Defence Production and Canadian Commercial Corporation of my intentions as I have just outlined them, with regard to the amalgamation of all aspects of defence export activity, including the Canadian Commercial Corporation aspects, into the Department of Defence Production. From that time management responsibility for all defence export activity including work done in the name of the Canadian Commercial Corporation has been assigned to the assistant deputy minister responsible for departmental defence export activity. This included the management of the Canadian Commercial Corporation, as well as the Department of Defence Production staff, to whom I pointed out that the administrative procedures associated with actual integration of Canadian Commercial Corporation personnel into the department could extend over a period of several months. In fact, as indicated in the analysis provided to the committee of Canadian Commercial Corporation employees integrated into the civil service, the actual process of bringing Canadian Commercial Corporation employees into the civil service continued will into this year. As of March 1964, there were 84 Canadian Commercial Corporation employees including the president and his secretary. As I will discuss later, the president since October 1963, has had no Canadian Commercial Corporation staff except for his own secretary, under his management. The remaining 82 employees became responsible to Department of Defence Production management. The tabulation shows the location of these employees as of November 18, 1964. As with any staff of this size, it is inevitable that, over the course of the year or so under consideration, there has been a variety of staff changes, transfers, etcetera. However, in the main as the tabulation shows, the bulk of the original Canadian Commercial Corporation staff continue to devote their abilities to functions similar to those in which they acquired experience in the earlier, less effective, Canadian Commercial Corporation organization.

During the course of my review last year of the need for more efficient organization of defence export activities, I of course discussed my intentions with the Canadian Commercial Corporation president. He had some reservations which I carefully considered. However, the importance to Canada of more effective international co-operation in defence industrial research, development and production, in comparison to organizations for this purpose evolving in the U.S. and other countries, led to my decision that the best approach in our case was integration of all the functions and appropriate personnel into the department.

With the assignment of operating management responsibility to the Department of Defence Production I assigned, for this transitional period, to the present incumbent of the president's position, now free of day-to-day operating workload, the role of defence export market adviser to the assistant deputy minister responsible for departmental defence export activity. Therefore, in this interim capacity Mr. Lamoureux has had every opportunity to make

available to the department any experience which he may have acquired since his appointment and any views which he has expressed have been given appropriate consideration.

Finally with regard to this reorganization, any such changes are bound to create reaction and temporary dislocations in old and comfortably established patterns and practices. However, it has now become evident that our new organization is shaking down into a far more effective and co-ordinated activity than the old fragmented arrangements. I am completely satisfied with the results of the transitional period to date and look forward to even increased effectiveness for the future. I, therefore, reject any suggestion that the Canadian Commercial Corporation has been brought to ruination and incompetency —quite the opposite has been achieved in a better managed organization and increased efficiency of performance.

Now I propose to turn to the questions raised at previous committee meetings, as to the legality of the integration of the Canadian Commercial Corporation staff into the department. It is essential first to emphasize that despite the transfer of its staff to Department of Defence Production, Canadian Commercial Corporation remains a corporate entity. As required by section 3(1) of the Canadian Commercial Corporation Act, Revised Statutes 1952, Chapter 35, the Corporation consists of—

> a president appointed by the governor in council and holding office during pleasure and not more than nine or less than five directors all of whom shall be appointed by the governor in council and hold office during pleasure.

Section 6(2) of the Canadian Commercial Corporation Act provides that—

> The Corporation has, under the minister, the control and supervision of the officers and servants employed under this act.

Section 4(2) of the Canadian Commercial Corporation Act provides further that—

> The corporation shall comply with any general or special direction given by the governor in council or the minister with reference to carrying out its purposes.

Under the above-mentioned provisions, Canadian Commercial Corporation has legal authority to carry out any instructions of the minister in regard to the retention or non-retention of part or all of its staff especially, as has been the case, if such instructions would result in increased efficiency in the carrying out of the purposes for which the corporation was established.

Although the Canadian Commercial Corporation Act contains ample power for the minister to give directions regarding staff and does not require him to obtain the approval of the directors of the corporation in that regard, the board of directors of Canadian Commercial Corporation, at a regularly constituted meeting held December 18, 1963, resolved that the legal entity of Canadian Commercial Corporation should be maintained and that the management and staff, with the exception of the president and his secretary, should be provided by the Department of Defence Production.

At the same meeting the directors passed bylaw No. 7, which recognized the reorganization and bylaw No. 7 was, pursuant to section 11 of the Canadian Commercial Corporation Act, approved by order in council P.C. 1964-663.

The Hon. the treasury board, in T.B. Minute 618099 of December 2, 1963, approved the change in the establishment of Department of Defence Production which was involved in the transfer to Department of Defence Production of the

Canadian Commercial Corporation staff, and the Civil Service Commission used its normal procedures in regard to the classifications of the Canadian Commercial Corporation personnel assigned to civil service positions within Department of Defence Production.

An independent opinion as to the legality of the staff transfers was sought by the president of Canadian Commercial Corporation, who wrote to the deputy attorney general on December 9, 1963. The deputy attorney general, in his reply of January 14, 1964, stated that the staff transfers were permitted by the Canadian Commercial Corporation Act, but that Canadian Commercial Corporaiton should not use its moneys to pay the remuneration of persons who had ceased to be officers and servants of the corporation. He was referring to personnel who had been transferred from Canadian Commercial Corporation to the civil service. As I indicated earlier, these personnel became civil servants within the meaning of the Civil Service Act and were paid as such.

The deputy attorney general further pointed out that the extent of the corporation's activities and its methods were subject to the direction of the responsible minister. The integration of the corporation's activities with overall defence export programs did not contravene the Canadian Commercial Corporation Act.

In conclusion, Mr. Chairman, I have studied carefully the opinions voiced in this committee as to the methods or the propriety of my department's arrangements for international defence industrial co-operation. I must say that I have found much of the criticism to be quite unfounded. Over the past few years each step in the evolution of our current organization has been taken only after careful review of our objectives and pertinent activities both domestically and abroad. I am satisfied that the final reorganization phase of integrating Canadian Commercial Corporation activities into Department of Defence Production has been:

first—in line with the concepts of modern management and organization sponsored by the Glassco Commission.

second—within my powers as the responsible minister under the governing legislation.

third—put into effect with equity to all concerned

and finally—found already to be a significant improvement over the previous organization in terms of operational efficiency and management effectiveness with real promise for continuing future achievement.

The CHAIRMAN: We are ready for questioning. I would suggest that questions concerning policy in the minister's statement be addressed to the minister, and that questions of fact concerning the reorganization be addressed either to the minister or to Mr. Lamoureux as you see fit.

Mr. MARTINEAU: Mr. Chairman, I would like to ask Mr. Lamoureux, first of all, for the information of the committee, whether he was briefed by a minister or any other official before appearing before this committee this morning.

Mr. M. H. LAMOUREUX (*President, Canadian Commercial Corporation*): I did have a meeting with the hon. Mr. Drury. At this particular time we discussed the staff and how the staff would fit into the organization of the Department of Defence Production.

Mr. MARTINEAU: Were you given any directions in respect of the answers you should give here this morning?

Mr. LAMOUREUX: No.

Mr. MARTINEAU: How long have you been president of the Canadian Commercial Corporation?

Mr. LAMOUREUX: I was appointed president of the Canadian Commercial Corporation on November 15, 1960.

Mr. MARTINEAU: For the information of the committee, would you give a succinct report of the standing of the corporation at that time with regard to its operations?

Mr. LAMOUREUX: What exactly do you mean?

Mr. MARTINEAU: What exactly was the business being carried on by the corporation at that time and the extent of the business?

Mr. LAMOUREUX: The extent of the business in this particular year ended March 31, 1961, was between $65 million and $70 million.

Mr. MARTINEAU: What has been the history of the corporation since that time?

Mr. LAMOUREUX: In 1961-62 the corporation increased sales to foreign governments quite considerably, and in 1962-63 it again increased. Until the first of November last year we were gradually increasing the volume.

Mr. MARTINEAU: To the first of November, 1963, which is the effective date of the take over, would you tell the committee the extent of the business you carried on; what was the total volume of business?

Mr. LAMOUREUX: I will have to look at some annual statements now in order to answer the question.

Mr. WINCH: May I ask a question at this point. In view of the fact that we have heard there is only a president and a secretary now officially on staff, are there any persons present in this room today who were your previous executive officers?

Mr. LAMOUREUX: I see Mr. Harris is sitting here; he was an executive officer. Mr. Harris was the assistant general manager.

Mr. WINCH: Would it assist if he came up?

Mr. MARTINEAU: It might be a good idea if he was up there to assist.

The CHAIRMAN: If it is the wish of the committee, Mr. Harris might be asked to answer questions, or assist.

Mr. WINCH: He was the assistant general manager?

Mr. LAMOUREUX: Yes, for the duration of the time I was there.

Mr. TEMPLE: Is he now with the Department of Defence Production?

Mr. LAMOUREUX: Yes, he is.

I am looking at the annual report of 1962-63. I understand that many of you have copies. You can very easily see that 1962-63 ended with a $200 million volume. Does that answer your question, Mr. Martineau?

Mr. MARTINEAU: It went from $50 million or $60 million when you took over to about $200 million.

Mr. LAMOUREUX: Yes. Actually, it was about $57 million in 1959-60, and goes up to $118 million, or somewhere in that area, in 1960-61, to $150 million in 1961-62 and to $200 million in 1962-63.

Mr. MARTINEAU: From what you have just stated is it correct to conclude that after taking over as president of this corporation you succeeded in bringing the business of the corporation, which is composed exclusively of export trade, from some $50 million or $60 million to something over $200 million?

Mr. LAMOUREUX: I must admit that this volume is composed all of export and nothing local. However, at the same time there are large programs in defence which were unfolded in these years and these defence programs were carried over to NATO and foreign countries. They purchased in Canada the type of equipment which was agreed by these large organizations.

Mr. MARTINEAU: Did you personally have a hand in drumming up trade for the corporation, and if so to what extent?

Mr. LAMOUREUX: Well, I made several trips because we were the contractual organization. I was involved in these contracts. In the board of directors meetings we discussed the type of service we would give these purchasing foreign countries.

Mr. MARTINEAU: Since November, 1963, what has been the history in respect of the volume of business transacted by the corporation; has it been increasing or declining?

Mr. LAMOUREUX: In respect of this particular period I would ask the minister to answer. I am only an adviser now. The volume of business and the way it is handled has no relation to the presidency of the corporation.

Mr. MARTINEAU: Is the business, which you as chairman of the corporation and the corporation itself was able to procure for Canadian firms, lost or is it still being carried on under another agency?

Mr. LAMOUREUX: Well, I believe some of the business that was offered actually has not generated. I admit I am not helping in this very much as I used to by visiting foreign countries and helping them by presenting a certain picture and the guarantee that the government offers through the corporation. Of course, the volume is down; there is no doubt about it. However, I feel that since the first of November last year there are qualified people here who really are on top of this particular situation. I would rather refer the question to a person who could answer it properly.

Mr. MARTINEAU: If I were to suggest to you that according to the report of this company, the business which reached a top of over $200 million in 1962-63 now is dropping at the rate of $10 million per month, would that be correct?

Mr. LAMOUREUX: If you take the volume of business that was carried out in 1962-63 in relation to what it is now, there is no doubt it has come down $10 million a month as an average.

Mr. MARTINEAU: Is that business which is lost by Canada, or is it taken up by some other agency?

Mr. LAMOUREUX: Offhand I could not tell you.

The CHAIRMAN: This is not within the scope of the responsibility of the witness. The minister is the appropriate person to answer if he would care to.

Mr. MARTINEAU: This witness now is the adviser in the department on these matters.

Mr. DRURY: Yes.

Mr. MARTINEAU: In the minister's statement on page 5, in conclusion No. 3, in speaking of the motives which have prompted the reorganization, he says:

> This has been put into effect with equity to all concerned and finally —found already to be a significant improvement over the previous organization in terms of operational efficiency and management effectiveness with real promise for continuing future achievement.

The question I would like to put to the witness is, does he agree with this statement and if so why, and if not why not?

Mr. DRURY: Mr. Chairman, I think it would be a little unfair, perhaps, of the committee to seek from an official an expression of approval or disapproval of government policy. I think it is a well established principle of our system of government that policy is the responsibility of the ministry and that the kind of advice officials give or do not give to the ministry is not an appropriate subject for questioning.

Mr. MARTINEAU: On a point of order, Mr. Chairman, first of all I think the minister's answer is out of order by raising a point of order when he does not happen to be a member of the committee.

Secondly, I am questioning the witness not on policy but on fact. This is not policy; this is a statement of fact—the fact that there is a significant improvement. It is a fact whether or not there is a signficant improvement, and whether the efficacy of the business has been improved is a matter of fact. The witness is competent to answer on that particular question. The question is absolutely relevant and pertinent.

Mr. GROOS: I wonder whether we might establish what is the competency of the witness.

Mr. WINCH: He is just the president of the Canadian Commercial Corporation; that is pretty good.

Mr. GROOS: I understand that. Perhaps the witness would tell us what has been his experience before he entered the Canadian Commercial Corporation which would establish in our minds what his experience and training was for the job.

The CHAIRMAN: I think, in terms of the point of order raised by Mr. Martineau—

Mr. MARTINEAU: I did not raise a point of order; the minister did, and he did it without any justification.

The CHAIRMAN: The witness has been asked whether he agrees with a statement in the minister's statement.

Mr. MARTINEAU: Mr. Chairman, may I resolve this point by perhaps rephrasing my question? Does the witness believe that the transfer has resulted in a significant improvement over the previous organization? This is a question of fact.

The CHAIRMAN: You are asking the witness for his opinion on this, and if the witness cares to answer, he may.

Mr. LAMOUREUX: I fully felt, while the administration of the corporation was under my guidance, that it was doing its job according to the act. It was definitely out to sell Canadian manufactured goods to foreign countries, in the defence field as well as in the commercial field. The integration of the corporation into the Department of Defence Production really struck me as quite a surprise. I felt, and I still feel, that the corporation could do an outstandingly good job in administering contracts and selling to foreign governments.

Mr. MARTINEAU: I would like to pose a question to the minister resulting from his statement. I would like to refer to the act itself, chapter 35, paragraph 4, where it states:

> The corporation is established for the following purposes:
>
> (*a*) to assist in the development of trade between Canada and other nations;
>
> (*b*) to assist persons in Canada
>
> (i) to obtain goods and commodities from outside Canada, and
>
> (ii) to dispose of goods and commodities that are available for export from Canada;

Then paragraph 5 states:

> (1) The corporation may do such things as it deems expedient for, or conducive to, the attainment of the purposes set forth in section 4;

And it gives certain specifics such as importing goods or commodities. Under the present set-up is the corporation accomplishing any of the objectives set out

by this statute of the parliament of Canada, chapter 35 of the revised statutes, at this time?

Mr. DRURY: I suggest it is; that is my statement, and it is clear. This is being more effectively accomplished than has been the case in the past where there were two separate administrations doing substantially the same thing. The corporation has been concerned principally in the defence field. If one looks at the report for 1963-64 at page 6, one will see a graph showing both the total volume of business transacted in the name of the corporation and also the source of the particular make-up of that total volume of business. There is shown a growth in total volume between the years 1959-60 of something in the order of $60 million to close to $200 million in 1962-63, declining to $150 million in 1963-64. Of this total the bulk is made up of sales in the defence products field to the United States, and is a direct reflection of the large individual programs that were in train during those years between the two countries.

Throughout the years small elements of Canadian Commercial Corporation business have been Canadian government requirements excluding external aid. As members of the committee will know, the purchasing agent in Canada for the external aid office is the Canadian Commercial Corporation. The volume of business done in this regard by the Canadian Commercial Corporation is directly and solely related to the size and scope of our external aid program; it rises and falls with this, without any activity on the part of the corporation. So far as other government and international agencies are concerned, between the years 1962-63 and 1963-64, and we hope in the current year 1964-65, there has been a quite remarkable increase in sales to foreign countries other than the United States. These sales have been the result of quite intensive and expert activity on the part of teams from the Department of Defence Production.

In the matter of sales to foreign governments of military equipment, it is necessary to establish first a requirement on the part of the foreign government which requires a quite detailed knowledge of the defence program of those countries, and, secondly, the relevance or appropriateness of what we can produce in Canada in the defence production field to satisfy those requirements; thirdly, and perhaps most important, is a selling job by equipment or technical experts who know not only the administrative consideration but also have a high technical qualification in order to discuss and negotiate with representatives of foreign governments in respect of the sale of this equipment. It is in this field principally that the Department of Defence Production under its international program branch has organized and sent abroad teams to accomplish this.

In this field we are achieving greater and greater success. In so far as the bulk of our sales to the United States through the Canadian Commercial Corporation is concerned, I think members of the committee will recognize that the selling efforts in this regard largely are carried on by, and accepted as the responsibility of, the Canadian manufacturing corporations themselves rather than the efforts of a government agency.

The government does provide through the Department of Defence Production technical advice and technical assistance for them, and further of course it provides a legal vehicle for the establishment of the Canadian Commercial Corporation through which these contracts are processed.

Mr. MARTINEAU: I thank the minister for his extensive information, but I am afraid he has not answered my question which was this: Under the act, which act has not been amended, unless I am in error—is that not correct?

Mr. WINCH: Or repealed.

Mr. MARTINEAU: Yes, or repealed, the corporation's activities are defined, and my question to the minister is this: Under the present reorganization is the corporation in effect discharging its responsibilities in carrying on operations provided for by this statute?

Mr. DRURY: The operations are to assist in the development of trade between Canada and other nations, to assist persons outside of Canada to obtain goods and commodities, and to assist persons in Canada to dispose of goods and commodities. This assistance, in my view, is assistance to persons in Canada to sell their products abroad, and it is being more effectively done, and more assistance is being provided under the present arrangement whereby the Canadian Commercial Corporation is used as the legal vehicle for the conclusion of contracts. But the actual work of both selling, negotiation, and the provision of export advice is done by people who are employees in the civil service, in the Department of Defence Production.

Mr. MARTINEAU: May I refer once again to section 5 where it states that the corporation may carry on the business of importing goods or commodities into Canada. Is the corporation as set up doing this? I am not asking you if the Department of Defence Production is doing it on behalf of the corporation, but I am asking you whether the corporation itself does carry this out?

Mr. DRURY: I think we have to distinguish between the functions which are carried out by the corporation itself with its own hands, and those it causes to be carried out on his behalf. Now, provided operations are carried out more efficiently, more effectively, by persons who have been caused by the corporation to act on its behalf, this would be the case, were the corporation doing this with its own hands, and I suggest that the requirements of section 5 are being met, as indeed they are.

Mr. MARTINEAU: Does the minister suggest that at the present time, under the present set-up, the corporation is importing goods and commodities into Canada and is exporting goods and commodities from Canada acting either as principal or as agent?

Mr. DRURY: There is very little that has been done for some time past, or that is being done now in the way of importation.

Mr. MARTINEAU: I mean the over-all operations of the corporation. The president stated that from 1960 when he took over, he brought the business up from $50 million or $60 million to over $200 million. Does the minister agree?

Mr. DRURY: It is a little difficult to say who was responsible for the increase in business.

Mr. MARTINEAU: Surely the minister will admit that this was business performed by the corporation, unless the annual statements are absolutely wrong. Is the answer to be yes or no? I would like to have a direct answer.

Mr. DRURY: The hon. gentleman is a lawyer himself.

Mr. MARTINEAU: That is not an answer.

Mr. DRURY: I think he understands perfectly clearly that a transaction carried out in the name of a corporation is the transaction of the corporation.

Mr. WINCH: That is eyewash and nonsense, surely.

Mr. MARTINEAU: I would like to pose another question, and then I will yield my place to someone else. The minister made a rather surprising statement when he said that under the present set-up the business was being carried on more efficiently than it was previously. Is it then right to conclude that 84 people were carrying on operations less efficiently than those being carried on now by two persons?

Mr. DRURY: Well, as I pointed out in my statement, these 84 people are in large part doing virtually the same kind of work that they were doing previously. But they are doing it under a different head. In some instances they are doing work in the name of the Canadian Commercial Corporation.

Mr. Martineau refers to my statement of transactions carried out in the name of the corporation as being transactions of the corporation; as a lawyer he knows that this is quite true.

Mr. MARTINEAU: I would say it was nonsense.

Mr. DRURY: He knows that it is true. The volume of business, as I think the president will agree, which was transacted in 1962-1963 in the name of the corporation was representative to a large degree of effort on the part of employees not of Canadian Commercial Corporation but of the Department of Defence Production.

Mr. MARTINEAU: Well!

Mr. DRURY: It was done on behalf of and in the name of the corporation.

Mr. MARTINEAU: Why then the necessity for 84 persons on that staff, if the operations of the corporation were being carried on by the department? Why then were 84 persons maintained on the staff of the Canadian Commercial Corporation if the minister's statement is true? How can he explain that when the corporation was acting according to the way it should operate under the statute; business was increased from $50 million or $60 million to over $200 million, but now it has dropped at the rate of $10 million a month?

Mr. DRURY: I am not sure I agree with the last statement that it has dropped at the rate of $10 million a month.

Mr. MARTINEAU: Well that is what the witness said.

Mr. DRURY: I think if you check back you will find that the witness said that he was not in a position to answer that, and I think the statement is incorrect.

Mr. MARTINEAU: Well, we can question the witness again.

Mr. DRURY: As I am trying to explain, the Canadian Commercial Corporation has indeed, ever since the Department of Defence Production began to grow in size, relied to an increasing degree on both the technical as well as the administrative support from the employees of the Department of Defence Production, until this reached the point where it was observed by the Glassco commission that there was duplication—quite large duplication—of effort by the employees of the corporation and the employees of the Department of Defence Production. With a view to eliminating this duplication the Glassco commission recommended—and quite rightly in my view—that the employees of the Canadian Commercial Corporation be transferred to the Department of Defence Production, and that the duplication be eliminated.

Mr. MARTINEAU: May I suggest to the minister, referring to his statement where he says that the transfer was within the power of the responsible minister under the governing legislation, that because of the terms of chapter 35, the Canadian Corporation Act, which has not been repealed, the minister has bypassed the express provisions of the law, and he is really doing in an indirect way what is prohibited directly by the statute, and he is in fact robbing the corporation of any of its effective powers under the act.

Mr. DRURY: Well, of course, the hon. member is making a statement which I cannot accept. What has been done is an improvement in efficiency as recommended by the Glassco commission on the grounds of administrative efficiency, and in the opinion of the deputy attorney general it is within the powers of the minister, and it is not an attempt to do indirectly what cannot be done directly. So I do feel that fairly substantial opinion is against the hon. member both on the administrative side as well as on the legal side. He may take issue with the deputy attorney general. It is his right to do so.

Mr. MARTINEAU: I am taking issue with the minister, because the minister is the one who is responsible for the action proposed.

Mr. DRURY: I am just supporting, with the opinion of the deputy attorney general, the legality of what has been done.

The CHAIRMAN: Does that complete your questioning?

Mr. MARTINEAU: I have one final question. Does the minister intend to regularize the situation. Does he intend to bring forth legislation repealing the act?

Mr. DRURY: There clearly is a case to be made for a modification of the present act. There is a place at the present time within the framework of encouraging the export from Canada of goods and commodities particularly in the defence equipment field, and for the continuing assistance of C.C.C. as a vehicle through which these transactions can be channelled, and to this extent the Canadian Commercial Corporation is of course needed.

Now, there are provided in the present act a number of fairly broad powers conferred upon the corporation; these are permissive powers which the hon. gentleman will know; they are permissive powers which are not at the moment being employed. The fact that the government is not employing all the permissive powers contained in the act does not make that act wrong, nor the activities of the government wrong. These powers are permissive. The mandatory sections of the act are being and have been scrupulously followed.

Mr. WINCH: Are you referring to sections 4 and 5?

Mr. DRURY: Section 4 is being followed, yes; section 5, Mr. Winch, starts out in its first sentence: "The corporation may do such things—it may carry on the business"; these are both permissive enactments.

Mr. MARTINEAU: Did the minister consult with the chairman before the reorganization?

Mr. DRURY: Yes.

Mr. MARTINEAU: Did he get his opinion on it? Was he in favour of it or against it?

Mr. DRURY: I do not think it is proper for me to tell the committee what the views of the chairman were in relation to government policy. It is unfair I think, as the hon. member well knows, to seek to ascertain what the views of officials are, and the kind of advice they give in relation to the formulation of government policy.

Mr. MACRAE: Is it not up to the Chairman of this committee to decide what is and what is not fair, and what should be answered or not answered? Would the Chairman please rule on it?

The CHAIRMAN: Yes, it has been our practice in the past to have officials of various departments. I am thinking particularly of the heads of the Services who were here along with the Minister of National Defence; and it was our practice at that time, and I think we should follow it, that when we have these officials before us as witnesses, that they would deal with matters of fact, and not be asked to comment on the policy under which they were working. In other words, policy decisions are the responsibility of the ministry.

This has been the practice we have followed, and it is the practice which I think we should follow, so that, subject to a decision of the committee to the contrary, I rule that the officials should not be asked to comment on policy directives which they are given. I want to ask Mr. Martineau if he is finished, because he has had the floor for a long time.

Mr. MARTINEAU: I yield, with the understanding that I may come back to this question later.

The CHAIRMAN: Very well. Now, Mr. Winch.

Mr. WINCH: I only have 14 questions.

The CHAIRMAN: I hope they can average two minutes each.

Mr. WINCH: I shall not ask all 14 now, but I hope that we may convene again, because I do have 14 questions to ask. However, at the moment I shall

ask only two or three. I would draw the attention of the minister to what he said in his presentation, at the middle of page 3, as follows:

> I, therefore, reject any suggestion that the Canadian Commercial Corporation has been brought to ruination and incompetency—quite the opposite has been achieved in a better managed organization and increased efficiency of performance.

I refer to the words "ruination" and "incompetency", which of course are my own words of two weeks ago. Following Mr. Martineau's question I would like to ask the minister just two questions. First, are you saying that since the Canadian Commercial Corporation was set up in 1946 until now that it has been disorganized and efficient in its almost 20 years of operation? Are you saying that?

Mr. DRURY: Disorganized and efficient? No, I am not suggesting that. What I am suggesting is that another instrument has been created and gradually grown up which can more effectively accomplish the purposes for which the Canadian Commercial Corporation was first created, and that over this period of time there has been evolution of the framework of defence procurement and defence transactions and the growth of effectiveness, and growth in size has taken place ever since this establishment in the Department of Defence Production rather than in the Canadian Commercial Corporation.

Mr. WINCH: All right, not being a lawyer, I can put a direct question to you, not an involved one. In view of what you say, that the opposite has been achieved in better organization and in increased efficiency of operation, I ask you this question. If you believe this—and you must, because you have put it down in writing—then why have you not brought in an amendment to the Canadian Commercial Corporation act or moved that it be deleted? If you believe this, why have you not done this?

Mr. DRURY: As I pointed out to Mr. Martineau, we have a continuing need for the Canadian Commercial Corporation through which foreign governments may contract with Canadian suppliers, and for it to act as their agents.

Mr. WINCH: Thank you, because you have now given me a statement which allows we to ask a direct question of the president of the corporation. I would like to refer the president of the corporation to page I of the minister's statement in the last paragraph, where he says:

> In the interest of efficient management this recommendation has been implemented by the government and, with the exception of the president and his secretary, all Canadian Commercial Corporation personnel were transferred from the corporation to the civil service.

I would now like to refer you to page 2, in the first paragraph where it is said:

> From that time management responsibility for all defence export activity including work done in the name of the Canadian Commercial Corporation has been assigned to the assistant deputy minister responsible for departmental defence export activity. This included the management of the Canadian Commercial Corporation, as well as the Department of Defence Production staff, to whom I pointed out that the administrative procedures associated with actual integration of Canadian Commercial Corporation personnel into the department could extend over a period of several months.

This leads me to a direct question of the president of the corporation. With yourself as president, and with a staff consisting of a secretary, will you please tell this committee what your job is in the Canadian Commercial Corporation?

Mr. LAMOUREUX: Well, actually since November 1, 1963, until now it was well and clearly stated in a letter sent to me by the minister that I should be an advisor to an assistant deputy minister of the Department of Defence Production. I was requested to make a report, which I have done. I have received people who visited me from various companies, large and small, who had problems, and I actually sent them or referred them to the director of the appropriate branch in the Department of Defence Production concerned with their problems; and sometimes I even called the director and arranged an appointment. I also, in the course of conversation with the assistant deputy minister, I put forward an idea whereby the Canadian Commercial Corporation could do something a little different and I worked up a report on it, and this has been my activity since November 1 of last year until now.

Mr. WINCH: I am sorry, but I do not think you understood my question. You are the President?

Mr. LAMOUREUX: Yes.

Mr. WINCH: And the only staff you have is a secretary?

Mr. LAMOUREUX: That is right.

Mr. WINCH: What are you, just a rubber stamp for recommendations made to you which, under the law, you have to sign, or they do not conform to the law?

Mr. LAMOUREUX: Well, as of November 1, 1963, I have not signed any contracts, and I have not signed any cheques. These powers were taken away from me.

Mr. WINCH: Can you tell us by what authority they were taken away from you.

Mr. LAMOUREUX: I could not say by what authority, but it was I think a letter of instructions. When I am told by an hon. minister to do something as president of this corporation, reporting to him, then I must do what I am told.

Mr. WINCH: Did you ever challenge the legality of those instructions to you?

Mr. LAMOUREUX: I did write two letters to the minister to make my views very clear to him in my own way, one on September 25, and another on September 30. As he stated just a few minutes ago, he had considered those two letters and had made a decision, and this decision I have carried out.

Mr. WINCH: May I then ask if you would refer to the middle of page 2.

Mr. LAMOUREUX: Yes, sir.

Mr. MARTINEAU: I wonder if Mr. Winch would permit a supplementary question at this time? The witness said that he no longer signed contracts on behalf of the corporation, yet the minister said that whatever business is being carried on, is being carried on by the officials of the Department of the Defence Production on behalf of the Canadian Commercial Corporation. May I ask who it is who now signs documents and contracts for the corporation?

Mr. LAMOUREUX: I do not know.

Mr. MARTINEAU: You are the head of this corporation and there are contracts and documents being signed on behalf of the corporation, yet you do not know who does it?

Mr. LAMOUREUX: I really do not know. This is very factual.

The CHAIRMAN: Now, Mr. Winch.

Mr. WINCH: I have one more question. At this stage I shall ask you as head, or as chairman, or I shall ask the minister later on, who does sign on behalf of the corporation if the president does not, because I am certain that the committee wants to know.

The CHAIRMAN: I suggest you pose the question.

Mr. WINCH: I do not want to ask all 14 questions at this time, but I am going to ask the president with reference to the middle of page 2 of the brief, where it says:

> As of March, 1964, there were 84 Canadian Commercial Corporation employees including the president and his secretary. As I will discuss later, the president since October 1963, has had no Canadian Commercial Corporation staff, except for his own secretary, under his management.

I would like to ask the president of the Canadian Commercial Corporation, if I may dare to give him that designation now, if he would please tell us where the experienced men—many of whom I understand have had almost 15 or 20 years doing responsible work in carrying on business—are today, if they are not under his control. For example, where is the man who was his assistant general manager? Is he working on this type of work, or are the others? Could he give us some information about it.

Mr. LAMOUREUX: I had an assistant, Mr. Wilfred R. Harris, who is now with the emergency supply people.

Mr. WINCH: You had?

Mr. LAMOUREUX: And I had Mr. Ralph E. Sneyd, Mr. Tom Coughlin, and several others, as a matter of fact. Of these fellows I can recall that Ralph Sneyd is now with electronics, Mr. Powell is now with aircraft, and Mr. Coughlin is now with International Programs Branch.

Mr. WINCH: Is that Mr. Harris who is sitting beside you?

Mr. LAMOUREUX: Oh yes, this is Mr. Harris.

Mr. WINCH: May I ask Mr. Harris how long he was in this department under the Canadian Commercial Corporation, what was his position, and what is he doing now? Is his experience being used by the Department of Defence Production today?

Mr. WILFRED R. HARRIS: In my present job I have no occasion to use the experience I gained in the Department of Defence Production for 23 years.

Mr. WINCH: How long an experience did you have in defence purchasing?

Mr. HARRIS: Since 1939.

Mr. WINCH: You were continuously in this department?

Mr. HARRIS: Well, I started with its predecessor, the defence purchasing board, then the war supply board, the department of munitions and supply, the department of reconstruction and supply, the Canadian Commercial Corporation, and lastly the Department of Defence Production.

Mr. WINCH: How long were you assistant general manager of the Canadian Commercial Corporation?

Mr. HARRIS: I returned to the Canadian Commercial Corporation in 1955 as assistant to the manager, and I was made assistant general manager I believe in 1961 or 1962.

Mr. WINCH: Are you in any way whatsoever, with your 23 years of purchasing experience, and being assistant general manager, employed by the Department of Defence Production in the manner in which you were qualified under the Canadian Commercial Corporation or in the Department of Defence Production?

Mr. HARRIS: No. My part, of course, is quite foreign to those other activities.

Mr. DRURY: Probably I should not intervene, but I hope the witness understood the question properly. If he is saying his work is quite foreign to

the activities of the Department of Defence Production, he perhaps is in the wrong department.

Mr. WINCH: What I mean is, is his present employment foreign to his 23 years experience in purchasing and his position as assistant general manager of the Canadian Commercial Corporation. That was my question. Would you like to change your answer in any way?

Mr. HARRIS: No.

The CHAIRMAN: I think the witness replied that the work he is doing now is not related to the work he was doing in the Canadian Commercial Corporation.

Mr. WINCH: I know that other members have questions they wish to ask, so I will hold my other questions until later except for this one. Therefore, Mr. President of the Canadian Commercial Corporation, basically outside of your secretary you have no staff at all, you sign no cheques and sign no documents; you are just a figurehead.

Mr. LAMOUREUX: I would not say I am just a figurehead.

Mr. WINCH: You sign no cheques and have no staff except a secretary. What is your responsibility?

Mr. LAMOUREUX: I surely am not performing the duties of the president as stated in the act. My duties were very clear to me when I joined the corporation. The bylaws which were in effect and in force at that time were at my direction. These are exactly the responsibilities I had and I performed them to the best of my ability. Since these bylaws have been changed and since the minister has given me new orders, I am carrying out his orders.

Mr. WINCH: In view of the statement we now have from the president of the Canadian Commercial Corporation, may I ask who signs the authorization of contracts which I understand should be signed by the witness; who signs them now and by what authority?

Mr. DRURY: I think in my statement I made reference to a bylaw of the corporation. In the middle of page 4 I say:

> At the same meeting the directors passed bylaw No. 7, which recognized the reorganization and bylaw No. 7 was, pursuant to section 11 of the Canadian Commercial Corporation Act, approved by order in council P.C. 1964-663.

Bylaw No. 7 provides, with the concurrence of the board of directors, who are the signing officers on behalf of the Canadian Commercial Corporation.

Mr. WINCH: Mr. Lamoureux, do you agree to this; that is, that someone, except yourself, would have the authority to sign?

Mr. LAMOUREUX: Would you ask the question again, please?

The CHAIRMAN: You are again asking the witness whether or not he agrees with a matter of policy which has been laid down for him.

Mr. WINCH: At a directors meeting did you agree that someone other than yourself be a signing authority, and under what authority do you think you have the power to transfer your responsibility? Did you know of this bylaw?

Mr. LAMOUREUX: Yes. I was present when the bylaws were changed and I objected to the bylaws being changed. However, after a lengthy discussion I finally agreed to sign the minutes and agreed to the bylaws.

Mr. WINCH: In other words, you did agree to transfer your authority as president to somebody else?

Mr. LAMOUREUX: I was very reluctant to do so.

Mr. LESSARD (*Lac-Saint-Jean*): But he was forced.

Mr. MARTINEAU: Does the witness imply that he was forced to sign something which he did not want to sign?

The CHAIRMAN: Perhaps we should let the Minister give the information in respect of the bylaw.

Mr. DRURY: I will read it, Mr. Chairman; it is quite lengthy. This bylaw is dated the 18th day of December, 1963:

> 1. All bylaws of the corporation shall be subject to the provisions of the Canadian Commercial Corporation Act, as amended, and the definitions contained in the said act shall apply.
>
> 2. The seal, an impression of which is made in the margin hereof, is the seal of the corporation.
>
> 3. The fiscal year of the corporation shall be the twelve months ending on the 31st day of March in each year.

Perhaps I may not read it all. It relates to notices of meetings, and so on, the functions, the fact that there should be a secretary who shall be appointed by and hold office during the pleasure of the board, and so on. It mentions the comptroller of the corporation and the functions of the comptroller:

> (*b*) The comptroller shall disburse the funds of, or in the custody of, the corporation in such manner as may be requisite for the conduct of the business of the corporation, taking proper vouchers for such disbursements, and shall render to the board as may be required, an account of his transactions as comptroller and of the financial position of the corporation. He shall perform such other duties as may, from time to time, be determined by the board and subject to the direction of the board shall have, generally, control of all funds in the corporation's hands either as trustee or otherwise.

Mr. WINCH: I am sorry, sir, but what I am trying to find out—

Mr. MARTINEAU: On a point of order, the minister is referring to a bylaw and I think under our rules of procedure he should table that bylaw.

The CHAIRMAN: I believe the bylaw should be published in the transcript of todays proceedings, if that is agreeable to the committee.

Mr. WINCH: May I ask—

Mr. MARTINEAU: Just a moment. On a point of order, as we may require to consult the bylaw, would it be possible for the minister or one of his officials to have copies of the bylaw distributed at the next meeting of the committee?

Mr. DRURY: Yes.

Mr. WINCH: I did not quite follow the reading of the minutes. Where did the president of the corporation sign over his signing authority? That is the point I was after. You did not read that.

Mr. DRURY: Perhaps I had better wait until you have had an opportunity to look at this quite long document.

Mr. WINCH: You said it was in the bylaw. Would you mind reading the section where the president of the corporation transferred his signing rights?

Mr. DRURY: This bylaw provides who shall be the signing authorities on behalf of the corporation. In bylaws of this nature it is not usual to outline a transfer in the specific terms which I think Mr. Winch has suggested; it is not usual this be done. What is laid out in this bylaw No. 7 is a definition of the powers and authorities of the elements of the corporation. That bylaw follows:

BYLAW NO. 7

BEING A GENERAL BYLAW OF CANADIAN COMMERCIAL CORPORATION.

BE IT ENACTED BY THE BOARD OF CANADIAN COMMERCIAL CORPORATION, AS A BYLAW OF THE CORPORATION AS FOLLOWS:

1. All Bylaws of the Corporation shall be subject to the provisions of the Canadian Commercial Corporation Act, as amended, and the definitions contained in the said Act shall apply.

2. The Seal, an impression of which is made in the margin hereof, is the Seal of the Corporation.

3. The fiscal year of the Corporation shall be the twelve months ending on the 31st day of March in each year.

4. (a) Notices of meetings of the Board shall be given to each member thereof by delivering or mailing the same to his usual office address. Failure to give or receive notice due to inadvertence shall not invalidate any meeting, and the presence of any member of the Board at the place and time of the meeting shall be considered waiver of notice to such member.

(b) Each member of the Board present at any meeting thereof shall have one vote with respect to any question arising at such meeting and the decision of the Board shall be in accordance with the majority of the votes.

(c) The Board shall cause to be entered into one or more books provided for the purpose, the minutes recording the proceedings and giving the names of those present at meetings of the Board.

5. There shall be a Secretary of the Corporation who shall be appointed by and hold office during the pleasure of the Board. It shall be the duty of the Secretary to issue notices of meetings of the Board and to attend all such meetings and act as Secretary thereof. The Secretary shall record all votes and the minutes of all proceedings taken and had at such meetings in books of the Corporation to be kept for that purpose, and shall be the custodian of the Seal of the Corporation.

6. (a) There shall be a Comptroller of the Corporation who shall be appointed by and hold office during the pleasure of the Board. The Comptroller shall maintain records of all property of the Corporation and, subject to Paragraph 11 hereof, shall receive, disburse and have custody of all funds and securities belonging to the Corporation and shall keep full and accurate accounts of receipts, disbursements and all financial transactions, in books belonging to the Corporation, and shall deposit all monies, securities, negotiable instruments and other such property in the name and to the credit of the Corporation in such depository as may be approved from time to time by the Minister of Defence Production.

(b) The Comptroller shall disburse the funds of, or in the custody of, the corporation in such manner as may be requisite for the conduct of business of the corporation, taking proper vouchers for such disbursements, and shall render to the board as may be required, an account of his transactions as comptroller and of the financial position of the Corporation. He shall perform such other duties as may, from time to time, be determined by the Board and subject to the Direction of

the Board shall have, generally, control of all funds in the Corporation's hands either as trustee or otherwise.

(c) The Comptroller shall, from time to time, prepare and deliver or cause to be prepared and delivered such reports of the finances of the Corporation as are called for by the Canadian Commercial Corporation Act and as the Board or the Minister of Defence Production may request.

7. The Board, or the Minister of Defence Production, may from time to time request any officers of the Corporation or of the Department to prepare such reports of the activities or proposed activities of the Corporation or reports relating thereto as the Board, or the Minister, may require, and such officer shall forthwith comply with such requests.

8. No public statement shall be made in speech or writing purporting to be in the name of the Corporation, and no officer or employee shall be a candidate for any public elective office, or support a candidate for any such office by public speech or writing, without the express authority of the Board.

9. No member of the Board or any officer or employee of the Corporation shall derive any profit from or in any way be pecuniarly interested in or be concerned directly or indirectly in a pecuniary way in any contract or transaction which shall be entered into by the Corporation.

10. All bids, proposals or quotations to be submitted by the Corporation and all contracts and agreements between the Corporation and other governments or other parties; and all invitations to tender, contracts, agreements, purchase orders and amendments thereto between the Corporation and its suppliers; and all miscellaneous documents including bills of lading, terminations of contracts, certificates of cost or pricing data, requisitions, releases, internal administrative documents and similar documents, shall be signed by one or more persons as may be designated from time to time by the Minister of Defence Production, who may also designate those contracts and documents which are to bear the Seal of the Corporation.

11. The banks in which the necessary bank accounts of the Corporation shall be opened and maintained shall be such banks as the Minister of Defence Production may from time to time approve; and the person or persons who shall have authority to draw and accept drafts, and to sign cheques, promissory notes, bills of exchange, letters of credit and orders for money in respect of such accounts and in respect of the transactions of the Corporation, including documents for deposit to the Corporation's credit, shall be such person or persons as may be designated from time to time by the Minister of Defence Production.

12. Bylaws 5 and 6 of the Corporation enacted on the 9th day of May, 1951, and the 19th day of March, 1963, respectively, are superseded by this Bylaw.

Dated the 18th day of December, 1963.

Sgd. M. H. Lamoureux,
President

Sgd. F. F. Waddell,
Secretary

Mr. HARKNESS: I assume the situation was that the board of directors of the corporation by a majority approved of this bylaw and a minority, including yourself, Mr. Lamoureux, disapproved of it. Is that the situation?

Mr. LAMOUREUX: Actually I was the minority. I was the only one who was not pleased with the new bylaws.

Mr. HARKNESS: In connection with the point I was raising and one of the points raised by Mr. Winch, the board of directors having approved of this bylaw, you as president then were in the situation of either accepting this as a majority decision of the directors or resigning; those were the only two choices open to you. It was not a matter of your signing away any rights, which was part of the tenor of Mr. Winch's remarks. Is that not the situation?

Mr. LAMOUREUX: Quite right.

Mr. TEMPLE: Mr. Lamoureux, since you became president of the Canadian Commercial Corporation, what percentage of the sales have been of defence equipment?

Mr. LAMOUREUX: Defence equipment—75 per cent of the sales are of defence equipment.

Mr. TEMPLE: When you say they are 75 per cent of defence equipment, what about other equipment such as fire control equipment; do you include that as defence equipment?

Mr. LAMOUREUX: Yes. It all depends on where it is being used, but it is part of defence equipment.

Mr. TEMPLE: Over the past years, has the practice been that the actual selling—and by actual selling I mean the actual leg work or field work—has been done by the Department of Defence Production?

Mr. LAMOUREUX: Well, the Department of Defence Production officials no doubt are specialists in aircraft, electronics, mechanical equipment, and machinery, and armament, and all these experts I would say would have a considerable amount of work to do in respect of discussions with officers of foreign governments in this particular field. Of course, the executives of these foreign governments who actually are involved in the purchasing are not experts; they are more the officials who sign the contracts and who want certain clauses to be well covered in accordance with their regulations. Every country has its own operation, and likes as much as possible to keep within the framework of it. Many of these areas were discussed with me on my trips. They wanted us to alter certain clauses. They discussed many features. As president of the corporation I was able to help, within the Canadian Commercial Corporation Act, by giving service to these foreign governments.

Mr. WINCH: I would still like to know what your position is now with only one secretary.

The CHAIRMAN: You will have an opportunity.

Mr. TEMPLE: In effect, Mr. Lamoureux, the Department of Defence Production people would have the specialized knowledge to be in a position to go out to make the sales, and you and your agency, the corporation, would be the body that would just put the final seal on it.

Mr. LAMOUREUX: We administered the contract and we took on the responsibility for payment, and also the special clauses which were required in order to meet their requirements.

Mr. TEMPLE: Because many of these items are items of defence equipment, people with security clearances would be required; would that be so?

Mr. LAMOUREUX: Yes.

Mr. TEMPLE: Would the people in the Canadian Commercial Corporation be cleared for security?

Mr. LAMOUREUX: Oh yes.

Mr. TEMPLE: You mentioned that since 1960 when you became president, the sales in the first year were $65 million to $70 million, and then in 1962-63 they rose to approximately $200 million. In connection with that you mentioned you made several trips abroad?

Mr. LAMOUREUX: Yes.

Mr. TEMPLE: Would you tell us how many?

Mr. LAMOUREUX: This would be rather hard to say offhand. I would say in the course of a year we would go across about five or six times, but not necessarily by myself; I would have officers of the corporation as well going along, and we would be accompanied by the Department of Defence Production officers to discuss the negotiations of contracts.

Mr. TEMPLE: Your corporation and the Department of Defence Production were in fact doing about the same thing.

Mr. LAMOUREUX: No, I do not think so. We would do one thing: we would do the administration of the contract, while they would handle the physical work of purchasing, following it up, and getting it to the point of shipping.

Mr. TEMPLE: Have you read the Glassco commission report concerning your corporation?

Mr. LAMOUREUX: Yes, I have.

Mr. TEMPLE: I refer to its relationship to the Department of Defence Production.

Mr. LAMOUREUX: Yes.

Mr. TEMPLE: Do you disagree with those findings?

Mr. LAMOUREUX: Actually I do not disagree with the findings. It all depends on what kind of interpretation you want to put on what is written.

Mr. TEMPLE: It says that while the legal identity of Canadian Commercial Corporation was maintained, its management and staff were provided by the Department of Defence Production. That sounds simple enough.

Mr. LAMOUREUX: Yes, it sounds simple enough, but I would refer back to the time when the Glassco commission was making its actual investigation and survey, when none of the Glassco commission officers ever came to see me.

Mr. MARTINEAU: You say none?

Mr. LAMOUREUX: None.

Mr. MARTINEAU: How would they know then about the work of the corporation if they did not come to see you?

The CHAIRMAN: Mr. Temple has the floor.

Mr. WINCH: That is a good question.

Mr. LAMOUREUX: There were two occasions I know of when they were in touch with my assistant.

Mr. WINCH: You mean your secretary?

Mr. LAMOUREUX: I am referring to a time before November 1, 1963. The Glassco commission recommendations came out before then. The Glassco commission has written a very short paragraph in volume 5 which I have somewhere.

Mr. WINCH: But it never saw the chairman of the corporation or the president of the corporation, never?

Mr. LAMOUREUX: No. Maybe when they called, I was not around.

Mr. MARTINEAU: Maybe they would have sent you to the guillotine.

Mr. TEMPLE: In fact, then, you disagree with some of the Glassco commission findings concerning the Canadian Commercial Corporation, and the transfer of its management and staff to the Department of Defence Production?

Mr. LAMOUREUX: Well, I do not agree with the transfer, that is for sure. You will notice in volume 5, at page 106 of the Glassco commission report, it clearly states:

> The legal identity of the Canadian Commercial Corporation be maintained, but its management and staff be provided by the Department of Defence Production (purchasing and supply).

Yet they came out later with recommendations to the government, and I think I have the recommendation. The Canadian Commercial Corporation does not appear in any way, shape, or form in the recommendations approved by the Government.

Mr. TEMPLE: The only time it appears is in the Glassco commission report itself, of 1963.

Mr. LAMOUREUX: Yes.

Mr. TEMPLE: The Glassco commission does say that in fact the duties of the Canadian Commercial Corporation were the same in fact as those of the Department of Defence Production, does it not?

Mr. LAMOUREUX: It does state this, but there are also some areas where they said very clearly that the commission is using the Canadian Commercial Corporation. As an example it states, "The Canadian Commercial Corporation for example is essentially concerned with the business of other governments." That was only as an example. "Its operations are in all material respects integrated with the purchasing department with which it is associated, and while its continued existence as a legal entity may be useful, no purpose is served. . . ."

Mr. LLOYD: I think for the purposes of the record you are referring to page 67 of volume 5 of the report of the Glassco royal commission.

Mr. LAMOUREUX: That is right, and it is also stated on that same page, as follows:

> Consequently, it has not been our intention to offer a detailed plan of organization, defining the position of every department and agency in the machinery of government and the form appropriate to each. Where changes have been suggested, they have been intended to clarify rather than to alter what appear to be the existing or intended relationships between ministers and the organizations concerned.

Mr. TEMPLE: Yes, but this was the only corporation or department that they actually recommended be transferred, that is, the Canadian Commercial Corporation?

Mr. LAMOUREUX: I would have to refer to the recommendations of the Glassco commission.

The CHAIRMAN: Does that complete your questions?

Mr. TEMPLE: No, but just about. Before we break off, prior to 1960, what was your experience as head of the Canadian Commercial Corporation?

Mr. LAMOUREUX: I can refer to quite far back now when it comes to experience. Prior to the war I was a seaman, on foreign going ships and I became a master on large vessels, and later I came ashore as superintendent of Acadia Overseas Freighters Limited, which had 58 ten thousand ton ships, and over 1,600 employees. The function of this company was to operate in all parts of the world.

Mr. TEMPLE: What was the name of the company again?

Mr. LAMOUREUX: It was Acadia Overseas Freighters Limited of Halifax. As superintendent of this organization I travelled worldwide for many years.

These ships did get into trouble sometimes, and in most of my travels I was interested in obtaining charters for these vessels, in encouraging contracts for transportation and handling of general cargoes, and also establishing lines—that is lines of trade—between South Africa and Canada and the United States, and I did all this for the same company, Acadia Overseas Freighters Limited.

When I was actually asked to come to join this organization it was mainly due to the fact that I had international knowledge of certain ways of operation that they have in foreign countries and I accepted. I think this opportunity of enjoying certain friendships with people gave me a certain status which I found to be of advantage in certain areas I visited as president of this corporation.

Mr. TEMPLE: Is Acadia Overseas Freighters Limited a Nova Scotian company?

Mr. LAMOUREUX: Yes, it is Acadia Overseas Freighters Limited of Halifax.

Mr. TEMPLE: Thank you.

The CHAIRMAN: Now, Mr. Lloyd.

Mr. LLOYD: Mr. Lamoureux, I think you have already read into the record from page 67 of the Glassco commission report volume 5 the passage where they say you exist as a legal entity, but there is no useful purpose to be served by having a separate management and staff. You said you disagreed with that. Would you like to particularize? In what respect do you disagree?

Mr. LAMOUREUX: I do believe in efficient operation. This is a system which is used and is in practice in large organizations. In the executive staff they always have a section for administering contracts. I am referring to fairly large companies; and they also have the bulk of the organization looking after production. I feel that between the years 1960 and 1963 this group of gentlemen were working for the corporation had become pretty well experts on this.

Mr. LLOYD: They are not lost to government service. Their skills are still available to the Department of Defence Production.

Mr. LAMOUREUX: I would not say that they were lost, no. They are with the department.

Mr. LLOYD: You want to indicate that the reason you felt your services were interesting to the government was your knowledge of persons, people, and practices abroad?

Mr. LAMOUREUX: To a certain extent, yes.

Mr. LLOYD: Would you say that your particular qualifications lay in identifying and designating potential sales contracts for Canadian industry with foreign countries? Is that your main qualification and what you contend?

Mr. LAMOUREUX: No, what I contend is the fact that owing to certain personal relationships, I have been fortunate enough to be introduced to people who do have the authority to purchase, and I have had occasion to talk with these people and ask them if they would give us an opportunity to quote on their requirements.

Mr. LLOYD: Because they recognized you as an authority in this field?

Mr. LAMOUREUX: No, because they recognized Canada as being a country where our industry is definitely not too far from the United States production styles, and that qualitywise, it is really outstanding.

Mr. LLOYD: Are you suggesting that you yourself had personal connections with persons in other governments, and that this in some way made it easier for you to do this than it would for anybody else?

Mr. LAMOUREUX: No, I do not think I could contend necessarily that only I could do it.

Mr. LLOYD: Could you identify to the committee any potential sales contract that was not completed under the present organization but which might have been completed had the Canadian Commercial Corporation staff continued to be under your direction, management and supervision? Could you give us a specific instance?

Mr. LAMOUREUX: A specific instance; that would be quite hard to pinpoint. But I feel that there is an area where I thought it had started to come to a conclusion. Maybe if I had carried on with it, it could have come to one.

Mr. LLOYD: But you are still continuing in the capacity as adviser to the Department of Defence Production in fact?

Mr. LAMOUREUX: Yes.

Mr. LLOYD: And have you indicated to the officers of the Department of Defence Production the potential areas of development, or of sales contracts? Are they asking for your advice? Have you voluntarily gone to them and identified these things?

Mr. LAMOUREUX: Yes, I did talk to the deputy minister at one time, I am speaking about a track contract in Germany and I was told it was in good hands, and I did not doubt it. So I moved along those lines, and I think I have made it very clear in mentioning the track contract.

Mr. LLOYD: How did you learn about this track contract?

Mr. LAMOUREUX: I learned about this track contract through a friend of mine in Germany.

Mr. LLOYD: Did he advise you personally?

Mr. LAMOUREUX: Yes.

Mr. LLOYD: In his capacity as president of his corporation?

Mr. LAMOUREUX: Yes.

Mr. LLOYD: Therefore in your present capacity which is that of adviser, to what responsible person did you pass along this information?

Mr. LAMOUREUX: This was actually prior to the transfer of the staff of the corporation.

Mr. MARTINEAU: How can the witness be an adviser to himself, when he is the chairman?

Mr. LAMOUREUX: This was before November 1, 1963.

Mr. LLOYD: This was at the time when you initiated some action on the inquiry.

Mr. LAMOUREUX: Not the inquiry; the inquiry came later. When the inquiry came the staff were actually in the Department of Defence Production or under both.

Mr. LLOYD: Did a sales contract arise?

Mr. LAMOUREUX: Yes, a sales contract arose.

Mr. LLOYD: As a result of that?

Mr. LAMOUREUX: I could not tell you. I do not know.

Mr. LLOYD: Can you give the committee any idea of the percentage of sales contracts which arose in the first instance because foreign companies on their own initiative wanted to take advantage of the services of your agency as distinct from your going out and attempting to identify their needs?

Mr. LAMOUREUX: Very few companies in the foreign countries placed inquiries with us; it is only the governments and departments of the foreign governments that place inquiries with the corporation.

Mr. LLOYD: How many of these departments initiated inquiries directly to the government agency in Canada of their own volition without any sales effort on the part of a soliciting agent for Canada?

Mr. LAMOUREUX: I think normally most of the inquiries received have been canvassed either by a Department of Defence Production officer, a trade and commerce officer, or someone attached to the embassy.

Mr. LLOYD: Am I accurate in saying all you are concerned about is whether or not your sales effort is being maintained; is that what you are concerned about mainly rather than organization?

Mr. LAMOUREUX: The purpose of this corporation is to try as much as possible to sell the manufactured goods in Canada to foreign countries.

Mr. LLOYD: Do you believe this is being done now?

Mr. LAMOUREUX: I believe this is being done.

Mr. LLOYD: Thank you.

The CHAIRMAN: Does that complete your questioning?

Mr. LLOYD: Yes.

The CHAIRMAN: Mr. MacLean.

Mr. MACLEAN (*Queens*): Mr. Chairman, I just have one or two questions to ask the witness. Mr. Lamoureux, before the transfer of personnel to the Department of Defence Production from the Canadian Commercial Corporation, I believe the total strength of the Canadian Commercial Corporation was something of the order of 85 persons.

Mr. LAMOUREUX: Actually, the 84 or 85 persons we are talking about were a part of the staff of the Canadian Commercial Corporation. On top of this I had a group of persons who were from the Department of Defence Production personnel on loan to the Canadian Commercial Corporation, and also another group on loan from defence construction. The 85 plus these two groups made up to 118 persons. A few times at the board of directors meeting I suggested I needed extra personnel because of the increased volume of business and the extra paperwork and administrative work in order to do a good job. These persons were loaned to Canadian Commercial Corporation; they were under my supervision and they performed very good work.

Mr. MACLEAN (*Queens*): Of course they were civil servants.

Mr. LAMOUREUX: Yes.

Mr. MACLEAN (*Queens*): My question has to do with those who are not civil servants. I presume their salaries were paid out of fees charged for services rendered by the corporation.

Mr. LAMOUREUX: I must admit that prior to my appointment as president of the corporation, the staff of the corporation was paid from fees which the corporation earned. At a directors' meeting the directors and myself decided we would drop our fees and now there are practically no fees being collected for the services of the corporation. The staff of the Department of Defence Production on loan to Canadian Commercial Corporation were being paid by Department of Defence Production and Defence Construction Limited personnel were paid by Defence Construction Limited.

Mr. MACLEAN (*Queens*): The Canadian Commercial Corporation staff was paid out of fees which had been collected in the past?

Mr. LAMOUREUX: Yes.

Mr. MACLEAN (*Queens*): Are any fees still being collected at this point?

Mr. LAMOUREUX: Very little, as a matter of fact. The only fees we are getting now are the fees we are charging to external aid which is a section of the Department of External Affairs.

Mr. MACLEAN (*Queens*): These assets which you sell for fees which were collected at one time or another, where are they held; are they still held by the corporation?

Mr. LAMOUREUX: Yes.

Mr. MACLEAN (*Queens*): But gradually the fees themselves diminished so at the present time every person except yourself and your secretary who engage in selling defence products abroad are civil servants paid by the public service from government revenue?

Mr. LAMOUREUX: Yes.

Mr. MACLEAN (*Queens*): So, compared to some time in the past the selling of defence production articles now is subsidized to the extent of the salaries of those persons who are engaged in it. At one time the Canadian Commercial Corporation was self-supporting and now it is not self-supporting; it is subsidized by the amount of the costs involved.

Mr. LAMOUREUX: This is quite right.

The CHAIRMAN: Mr. Lessard?

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): Mr. Chairman, granted that Mr. Lamoureux has to speak French, I would be very pleased to go on in French. I have several questions. They are direct and I hope you are going to be in a position to answer them as directly. On the occasion of the interview you had with the minister, a few days ago, before appearing here, today, did the Minister indicate to you what would be the subject of the discussion you were to have with him?

Mr. LAMOUREUX: The only thing he discussed was the question of the 84 employees who took part in organizing the Canadian Commercial Corporation.

Mr. LESSARD (*Lac-Saint-Jean*): Mr. Minister, since you have been responsible for this Corporation and since you have been aware of its activities, have you any direct criticism to level at Mr. Lamoureux's work?

Mr. DRURY: Naturally, that depends first of all on the meaning of the word "criticism": I was not in agreement with the object of continuing to retain the Corporation team in its entirety.

Mr. LESSARD (*Lac-Saint-Jean*): Why?

Mr. DRURY: Why? Because in my opinion, in retaining the whole Corporation team, there would be job duplication between the duties of the Department and of the Corporation. In this sense, it is inefficient, useless.

Mr. LESSARD (*Lac-Saint-Jean*): You have not answered a specific point in my question. Did you have any direct criticism to make of Mr. Lamoureux in his work, since he is responsible for this Corporation?

Mr. DRURY: I answered that that depends on the meaning of the word "criticism". I gave you an example of the criticism, if I can put it that way, of something that I criticized him about.

Mr. LESSARD (*Lac-Saint-Jean*): That is not enough, in any case. Mr. Lamoureux, out of the 84 individuals who were in your Department how many French-Canadians were there, can you tell me? Three, six, eight?

Mr. LAMOUREUX: I would have to say less than half a dozen, six.

Mr. LESSARD (*Lac-Saint-Jean*): About?

Mr. LAMOUREUX: Yes, that's right.

Mr. LESSARD (*Lac-Saint-Jean*): Have they been transferred or absorbed into the Department of Defence Production?

Mr. LAMOUREUX: Yes, they were absorbed.

Mr. LESSARD (*Lac-Saint-Jean*): Were they reduced in grade or were they transferred laterally?

Mr. LAMOUREUX: The transfers were not lateral.

Mr. LESSARD (*Lac-Saint-Jean*): Did their responsibilities or salary increase or decrease? Those are two questions.

Mr. LAMOUREUX: I agree, we are still speaking of French Canadians.

Mr. LESSARD (*Lac-Saint-Jean*): Yes.

Mr. LAMOUREUX: Among the French Canadians—there, were some who were reduced in grade and some who were transferred laterally.

Mr. LESSARD (*Lac-Saint-Jean*): Reductions in responsibility or reductions in salary?

Mr. LAMOUREUX: Reductions in responsibility, reductions in grade. Their salary automatically remained the same, due to an arrangement which was made quite specially in their case.

Mr. LESSARD (*Lac-Saint-Jean*): Mr. Lamoureux, those employees, when they were under you, were they subject to the control of the Civil Service Commission?

Mr. LAMOUREUX: When they were under my responsibility, they had nothing whatsoever to do with the Civil Service Commission.

Mr. LESSARD (*Lac-Saint-Jean*): In the course of your previous administration, had you already had difficulties or conflicts with the Civil Service Commission?

Mr. LAMOUREUX: No, I had no conflicts with the Civil Service Commission, from the very fact that I was not, that none of my employees was—

Mr. LESSARD (*Lac-Saint-Jean*): Did they, at given times, attempt to interfere with your duties and your work, to stick their nose into the administration of your staff?

Mr. LAMOUREUX: I don't believe so.

Mr. LESSARD (*Lac-Saint-Jean*): Mr. Minister why did you not absorb Mr. Lamoureux and his secretary in the group, at the same time as the 84 other individuals? Why did you not give Mr. Lamoureux other responsibilities?

Mr. DRURY: Section 3 of the Corporation Act makes the chairman responsible for duties, responsibilities, tasks. As Mr. Lamoureux has explained he did receive duties, comparable to those that he had previously to take the place of the administrative duties he no longer has.

Mr. MARTINEAU: Could I ask an additional question? Do the Corporation regulations define the duties of the chairman and if so, does the chairman continue to carry out these duties as defined by the regulations?

Mr. DRURY: I am informed that the answer is yes.

Mr. MARTINEAU: It is yes?

Mr. DRURY: Yes, frankly I have not personally seen the definitions of the chairman and his duties and responsibilities, I have been informed that it is a fact.

(*Text*)

Mr. MARTINEAU: May I raise a point of order at this time. The minister has said that he does not know the exact terms of the bylaw which defines the power of the president and other officers. May I request that all the bylaws, not only the one referred to previously, of the corporation be produced at the next sitting of this committee?

Mr. WINCH: I know you have to stop now, but just so that everything is completely embodied in the one transcript may I have one answer which ties in with everything; in view of the bylaw statement, and the president's statement, will the minister tell us who now signs all the documents which were previously signed by the president?

Mr. DRURY: I cannot give you that answer. I would have to take advice. There has been a vast variety of documents.

Mr. WINCH: I mean those which would otherwise have been signed by the president.

Mr. DRURY: I am not sure which document would otherwise have been signed by the president, so I cannot answer you now.

Mr. WINCH: May we have it in time for next week?

Mr. DRURY: That is the kind of information you can have.

The CHAIRMAN: Mr. Lessard, have you any further questions?

Mr. LESSARD (*Lac-Saint-Jean*): I would like to complete them at this time, if I may.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): Mr. Chairman, I would like to continue. Since you have been occupying your new position, that is since December 1963, one year, how many times approximately have you been consulted? I am not speaking of you going to make suggestions. Have you been consulted?

Mr. LAMOUREUX: I have never been consulted or asked for my opinion since the 1st of November 1963.

Mr. LESSARD (*Lac-Saint-Jean*): And you are the departmental advisor and you have never been consulted.

Mr. LAMOUREUX: No.

Mr. LESSARD (*Lac-Saint-Jean*): Thank you, that is very interesting. When you made suggestions, on your own initiative, were you already told to mind your own business, that everything was in good hands?

Mr. LAMOUREUX: I must say that—

Mr. LESSARD (*Lac-Saint-Jean*): Directly or indirectly?

Mr. LAMOUREUX: I certainly had—it's difficult to say—with the deputy minister, the assistant deputy minister—I must admit that I was very sincerely told not to bother myself, that everything was going fine.

Mr. LESSARD (*Lac-Saint-Jean*): In other words, you were told to mind your own business. Are you under the impression that the Civil Service Commission wanted to destroy your organization because it was not under its control?

Mr. LAMOUREUX: I am going to tell you sincerely that the Civil Service was asked, by the Department and not by me, to arrange to transfer, to take the Canadian Commercial Corporation officers, to integrate them into the Department of Defence Production, without bothering too much about their qualifications and their competence, to find them a spot somewhere. I do not know how they were able to express themselves at that time.

Mr. LESSARD (*Lac-Saint-Jean*): In addition to being legally debatable, the present situation seems, as far as I can see, to be the result of a conspiracy of officials to eliminate the only French-Canadian who had a responsible position in the whole Department of Defence Production. In the whole Department, French-Canadians are almost non-existent or where they do exist they hold unimportant positions. Mr. Lamoureux was just about the only one who had any importance in your Department. Do you consider that Mr. Lamoureux still occupies an important position, Mr. Minister?

(*Text*)

The CHAIRMAN: Mr. Lessard, on a point of order. You have made two statements in your question, which are not necessarily founded on facts. They are opinions.

Mr. LESSARD (*Lac-Saint-Jean*): You object? very well.

(*Translation*)

Mr. Lamoureux, were you asked directly or indirectly to resign?

Mr. LAMOUREUX: No, I was never asked to resign from my duties.

Mr. LESSARD (*Lac-Saint-Jean*): Are you under the impression that your days are numbered, excuse me for being direct, as chairman and as Government employee?

Mr. LAMOUREUX: It's very difficult to answer that because of the very fact that I don't see the Minister very often, even very very seldom. As he is my superior, he has given formal orders for me to report to the assistant deputy minister. Then, as a result, I must say that I do not know how long I am going to stay in this situation.

Mr. LESSARD (*Lac-Saint-Jean*): You report to an assistant deputy minister?

Mr. LAMOUREUX: Yes, those are the orders I received from my Minister.

Mr. LESSARD (*Lac-Saint-Jean*): Fine, that is enough, Mr. Chairman. I have heard enough.

(*Text*)

That is enough for the moment.

The CHAIRMAN: It is now past 1 o'clock.

Mr. MARTINEAU: Will an effort be made to have the bylaw circulated among members of the committee before the next meeting so that members who may wish to study it can do so before the meeting?

The CHAIRMAN: I think this is desirable. I will arrange this, if the committee is agreeable.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 25

TUESDAY, DECEMBER 15, 1964

Respecting

CANADIAN COMMERCIAL CORPORATION

WITNESSES:

The Honourable C. M. Drury, Minister of Defence Production; and Mr. M. H. Lamoureux, President, Canadian Commercial Corporation.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

21664—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—24.

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

TUESDAY, December 15, 1964
(39)

The Special Committee on Defence met at 11:10 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Deachman, Fane, Groos, Hahn, Lambert, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, MacRae, Martineau, McMillan, Smith, Winch (14).

In attendance: Honourable Charles M. Drury, Minister of Defence Production; Mr. M. H. Lamoureux, President of Canadian Commercial Corporation; and Mr. W. Harris, former Assistant General Manager of the Corporation.

The Chairman announced that a paper entitled "Armaments and Modern Weapons" would be available shortly, and would be identified as Exhibit No. 11.

A report entitled "Policy for Industrial Technology in Canada" was tabled on behalf of the Air Industries Association in Canada, as requested at the meeting of November 26.

This report was identified as Exhibit No. 12.

The Chairman outlined a proposed future program for the Committee.

Agreed,—That Bylaws Nos. 5, 6 and 7 of the Canadian Commercial Corporation, requested at the last meeting, be printed as Appendix "A" to today's evidence.

The Committee continued its consideration of the organization and operations of the Canadian Commercial Corporation, Messrs. Drury and Lamoureux answering questions thereon.

The Minister tabled the following:

(*a*) List of signing officers for Canadian Commercial Corporation

(*b*) Signing authority for Cheques, Drafts, Notes, etc.

Agreed,—That the abovementioned documents be printed in the Committee's evidence at the point of tabling.

A copy of the Order in Council approving bylaw No. 7 was tabled and included in the evidence at point of mention.

At 1:00 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

21664—1½

EVIDENCE

TUESDAY, December 15, 1964.

The CHAIRMAN: Gentlemen, I think we will see a quorum in order to proceed.

Before we start with today's proceedings there are a few items of general business to dispose of.

First of all, the last of the eleven papers that we are receiving entitled "Armament and Modern Weapons" has not come in but it will be here momentarily. As soon as it arrives it will be identified as Exhibit No. 11 and will be printed, as already authorized by the committee, with the previous papers in order that they all will be printed in one booklet.

The second item is in respect of page 944 of the evidence. This was the meeting at which officials of the Air Industries Association were present. There is a request for the presentation of a report on Research and development that was being prepared or had been prepared for the Air Industries Association. That report now has been provided to the committee by the Air Industries Association and I will table it now as Exhibit No. 12 so that it will be available to the Committee.

Mr. SMITH: If I could pose a query, Mr. Chairman, when the committee has finished with that report, does it stay with the committee papers, or does it ultimately go to the library?

The CHAIRMAN: It stays with the Committee's papers.

Mr. SMITH: Are you saying that two years or five years from now it will still stay with the committee papers; in other words, as long as the committee papers exist? Do you think that is the best disposal of it? Or, do you think it should be available in the library?

The CHAIRMAN: I have requested an additional copy of the report and my thought was, if we were able to do it, we would place it in the library.

The third general area deals with our future plans. We had a Steering Subcommittee meeting and discussed the future work of the committee.

There were a number of topics that we felt we should tackle, and I will give you a list of the sort of things we are thinking about.

First, a meeting where we would discuss the differences between the Suttie recommendations and the actual changes that were made in our Reserve forces.

Second, when the shipbuilding and other procurement programs are announced we will be having meetings and briefings on these programs.

Third, we have a paper on "Economic Consequences of Disarmament", and it is considered worth while to go into this paper.

Fourth, following the "Economic Consequence of Disarmament", it was felt we might go into the disarmament negotiations and have a look at the political status of these negotiations and the political problems inherent in them.

Fifth, the military and political aspects of peace-keeping, which form an important part of our defence policy.

Sixth, and finally, prior to the end of the session—and the session undoubtedly will continue past our recess—we will be submitting a final or sessional report which will deal with the new topics we have covered since our last report, and this will also include, printed in booklet form, the last report we make.

It is unlikely we will have any further meetings before Christmas. The Minister of National Defence is away. I thought we possibly might deal with the Reserve Forces situation, but the Associate Minister is not available for a meeting.

I have one last point before we start with today's business. At our last meeting By-laws of the Canadian Commercial Corporation were requested by the Committee. By-law No. 7 was tabled at that last meeting, and it has been printed in the proceedings of that meeting. All of you should have your copies of the proceedings. The remainder of the by-laws have been distributed now to every member of the committee, and I would suggest they be included in the proceedings of today's meeting. I think it should be made an Appendix to today's evidence.

Mr. WINCH: Perhaps there is a misunderstanding on my part, and please correct me if I am wrong. It was my thinking that as a result of the steering committee meeting you were to ask if the Department of National Defence would produce an expose of the report of the Suttie commission on recommendation of certain units being held, together with the reasons why it had not recommended on these particular items. I understood you were to ask for that, as a result of our Steering Committee meeting.

The CHAIRMAN: That is correct, Mr. Winch, and we will have this. However, the presentation of this would require the Minister, and he is not available this week.

Mr. WINCH: But you have asked for that?

The CHAIRMAN: Yes, and we probably will do this as one of the first items of business after the recess.

At today's meeting we will continue with the Canadian Commercial Corporation. We have a statement from Mr. Lamoureux. I believe copies of this statement have been distributed. Has everyone a copy?

Mr. M. H. LAMOUREUX (*President, Canadian Commercial Corporation*): Mr. Chairman, I have a few extra copies for others who may come later.

The CHAIRMAN: Would you proceed with your statement, Mr. Lamoureux.

Mr. LAMOUREUX: Mr. Chairman and members of the committee:

Two weeks ago, when I appeared before the committee I was, as the minister pointed out in his statement, not entirely *au fait* with the scope of the committe's interest in the work and functions of the Canadian Commercial Corporation. Therefore, at the outset today I would like, with your permission, to expand my previous remarks.

I was appointed president in November, 1960, and thus can speak with authority on the activities of the corporation only from that time until November 1963, when its functions were taken over by the Department of Defence Production, as the minister has explained.

In order to appreciate the present developments we should recall that the corporation throughout its history readily has adapted to the changing demands of our export trade. Thus, in 1944 the Canadian export board was established for the purpose of assisting foreign governments and agencies (chiefly UNRRA) in purchasing non-military supplies in Canada. The Canadian Commercial Corporation, established in 1946, took over from the board and in 1947 assumed the further heavy responsibility of procurement for the Department of National Defence. In 1951, when the Department of Defence Production was established, the corporation reverted to its previous role of serving as agent for foreign purchasers. During the decade that followed, defence contracts placed in Canada by the United States government made up the bulk of our business, but, in addition, contracts placed in Canada under the Colombo plan, and defence contracts placed in Canada by a large number of foreign countries were administered by personnel of the corporation.

The corporation being a legal entity was able to guarantee the execution of contracts to the satisfaction of foreign purchasers. The most valuable function of the corporation, however, was to co-ordinate and administer the execution of those contracts, the majority of which involved several departments of government in addition to manufacturers and suppliers. Thus, the corporation served as a liaison between the foreign purchaser, government departments, other crown agencies and Canadian industry. As pointed out by the Minister of Trade and Commerce, when the Canadian Commercial Corporation Act was introduced in parliament, a government board had not proved to be a practical medium through which to carry out foreign trade transactions and, further, "many firms preferred to do business with a company which could sue and be sued, rather than with a department of government" (*Hansard*—August 5, 1946, 4326). The corporation was always administered along commercial lines and fulfilled a function not provided by private enterprise.

I would like now to deal with a few specific points arising out of my last appearance here.

I believe that Mr. Martineau at that time suggested that the president and personnel of the corporation were responsible for increasing its business from some $50 to $60 million in 1960-61 to approximately $200 million in 1962-63.

I would like to state that the increase in business during the fiscal years 1960-61 to 1962-63 was due to several factors. For example, in those years there was a great increase in the volume of contracts with the United States under defence sharing arrangements, which it was the policy of the government to encourage and which was brought about through the concerted efforts of several government departments. This was also the period in which arrangements were concluded for the production of the F-104 aircraft in Montreal in exchange for the assumption by Canada of responsibility for the administration of certain Pinetree and Dew Line stations.

With reference to a question asked by Mr. Temple concerning the recommendations of the Glassco Commission, I said that the representatives of the Commission had not come to see me. By this, I did not mean to suggest that there had been no study of the corporation by the Glassco Commission. However, there is no detailed examination of the functions of the Canadian Commercial Corporation in the Glassco Commission report and I think that it is fair to suggest that the commission may not have paid sufficient attention to the advantages provided by the corporation from the point of view of foreign governments dealing with Canadian industry.

There was some discussion during our last meeting with respect to the selling efficiency of the corporation during my tenure as compared with the functions now carried out by the Department of Defence Production. Undoubtedly, the transition of functions to the department has produced difficulties, but I cannot believe that any such change-over could have been accomplished without some disruption in the negotiation and administration of contracts. It is important to note, however, that where foreign purchasers formerly dealt with representatives of a crown agency, they now deal with representatives of a department. Being a crown agency the corporation was admirably suited to deal expeditiously as agent, principal or co-ordinator on behalf of foreign purchasers with a wide variety of contracts which called for every conceivable type of product and service. Thus, from 1960-63, the corporation not only handled defence items but, through its foreign projects division, co-ordinated contracts for procurement of services, equipment and materials to be used in foreign countries under the Colombo plan, UNICEF and other aid programs.

Mr. MacLean questioned me about the elimination of fees which were previously charged for our services and which made our corporation self-sustaining. I would like to supplement the reply that I then gave by saying that in recent years the foreign governments with whom we dealt have not charged fees for administration of contracts by government agencies, and it was this

that brought about our decision to cut out fees altogether. In fact, I recall it was felt that the additional cost of fees for contract administration often made it impossible for Canadian companies to present competitive bids; thus, the dropping of fees was an incentive to raise the general level of our export trade.

(*Translation*)

I would now like to make one last remark in French for the record. In the course of our last meeting, Mr. Lessard asked me how many French Canadians were in the employ of the corporation.

Contrary to what I said then, it was not half a dozen French Canadians that were in our employ on October 31, 1963; we had twenty of them.

(*Text*)

In closing, may I assure you Mr. Chairman and members of the committee that I have always considered it my duty to satisfy as effectively as possible the needs of Canadian industry and foreign purchasers, within the terms of section 4 of the Canadian Commercial Corporation Act.

The CHAIRMAN: Gentlemen, we are now ready for questions to be put to the witness.

Mr. DEACHMAN: Mr. Chairman, may I refer to the first page of the statement of the witness, Mr. Lamoureux; it says in the second paragraph:

> I was appointed president in November, 1960.

Mr. Lamoureux, what post did you hold prior to November, 1960?

Mr. LAMOUREUX: I was executive vice president of Grimaldi Siosa Steamship Line.

Mr. DEACHMAN: And as executive vice president of that line you were not connected with the civil service or with the government in that connection or before that?

Mr. LAMOUREUX: Not at all.

Mr. DEACHMAN: What were your qualifications for this particular job at that time? I presume you are an economist or, perhaps a lawyer?

Mr. LAMOUREUX: No, I am not a lawyer and I am not an economist.

I gave my background at the last meeting. I said I was a sailor and I became a deep sea captain in charge of vessels. I came ashore as superintendent and, as such, I travelled world wide on behalf of the steamship companies and negotiated contracts in many parts of the world. I feel I am quite well known in several areas. I think it was because of this that Mr. Drury's predecessor requested that I join the Canadian Commercial Corporation.

Mr. DEACHMAN: What sort of contracts were you engaged in negotiating when in this business? What kind of contracts would these have been that you negotiated around the world?

Mr. LAMOUREUX: Well, charter contracts were the main ones; these included actual carrying of goods and general cargoes or bulk cargoes from certain parts of the world to other parts of the world; negotiating ship contracts—in other words, the building of vessels; administering the construction of these vessels, and then negotiating labour contracts with the unions, the personnel of which were on board these vessels. There were quite a few vessels, divided in groups: some of these vessels flew Canadian flags, others Greek flags, others British flags, etc., and I was negotiating on behalf of the group of vessels I was representing.

Mr. DEACHMAN: What would be the size of this firm which you have mentioned, namely Grimaldi Siosa Steamship Lines.

Mr. LAMOUREUX: The firm is much larger now but when I was with it we had six passenger ships.

Mr. DEACHMAN: This is in 1960?

Mr. LAMOUREUX: It was 1960, yes. As I say, we had six passenger ships, the smallest one of which was 17,000 tons and the largest 32,000 tons, carrying a crew of 560.

We also had a dry cargo fleet of 19 vessels, six of them on charter with Saguenay terminals in Montreal. We had a fleet of tankers from 17,000 tons to 41,000 tons, which operated world wide, entered many ports and came to Montreal to unload. They were on charter with Imperial Oil and Shell.

Mr. DEACHMAN: But your specific position with that company would be to do what?

Mr. LAMOUREUX: To administer the operation of the—

Mr. LESSARD (*Lac-Saint-Jean*): If I may interrupt, Mr. Chairman, I object to this line of questioning. I do not think it is relevant because this is not the reason we are here today. I do not believe this line of questioning has anything to do with the executive function of Mr. Lamontagne at the present time and, as I say, I object to the line of questioning being put.

The CHAIRMAN: I think your point of order, Mr. Lessard, is probably well taken. I do not think we are here to probe in great detail into the background of Mr. Lamoureux; I think we are here to look at the Canadian Commercial Corporation.

Mr. WINCH: Except, Mr. Chairman, in so far as it relates to the experience, ability and capability of the witness in respect of this appointment.

The CHAIRMAN: Yes. But at our last meeting the background of Mr. Lamoureux was touched upon, and that is why I have allowed Mr. Deachman to continue up until now. But, I think we probably have explored this reasonably thoroughly and perhaps we should move on to something else.

Mr. LESSARD (*Lac-Saint-Jean*): If this line of questioning is followed, Mr. Chairman, later on when other witnesses are called I, too, will question their background.

The CHAIRMAN: Would you like to proceed, Mr. Deachman.

Mr. DEACHMAN: No, I will let it go at this point, Mr. Chairman.

Mr. WINCH: Mr. Chairman, I am interested, first, in the second paragraph of Mr. Lamoureux's submission, where he says:

> I was appointed president in November, 1960, and thus can speak with authority on the activities of the corporation only from that time until November, 1963, when its functions were taken over by the Department of Defence Production, as the minister has explained.

Now, as Mr. Lamoureux says, the functions were taken over by the Department of Defence Production in November, 1963. I would like Mr. Lamoureux to explain whether there is any relationship to bylaw number 6 because bylaw number 6 was enacted by the board of directors on March 19, 1963. I presume this bylaw was to establish a change from his authority or Canadian Commercial Corporation's authority to defence production. Is there some relationship between the bylaw of March 19, 1963 and the functions being taken over in November of the same year?

Mr. LAMOUREUX: No, there is no relationship.

Mr. WINCH: Then, the passage of the bylaw had no connection with the takeover in November?

Mr. LAMOUREUX: No, I do not think it had. But, I will check into this.

Mr. WINCH: And, if I may add to that, what was the purpose of the bylaw on March 19, 1963?

Mr. LAMOUREUX: I had better have a look.

Mr. WINCH: I am referring to the last page of the bylaw where I give the date, and that is all.

Mr. LAMOUREUX: Mr. Winch, are you referring to section (*d*) of the bylaw?

Mr. WINCH: I am referring to the entire bylaw number 6.

Mr. LAMOUREUX: Yes.

Mr. WINCH: This was passed, as I said, on March 19, 1963.

Mr. LAMOUREUX: Yes.

Mr. WINCH: Now, was this bylaw passed because of what occurred in November, 1963, on a transfer of power?

Mr. LAMOUREUX: No, actually it is a bylaw for signing authorities.

I must admit that it was passed, and this actually was to give us a little more freedom owing to the fact that some of the officers of the corporation did have to represent the corporation in other cities; I am referring now to the United States, where they required signing authority to close a contract. Owing to the quarterly amounts of money allowed by the United States government in order to meet their purchasing cycle over a period of four times a year, we had to expedite an officer of the corporation down to this area to close the contract some times a few hours before the deadline. This is a bylaw which strictly concerns signing authorities.

Mr. WINCH: Then, in view of your use of the word "freedom", when you passed this bylaw on March 19, 1963, to give you more freedom, at that time did you have an indication that in November of 1963 the Canadian Commercial Corporation was going to lose all its freedom?

Mr. LAMOUREUX: No, I did not.

Mr. WINCH: Then, referring to the first page of your submission, the last part of the second to last paragraph, we have the words:

> —the bulk of our business, but, in addition, contracts placed in Canada under the Colombo plan, and defence contracts placed in Canada by a large number of foreign countries were administered by personnel of the corporation.

If my information is correct, Canada still is placing contracts under the Colombo plan and others. Since when have you not had anything to do with contracts placed under the Colombo plan, or others?

Mr. LAMOUREUX: The first of November, 1963.

Mr. WINCH: You have had nothing whatsoever to do with them since then as president of the corporation?

Mr. LAMOUREUX: That is correct.

Mr. WINCH: In respect of the last paragraph on page 2, where you speak of defence buying, you had nothing to do since November, 1963, with any of these either?

Mr. LAMOUREUX: That is correct.

Mr. WINCH: In the middle of the second paragraph on page 3 you stress how important it was that foreign purchasers could deal with this crown agency. Has that situation changed in principle so far as you are concerned now that you no longer have anything to say or do with it?

Mr. LAMOUREUX: Well, it has changed owing to the fact that I do not as a person have a group of officers whom I actually govern and instruct in respect of certain parts of the negotiation.

Mr. WINCH: That is not my question. From the evidence you gave us two weeks ago I know that you now no longer have any say. I am asking you,

do you feel that the picture is still as you outline it here; that is, that foreign purchasers would like to deal with a crown agency and not a department of government; have you changed your mind on the principle?

Mr. LAMOUREUX: No; I have not changed my mind on the principle.

Mr. WINCH: It was changed for you?

Mr. LAMOUREUX: Yes.

Mr. WINCH: Thank you. Mention was made this morning and last week of the Glassco Commission investigation. Two weeks ago and again today you stated that no member of the Glassco Commission ever saw you as president of the Canadian Commercial Corporation?

Mr. LAMOUREUX: That is right.

Mr. WINCH: May I ask whether, to your knowledge, the Glassco Commission, or any member thereof, saw any of your officials?

Mr. LAMOUREUX: I know that two representatives of the Glassco Commission visited my executive assistant at that time, Mr. Harris, and requested a technical paper on the operations of the corporation. Of this I am aware. My assistant asked me whether I would allow him to do this, and I said yes. I understand, beyond this, that they had visits with the other members of the corporation, and I am referring to the legal adviser, the comptroller, and some of the directors of C.C.C.

Mr. WINCH: Did you think it unusual that a commission of the importance of the Glassco Commission should not ask to see you as president of a corporation?

Mr. LAMOUREUX: It is most unusual; there is no doubt about it.

Mr. WINCH: Did you ask for a meeting with them?

Mr. LAMOUREUX: No. I expected them to come back to me once they had read the statement given by Mr. Harris.

Mr. WINCH: Did you ask them to come back?

Mr. LAMOUREUX: No. I was expecting them to come back once they had read Mr. Harris' report.

Mr. WINCH: May I ask whether Mr. Harris informed you of the meeting and whether he made any recommendation at all in respect of whether or not they should see the president of the corporation?

Mr. LAMOUREUX: I recall Mr. Harris coming in to see me. As I recall it this took place in the morning, and the following afternoon he came in to tell me that is what they needed and had requested, and I gave him authority to produce the report; and at this time I do not think he had made any recommendation.

Mr. WINCH: Do I take the correct interpretation from what you say in your statement this morning, that you feel the Glassco Commission in its report did not have an understanding of the operation of the Canadian Commercial Corporation?

Mr. LAMOUREUX: No. I have endeavoured to find in the report of the Glassco Commission the same type of study that they have made in respect of certain departments in which they lead up with hundreds of pages of documentation and reports and arrive at a conclusion. In this case you can study the conclusion right back and see where it starts. However, in the case of the corporation I am trying to see where there is such a thing as working papers which would lead them to make a recommendation in the report.

Mr. WINCH: I am a little intrigued in noting that bylaw No. 5 was passed on May 9, 1951. There is no further bylaw until March 19, 1963. Is that correct; there were no other bylaws or amended bylaws?

Mr. LAMOUREUX: No. Those were the bylaws that were in effect when I was appointed president of the corporation. Bylaw No. 7 came about at a directors' meeting of December 18, 1963.

Mr. WINCH: May I refer you to page 2 of bylaw No. 5 where it says under (*d*):

> The president shall have control and supervision of the staff of the corporation and shall have authority to delegate any of his powers in this regard to any officer or employee of the corporation.

Was that ever amended, or do you consider it was amended by bylaw No. 6?

Mr. LAMOUREUX: No; by bylaw No. 7.

Mr. WINCH: I am sorry, I do not have a copy of bylaw No. 7.

The CHAIRMAN: Bylaw No. 7 is in the proceedings of our last meeting.

Mr. WINCH: Was there ever any amendment made to (*d*) of bylaw No. 5?

Mr. LAMOUREUX: No; not until bylaw No. 7 came into existence.

Mr. WINCH: Do you say that bylaw No. 7 amends (*d*) of bylaw No 5?

Mr. LAMOUREUX: Yes.

Mr. WINCH: I have one more question at the moment. Did you question the legality of bylaw No. 7 transferring your power to officials who were no longer under the jurisdiction of the Canadian Commercial Corporation?

Mr. LAMOUREUX: Well, before bylaw No. 7 was enacted I wrote to the hon. minister telling him I felt that the reorganization and the transfer of the corporation to the department, so far as I could see it, was not quite in line with the way I understood the act.

Mr. WINCH: Do you have a copy of that letter here?

Mr. LAMOUREUX: Yes, I have a copy of it here now.

Mr. WINCH: Mr. Chairman, may I ask that it be read and tabled.

The CHAIRMAN: This is an internal document. I do not think it is customary that documents of this type be tabled in the house.

Mr. WINCH: It is pretty important to us, is it not?

Mr. LLOYD: Mr. Chairman, may I raise a question of procedure. I am becoming a little concerned that the function of this committee is quite different from the way we have interpreted our terms of reference in the past. It seems to me we are getting into sort of an investigation and away from identifying broadly questions of policy. If this question is to bring out information which will enable us to appraise the policy, then it is all right; but if it spills over into judging the relative judgment decisions of the minister in connection with the corporation and its personnel, then I think we are going beyond our role.

The CHAIRMAN: I think we are dealing here with a reorganization.

Mr. LLOYD: Mr. Lambert has made an observation that until we deal with matters in Halifax—what was your observation?

Mr. LAMBERT: Personally I feel this is a question of general policy in dealing with the Canadian Commercial Corporation, and that there is a policy decision being looked at by this committee and, therefore, I am not at all happy about any gags.

The CHAIRMAN: It is perfectly in order to question on and discuss the reorganization and the reasons behind it. I think, however, we should remember that as a matter of practice it has been our procedure in the past—and I think we should follow it—to ask a Civil Servant questions of fact and discuss the policy aspect with the Minister. Therefore, I would suggest you are at liberty to ask the minister questions with regard to the reasons, and the question that you just put.

Mr. WINCH: Mr. Chairman, I would like to use your own argument and reasoning in what you just have said. The purpose of this committee is to discuss what is going on, the policy and the reasoning. Surely, in respect of policy and reasoning as it concerns a crown corporation established by statute, if there has been a change, then we are entitled, to use your own term, to the facts, and the facts are as admitted now by the president of the corporation that he questioned the legality of certain policy procedure. Surely that is a fact along the line you, yourself, just spoke about.

The CHAIRMAN: Mr. Winch, you asked that a letter from the President of the C.C.C. to the minister responsible be tabled?

Mr. WINCH: In which he questioned the legality.

The CHAIRMAN: I would suggest that rather than ask for the tabling of that sort of correspondence you should question the Minister about it.

Mr. LAMBERT: On that point, will the minister table the letter? Let him make the decision on this. I quite agree that Mr. Lamoureux is in a difficult position about that, but if the minister wishes, he can do so. I also am very interested in this letter.

Hon. C. M. DRURY (*Minister of Defence Production*): I think this would be establishing a very bad precedent. The advice given the ministry by officials and the recommendations they may make or not make always has been regarded as an internal matter and, as such, privileged.

Mr. LAMBERT: This is all I want on the record. The minister is making the claim of privilege in respect of the document. It is not up to Mr. Lamoureux as president of the corporation to claim privilege, but the minister is. What we think of it is another question.

The CHAIRMAN: Would you like to proceed with your questioning, Mr. Winch.

Mr. WINCH: I will let it go for now. I have some other questions for later.

Mr. DRURY: On that point, I may say that the advice of the law officers of the crown on the matter of the legality of this was sought and the legal opinion, as Mr. Lamoureux will confirm, was that this is within the terms of the relevant statutes.

Mr. LAMBERT: I am directing this question to the minister. On page 1005 of the Minutes of Proceedings and Evidence it indicates that the personnel of the Canadian Commercial Corporation were transferred from the corporation and placed in the Department of Defence Production by the Civil Service Commission at the request of the Department of Defence Production. Did the minister give any directions that this should be done?

Mr. DRURY: Yes.

Mr. LAMBERT: Under what authority?

Mr. DRURY: The authority which presides in the minister to reorganize or organize both the Department of Defence Production and the Canadian Commercial Corporation.

Mr. LAMBERT: I would put it to you that the C.C.C. is a creature of parliament by a statute and the corporation reports to parliament through the Minister of Defence Production. If, under the act which sets up the corporation, the Minister of Defence Production merely reports to parliament, may I ask the minister where he derives his authority to go over the head of the president of the corporation as indicated in bylaw No. 5, which is the properly constituted authority for the duties of the personnel of the corporation; where do you derive your authority to direct that the personnel shall be transferred or placed elsewhere?

Mr. DRURY: Well, I hope Mr. Lambert does not insist on his statement concerning going over the head of the president. The affairs of the corporation, as in any corporation, are run by the board of directors. As the committee will recollect, bylaw No. 5 was modified by bylaw No. 6 in March of 1963, and subsequently modified again by another bylaw in the fall of the same year, a bylaw enacted by the corporation. In respect of the authority of the minister to direct the corporation, we see in section 6 of the act:

> (1) The corporation may, notwithstanding the Civil Service Act or any other statute or law, employ such officers or servants as it deems necessary to carry out this act and may determine their conditions of employment and their remuneration, which shall be paid by the corporation.
>
> (2) The corporation has, under the minister, the control and supervision of the officers and servants employed under this act.

I would underline the words "the corporation has, under the minister".

Mr. LAMBERT: I do not have a copy of the act before me. Is the minister's duty with regard to the corporation that of reporting to parliament on behalf of the corporation, or are the minister's duties with regard to the corporation more extensive?

Mr. DRURY: Well, there is a rather more general provision in relation to your question, which is section 4, subsection (2) of the act which provides:

> The corporation shall comply with any general or special direction given by the governor in council or the minister with reference to carrying out its purposes.

Mr. LAMBERT: Is that the relevant provision of the statute to which you refer when you say the minister has the authority to deal with the corporation?

Mr. DRURY: Yes.

Mr. LAMBERT: May I point out that another crown corporation, where there is similar wording feels it does not. However, I will make that just as a side comment.

The next point arising out of the minister's answer is in respect of bylaw No. 6. Incidentally, this bylaw was strictly a signing authority bylaw passed when this administration was not in office. Was bylaw No. 7, which is a complete reorganization of the corporation in its corporate framework within its own bylaws, passed prior to the direction by you as minister to the Civil Service Commission that positions would be found for the personnel of the corporation within your department or elsewhere?

Mr. DRURY: The reorganization of the corporation as reflected in bylaw No. 7 carries with it the necessary consequence that personnel on the payroll of Canadian Commercial Corporation no longer would be carried on that payroll.

As a consequence, as their services were needed, positions were sought for them within the Department of Defence Production and indeed, as bylaw No. 7 recognizes, there is the transfer of the operating functions of the corporation from the corporation itself, or the carrying out of functions by people under the control of the corporation, and they would discharge substantially the same functions by being put under the control of the Department of Defence Production.

I might point out, Mr. Chairman, that in a sense the first step, and a large step in this direction to be taken—if you will look at bylaw No. 6, you will see the signing authorities for bid, proposal, or quotation. Colonel Lake was

an employee of the Department of Defence Production. Mr. Thom was with the Department of Defence Production. Mr. Lamb—I am sorry Mr. Tevlin, and Mr. Gilchrist were both employees of the Department of Defence Production, not of the corporation.

In the case of a contract between the Canadian Commercial Corporation and a foreign government, or with a domestic supplier where the value exceeds $50 thousand, the signing authority for it was the president and a director of the corporation.

Mr. LAMBERT: This constituted them as agents on behalf of the corporation.

Mr. DRURY: Well, as signing officers.

Mr. LAMBERT: I have been a signing officer for corporations for whom we did legal work in our office, and it was provided for by a minute or a bylaw.

Mr. DRURY: That is right.

Mr. LAMBERT: This is merely an administrative matter, and I suggest one cannot confuse it with the bylaw of December 18, 1963, because this is a fundamental reorganization. Certainly bylaw No. 7 bears no relationship to either the principle or otherwise of bylaw No. 6. What I am asking you is this: was there any minute of the board of directors authorizing the transfer of personnel or anything beyond bylaw No. 7 which more or less cuts the throats of the personnel of the board?

Mr. DRURY: Well, you will forgive me if I take exception to this language, cutting the throat of the board.

Mr. LAMBERT: All right, I will not use such a grave expression. But in fact it removed the powers and left it only a shell. Now, are there appropriate minutes of the board with regard to these matters?

Mr. DRURY: Well, of course there are.

Mr. LAMBERT: The committee does not know that.

Mr. DRURY: I am answering the question. Of course there are; and there was an examination by the law officers of the crown of the steps that have been taken leading up to the second point, the enactment of bylaw No. 7, with the opinion or ruling that they had been properly and legally carried out.

Mr. LAMBERT: At the time of the passing of bylaw No. 7 who were the members of the board of the Canadian Commercial Corporation?

Mr. DRURY: At the time it was the president, Mr. Lamoureux, Mr. Bland, Mr. Erskine, Mr. Huck, and Mr. Mundy.

Mr. LAMBERT: With the exception of Mr. Lamoureux, all the others are members of the Department of Defence Production.

Mr. DRURY: Mr. Bland is president of Defence Construction (1951) Limited.

Mr. LAMBERT: Was bylaw No. 7 passed at your request?

Mr. DRURY: I would not say that I made a specific request for the passage of bylaw No. 7. This was one of the procedural steps, one of the necessary steps, in executing the recommendations of the Glassco Commission to maintain the legal entity of the Canadian Commercial Corporation, but to have its operations carried out by employees of the Department of Defence Production.

Mr. LAMBERT: All right. I have another area to explore, but I shall stand it at this time.

Mr. WINCH: I have a supplementary question of Mr. Lamoureux, and in view of the questioning we have had, might I ask Mr. Lamoureux, in view of

his statement that he did submit a document which is to be put on file, on what basis, he, as president, therefore, signed as president? Bylaw No. 7 completely superseded bylaws 5 and 6.

Mr. LAMOUREUX: Well, at a meeting of the board on Wednesday, December 18, 1963, I objected, and I made my reasons very clear in the minutes of the meeting, although I was advised by the legal officer; that is, the legal officer from the corporation who is the head of the legal branch in the Department of Defence Production that everything was in order, but still I felt that I should raise objection and I did so.

Mr. WINCH: May I put it this way: under bylaw No. 7, of December 18, 1963, you signed as president, although objecting, but because of the majority of the directors it was decided.

Mr. LAMOUREUX: Yes, of course.

Mr. WINCH: That is a fair way to put it?

Mr. LAMOUREUX: Yes, that is a fair way to put it. Normally I would go along with the majority, and the majority of the board of directors agreed.

Mr. WINCH: But you as president at the same meeting on December 18 had objected, as such?

Mr. LAMOUREUX: Yes.

Mr. GROOS: May I ask a supplementary question?

The CHAIRMAN: Yes, but before you do may I say I have no other questioner who has not previously asked questions. Unless somebody who has not questioned the witness up to this point wishes to ask a question, I shall revert to Mr. Winch who had asked for a second go. You may ask your supplementary question now.

Mr. GROOS: With respect to bylaws Nos. 6 and 7 here, I would like to ask the minister if he could give us his idea of the improvements that were effected in the way of awarding contracts and effecting contracts by agents, which resulted from bylaws Nos. 6 and 7?

Mr. DRURY: Well, as I think has been indicated to the committee on prior occasions, consultations, technical explanations, and negotiation of contracts have increasingly been carried out by officials of the Department of Defence Production, and the role of the Canadian Commercial Corporation has been rather limited to that of preparing, if I may use the term, back to back contracts. That is a contract between a foreign government and a Canadian corporation which corresponds to the contract negotiated between the Canadian contractor and the Canadian Commercial Corporation. Negotiations on behalf of the Canadian Commercial Corporatin were and are carried out by officials of the Department of Defence Production.

Now, all the work including the preparation, scrutiny, and checking of back to back contracts is done in the name of the Canadian Commercial Corporation in the department, or in a section or division, which is responsible for the negotiations themselves rather than in another administrative unit. Thus the concentration of effort has reduced in my view the possibilities of gaps occurring, and has also led to more economy in the way of personnel.

The CHAIRMAN: As I suggested a moment ago, there is no one who has not yet asked a question on my list, and I now revert to Mr. Winch. Oh, I am sorry, Dr. McMillan would like to ask a question.

Mr. MCMILLAN: I would like to ask Mr. Lamoureux if he thinks that in this organization everything was legal, as far as he was concerned?

Mr. LAMOUREUX: Well, as president of the corporation from November 1960 until November 1, 1963, definitely everything was legal.

Mr. MCMILLAN: And the takeover too?

Mr. LAMOUREUX: On the takeover I must admit I differed in opinion; it was somewhat different from what I was led to believe.

Mr. MCMILLAN: But there was no place where you think it was illegal. It was only a difference of opinion?

Mr. LAMOUREUX: Well, no, it was legal.

Mr. WINCH: Mr. Chairman, in the statement made this morning by Mr. Lamoureux confirming what was said two weeks ago, he said that the functions of the corporation were taken over in November of 1963 by the Department of Defence Production. And we have also heard more than once from Mr. Lamoureux that he has never signed any documents since that time. That being the case, I would like to ask the minister if he is now prepared to answer the question which I asked him two weeks ago, which he promised to do at this meeting. Who now is signing? Who has signed and is signing all documents or contracts, whether it be with the Colombo plan or anything else? And why is it not the president of the corporation?

Mr. DRURY: Well, in response to the second question, Mr. Chairman, bylaw No. 6 indicates, for the reasons which Mr. Lamoureux gave, the increase in the number of signing officers.

Mr. WINCH: But who signs it?

Mr. DRURY: Bylaw No. 6 lists the signing officers as of that date, November 1963, and the bylaw clearly lists them. There are a number of signing officers in addition to the president who have full authority to sign with him. I have here a document dated August 18, 1964, issued by the secretary of the Canadian Commercial Corporation under the seal of the corporation, giving a list of individuals who are authorized to sign invitations for bids, contracts and amendments, contracts and amendments less than $50,000, and contracts and amendments provided the value is less than $10,000.

I also have a document, which I will be glad to table, dated May 27, 1964, signed by myself, providing the signing authorities for cheques, drafts, notes, bills of exchange, and so on.

Mr. WINCH: Could I ask a question?

The CHAIRMAN: If I may interject at this point, Mr. Winch, are the members of the committee agreeable that these documents should be tabled and printed in the evidence at this point?

Some hon. MEMBERS: Agreed.

The documents follow:

CANADIAN
COMMERCIAL CORPORATION
Ottawa 4, Canada

LA CORPORATION
COMMERCIALE CANADIENNE
Ottawa 4, Canada

August 18, 1964

TO WHOM IT MAY CONCERN:

The undersigned, F. F. Waddell, Secretary of Canadian Commercial Corporation, hereby certifies, under the seal of the corporation, that the persons listed

below have full authority, pursuant to the bylaws of the corporation, to sign, on behalf of Canadian Commercial Corporation, the documents mentioned below, within the respective amounts stated.

(A) Invitations for bid (IFB), proposals and quotations, regardless of the value, the following:

A. K. Aspden
D. R. Beardshaw
D. H. Gilchrist
E. M. Heath
B. Lake
E. M. Lamb
R. J. Powell
R. M. Trites

(B) Contracts and amendments regardless of the value, the following:

A. D. Belyea
J. R. Brisson
S. I. Comach
F. Dugal
D. M. Erskine
J. S. Glassford
D. F. Gray
A. M. Guerin
R. D. Hindson
R. C. D. Laughton
N. B. MacDonald
A. H. Mathieu
J. J. McKennirey
G. P. O'Keefe
K. O. Roos
M. Rudge
J. C. Rutledge
J. J. Tennier
D. L. Thompson

(C) Contracts and amendments, provided the value is less than $50,000.

A. W. Allan
D. L. Anderson
R. W. Andrews
W. T. Andrews
J. Apperson
E. W. Atkinson
L. W. Bonhower
E. A. Booth
W. A. Boyce
J. P. Boys
M. F. Bradford
N. A. Bradford
J. T. Brazeau
J. S. Brown
J. L. Bush
J. W. Cameron
J. F. Candow
W. H. Chandler
D. M. Collins
A. E. J. Combley
E. M. Comerford
J. E. Cooper
F. J. Corrigan
W. E. Craig
J. K. Cunningham
J. P. Dallaire
J. M. Davies
D. E. Daye
D. J. DeLisle
J. C. Devlin
G. C. Doms
P. J. Donovel
H. C. Douglas
W. J. Driscoll
C. A. Drouin
J. R. Dupont
N. H. Fink
M. A. B. Fleming
J. G. Ford
D. H. Gilchrist
D. F. Gray
D. A. Hall
D. H. Hand
J. W. Harrison
R. C. Herrin
R. T. Hilyer
G. S. Hincks
G. E. Hughes-Adams
M. J. Kennedy
A. Kielland
J. R. Killick
E. J. Lacroix
J. L. Lafontaine
C. Lamb
M. R. Lemelin
G. R. Logan
J. Longhurst
E. P. Loveridge
W. H. Luetchford
L. A. Lynch
A. A. Macintyre
H. J. Mackay
W. H. Mackey
H. MacMillan
G. C. Manuel
W. H. Mayo
M. J. McGrath
G. F. McKay
K. H. McNeely
A. Michaels
LeB. Mitchell
P. A. Mondor
R. Mosher
J. F. Murphy
W. F. Murphy
D. A. Myhill
H. Newberry
J. A. Nicas
W. B. Nind
S. J. Noad
W. G. O'Brien
R. Patel
S. S. Payne
R. L. Peppy
S. A. Radley
W. W. Reid
M. L. Reynolds
S. P. Roper
G. C. Rowe
C. D. Ruppel
R. P. St. Pierre
D. R. Scott
T. G. Sewell
G. S. Sheraton
M. J. J. Simoneau
R. A. Skuce
C. J. K. Smith
W. F. Smith
M. Standish
P. Stevens
D. Stewart
H. F. Stillwell
L. H. Stopforth
A. M. Swan
D. A. Swanson

G. E. Torpey
F. H. Turner
P. E. Valiquette
L. A. Vance
P. G. F. H. van der Brugh
G. W. Vanderwater
D. B. Wallace
R. D. Wallace
H. E. Waylett
J. W. Webber
W. T. Weir
G. F. Whiteside
G. C. Wilson
A. Wolchock
A. K. Woodill
R. J. Woods
C. M. Wright

(D) Contracts and amendments, provided the value is less than $10,000.00, the following:

J. P. Barber
R. G. Bastow
L. R. Berlinguette
C. C. Brown
J. A. Byrne
O. J. Carroll
G. F. Carter
N. K. Crowder
M. Cushman
W. Daly
L. A. W. Davis
J. C. Desislets
M. K. Donaldson
W. J. Dubroy
R. Dupre
D. Eastwood
J. W. Elliott
K. P. Ellis
E. C. Farant
A. G. Farrell
E. C. Gage
J. L. Gohier
R. A. Green
F. Haley
R. F. Jacob
R. R. Lajoie
D. S. Lunan
H. E. MacFarland
O. I. Matthews
F. J. MacNaughton
F. G. McNeely
D. G. Mitton
E. W. Montgomery
D. W. Palmer
I. J. L. Palmer
D. W. Parker
S. G. Pink
R. A. Rich
T. C. Routh
S. Shapiro
H. J. Sloan
E. O. Smith
G. M. Spencer
G. Steel
E. C. Styles
V. E. Tant
P. R. Turner
A. J. Turpin
E. D. Way
F. G. White
E. S. Wood
W. J. Wright
V. Zinck

(E) Change Order Cost Proposals, Priced Exhibits, Termination Settlement Agreements, Royalty Reports, Reports of Inventions and Subcontracts, Release Statements and Assignment of Rebates and so on, with respect to the above contracts, the persons listed under (A) (B) and (C) above, within the respective contract values therein mentioned.

(SEAL)

F. F. Waddell
Secretary
Canadian Commercial Corporation

MINISTER OF INDUSTRY

MINISTRE DE L'INDUSTRIE

CANADIAN COMMERCIAL CORPORATION

Signing Authority for Cheques, Drafts, Notes, Bills of Exchange, and so on.

Pursuant to paragraph 11 of Bylaw No. 7 of Canadian Commercial Corporation which was approved by Order in Council P.C. 1964-663 of 7th May, 1964 and pursuant to Section 8 of the Department of Industry Act, I hereby make the following designation as to the persons who shall have authority to draw and accept drafts, and to sign cheques, promissory notes,

bills of exchange, letters of credit and orders for money in respect of the bank accounts of the Corporation and in respect of the transactions of the Corporation, including documents for deposit to the Corporation's credit; namely:

any Director of the Corporation; or
the Secretary of the Corporation; or
the Deputy Director, International Programs Branch, Department of Defence Production;

signing together with

the Comptroller of the Department of Defence Production; or
the Deputy Comptroller of the Department of Defence Production; or
Mr. B. V. Duffy of the Comptroller's Branch, Department of Defence Production;

provided, that cheques on the Bank of Nova Scotia's Special Payroll Account may be signed by affixing a facsimile signature of the Comptroller of the Department of Defence Production without any further signature or facsimile signature; and provided, further, that as long as the maximum balance in the Interest Account in Riggs National Bank, Washington, D.C., does not exceed $850.00, such account may be operated by the Comptroller, Department of Defence Production (acting alone) or by such employee (acting alone) of the Washington office of the Corporation or of the Department of Defence Production as may be designated by the Comptroller; all previous signing authorities in respect of the matters set out above are hereby superseded.

This signing authority is dated the 27th day of May, 1964.

(Sgd) C. M. Drury,
Minister.

Mr. WINCH: Mr. Chairman, I would like to direct a question through you to the minister. With all the signing officers you have will you give a direct answer to a direct question?

Since November, 1963, if we take the evidence of Mr. Lamoureux, at no time whatsoever has he, as president of the Canadian Commercial Corporation signed a solitary document. Is this empire building inside your department or are you in some way trying to downgrade the position of the president of the Canadian Commercial Corporation?

Mr. DRURY: You asked a number of questions, Mr. Winch. First, you asked would I give a direct answer to a direct question. Yes, Mr. Chairman, I will give a direct answer to any direct question. Second, Mr. Winch asked are we trying to empire build. The answer is no. The third question was, are we trying to downgrade the—

Mr. WINCH: The president of the Canadian Commercial Corporation?

Mr. DRURY: —the president of the corporation. The answer is no.

Mr. WINCH: Right. Then, why it is that the president of the Canadian Commercial Corporation, which is a crown agency operation now with himself and one secretary, does not sign any documents?

Mr. DRURY: Because, Mr. Chairman, Mr. Lamoureux's present duties, as he indicated, are to act as adviser on export possibilities on defence equipment to the Department of Defence Production. This is his activity, not the routine administration of contracts which have been negotiated by others, or the transaction of financial matters which have been organized by others, notably

the comptroller of the corporation, who is also the comptroller of the Department of Defence Production. To do so would be to ask Mr. Lamoureux to sign blindly documents and contracts for which he has no personal responsibility in either drafting or negotiating.

Mr. WINCH: The minister is keenly interested, according to talks he has given and, of course, his responsible position, in the work and the responsibility of the Canadian Commercial Corporation, and I would like to ask the minister how often approximately since November of 1963 has he sought the advice of the president of the corporation?

Mr. DRURY: That, Mr. Chairman, I would regard again as following under the general ban in respect of seeking to inquire into the question of advice given or not given to a minister by his officials.

Mr. WINCH: Have you sought the advice?

Mr. DRURY: Of course.

Mr. WINCH: Often?

Mr. DRURY: I will not go any farther than that.

Mr. WINCH: I did not think you would. May I ask a question then under defence production? In defence production and Canadian Commercial Corporation do you have any policy whatsoever since you took over as minister, with the resultant granting of hundreds of millions of dollars in contracts, in respect of either laying down a policy position or making inquiries whether or not any of those who have this responsibility with regard to contracts do not hold shares in companies they deal with, nor hold any position whatsoever whereby they can be influenced?

Mr. DRURY: Would you rephrase that question?

Mr. WINCH: Well, I will rephrase it this way. A few years ago cabinet ministers were asked not to be directors of corporations because of their positions as cabinet ministers. Now, here we have the Department of Defence Production tied in with the Canadian Commercial Corporation in the allocation of contracts. Is any inquiry made as a matter of policy to ensure that those in the employ or previously employed by the Canadian Commercial Corporation but who are now working with Canadian Commercial Corporation and the entire structure of defence production have no interest in the companies with which they are dealing? Now, Mr. Drury, you know the reason I am asking the question, without my having to go into any further details.

Mr. DRURY: I do not, to be quite frank.

The government regulations are quite explicit about prohibiting any conflict of interest, and it is expected that an official of the government will not get into a position where he would be exercising a judgment in matters in which he had a personal pecuniary interest.

Mr. WINCH: That was also the case in respect of two R.C.M.P. officers, and this is my purpose for asking the question.

The CHAIRMAN: Mr. Winch, I think you are going beyond the limits in this respect.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): I agree with you, Mr. Chairman.

Mr. WINCH: It is because of that position I put the question. What is the position in your department?

Mr. DRURY: The position is that if any such conflicts of interest are discovered they are prosecuted to the full extent of the law.

Mr. WINCH: But you do not make it a part of the policy of your department that there should be a statement to the effect that those who are dealing in these millions and hundreds of millions of dollars contracts should have no interest whatsoever by investment or otherwise?

Mr. DRURY: I do not think there is any such statement in respect of the precise language you have used, but I would have to inform myself. But, I do know the regulations prohibit a conflict of interest which may arise.

The CHAIRMAN: If you are finished, Mr. Winch, Mr. Lambert is next.

Mr. LAMBERT: Is the result of bylaw number 7 merely a legal framework whereby officials of the Department of Defence Production actually are conducting state trade or engaging in some form of commercial business on behalf of the crown or other persons, but hanging it on a legal peg of the corporation?

Mr. DRURY: That is correct.

Mr. LAMBERT: One of my colleagues is having the records checked, but have you referred at all to the statement of your predecessor in 1946, when the Canadian Commercial Corporation Act was introduced, to show the stated purpose of the corporation and its functions and, if so, have you reconciled within your own mind the operations of the corporation as they are today with what was the stated purpose to parliament of this corporation.

Mr. DRURY: I think I have, yes, Mr. Chairman.

Mr. LAMBERT: And, you are satisfied that it is working and that this was the purpose granted by parliament?

Mr. DRURY: That it is serving the purpose authorized by parliament. Now, the circumstances described by the minister in introducing the act obviously were quite different from the circumstances of today and, consequently, would not be either appropriate or, indeed, relevant to today's circumstances. I suggest perhaps that is the reason why in the act itself some of the clauses are mandatory and some are permissive, and they were made permissive to allow for the inevitable change of circumstances without making the act virtually inoperative.

Mr. LAMBERT: You, Mr. Drury, in answers to my previous questions referred to paragraph (c) of clause 4 of the act, which says: "to exercise on behalf and under the direction of the minister." You were at pains to underline "on behalf and under the direction of the minister" but then, I have a further wording: "any powers or functions vested in the minister by any other act that authorizes the minister to employ the corporation to exercise them." In other words, this is an ancillary power and an ancillary purpose of the corporation because paragraphs (*a*), (*b*) and (*d*) are the true purposes of the corporation, although (*d*) is a sort of basket provision. I would put it to you, Mr. Drury, that to take the ancillary clause "on behalf and under the direction of the minister" is to use a somewhat shaky base on which to state that the minister has the direction of the corporation.

Mr. DRURY: Well, I will not endeavour to debate the legal point, Mr. Chairman, but I would like to suggest that I was speaking not about clause 4 (1) (c) but clause 4 (2).

Mr. LAMBERT: Yes, I grant you that there is a direction that they will comply with any general or special direction given by the governor in council, Mr. Drury, with reference to carrying out its purposes, but this is not the purpose of the corporation. I would put it to the minister that there is a good and substantial argument that what has been done may stand some examination. That is why I suggest to you that this committee is doing this, and perhaps the house itself, parliament itself, may be interested in the function of the corporation under the terms of the act.

I am not saying that what the corporation is doing now is wrong, but I think Mr. Winch and Mr. Martineau the other day suggested the act should have been amended in order to carry out the program of the reorganization. I think I would commend that thought to the minister. The minister I think

should have this point re-examined to see whether in all wisdom that should not be done.

Mr. DRURY: I would be quite prepared to have it re-examined, Mr. Chairman.

The CHAIRMAN: I wonder if I might interject with two questions, Mr. Lambert, to clarify this. I am thinking now of the problem of drafting a report.

I would like to ask the minister, if I may, first of all whether in his opinion it is not necessary to amend the act to operate as you are. In other words, you are operating now legally within the provisions of the act.

Mr. DRURY: I have been so advised by the law officers of the crown.

The CHAIRMAN: Secondly, in your opinion would it or would it not be desirable to amend the act?

Mr. DRURY: This is a question of judgment, I guess. It is useful to have an act which is broad enough in its scope and broad enough in its permissive allowances to change our operating procedures as circumstances change. Indeed, the circumstances since the enactment of this legislation have changed very largely indeed, as has been outlined in the committee.

Initially, this corporation performed all the functions of the embryonic Department of Defence Production, and it was a revenue-earning operation. Since then, two major things have happened. One is that the Department of Defence Production has come into being and has established a series of specialized functions on a much higher degree of competence than would have been possible for the corporation.

Secondly, because of a change in international practice it is no longer feasible for the Canadian Commercial Corporation to contemplate earning revenue with which to support its expenditure. The act could be modified to adjust it more appropriately to current circumstances. One would hope that this change would be made without impairing its flexibility to cope with circumstances that may change again, but I would not regard this as a high priority in the legislative calendar. With the number of things that we have now on the order paper, both for the present and the next prospective session, I would not suggest that this was one of the most urgent things we should be getting on with.

Mr. LAMBERT: May I follow up?

Can you indicate to us when the governor in council approved bylaw No. 7 pursuant to section 11 of the act?

Mr. DRURY: This was order in council P.C. 1964-663:

> His Excellency the Governor General in Council, on the recommendation of the Minister of Industry, pursuant to section 8 of the Department of Industry Act and section 11 of the Canadian Commercial Corporation Act, is pleased hereby to approve the annexed by-law No. 6 and by-law No. 7 of the Canadian Commercial Corporation made by the corporation on the 19th March, 1963, and the 18th December, 1963, respectively.
>
> (Sgd) R. G. Robertson,
> *Clerk of the Privy Council.*

Mr. LAMBERT: Would the minister table a copy of that order in council?

Mr. DRURY: I would be glad to, Mr. Chairman.

Mr. LAMBERT: Perhaps you could also give us some indication about the gap between December 18 and May 7, the time which elapsed before obtaining the approval of the governor in council of bylaw No. 7, Bylaw No. 7 was filed on December 18; it was presumably decided upon at the board meeting

prior to that date. It received the conditional and the preconditional sanction of the governor in council only on May 7, 1964.

Mr. DRURY: Yes. As a lawyer, Mr. Lambert will appreciate that where there is no statutory delay, ratification becomes a matter of routine. In this particular case there is no time limit within which ratification must be secured—and this is ratification, not preconditioned approval. In these circumstances, it would go through the normal machinery of preparation, of submission to the governor in council, scrutiny by the law officers of the crown and so forth and so on, and finally approval.

Mr. LAMBERT: You might also agree, Mr. Drury, that it would be possible for the whole of the corporation to have gone down the drain in the interval. I would put it to you that this is not a mere routine. The approval of the governor in council of these changes is not a mere matter of routine. This is something that is put there to guard against what one might call improper action by the board—improper to the point of being unwise judgment. Because, after all, the bylaws—

Mr. DRURY: I will not agree with that. I think the purpose of this ratification by the governor in council is to engage the responsibility of the governor in council, to engage the responsibility of the government for the bylaws that have been enacted.

Mr. LAMBERT: But you would also agree, Mr. Drury, that the board of directors and the president of the corporation could have enacted new bylaws without the knowledge of the governor in council which would have been very detrimental—I am setting up a hypothetical case here—both to the purposes of the corporation and the activities of the corporation, and yet you say it is merely routine that six months later the governor in council gets a look at these things. That is why I say it is illogical to assume that it is mere routine.

I put it to you that the purposes as stated in the act are that the bylaws will have the approval of the governor in council before they are put into effect. Six months seems to me to be quite out of line or else section 11 is meaningless.

Mr. DRURY: I think what Mr. Lambert is suggesting is that there should be some delay within which ratification should be sought. In some cases our statutes do provide for these delays.

Mr. LAMBERT: They may in appropriate cases, Mr. Drury, but I put it to you that in the case of a crown corporation this section is not meaningless to the point where it is merely routine ratification, and the officers of a crown corporation are glad to see such a provision that action will be taken with the approval of the governor in council—and that routine, you know, can delay from one month to a year, by which time a whole corporation can be ruined.

Mr. DRURY: To avoid the impression, I think, that you may be unwittingly creating that we were lethargic about this, I should say that you will recollect that the president at the time of the enactment of this bylaw raised questions of its legality. This called very broadly for an examination by the Department of Justice of the whole business, and the rendering of an opinion by the Department of Justice. I think you have been around long enough to know that—

Mr. LAMBERT: —that this takes time, yes. But, Mr. Drury, I will then ask whether the reorganization of the corporation was held up during that six months period, or did you proceed then to effect the plan you had?

Mr. DRURY: During this period we proceeded to put into effect the plan we had, relying on the advice of the legal officer of the Department of Defence

Production, who was also the legal adviser to the corporation, that what had been done was legal and that indeed the Department of Justice in due course would get around to confirming this.

Lest you worry about that, let me say that theoretically the legal opinion of the department's law officers perhaps should be tested by the courts. Indeed, perhaps it should be tested by a reference to the Supreme Court of Canada. Perhaps we should do nothing and just make no move at all until there has been a reference to the supreme court because of this hypothetical possibility.

Mr. LAMBERT: It strikes me, Mr. Drury, this course of action you have taken reminds me of some clients who used to come to me and say, "Now, we have done this; you find a way for us to make it legal."

Mr. DRURY: And those clients probably were pretty good businessmen.

Mr. LAMBERT: You are bound within the framework of the statute.

Mr. DRURY: That is quite correct, and I suggest everything that has been done was within the framework, and properly within the framework of that statute.

Mr. LAMBERT: But not within the meaning of section 11. I would have thought that it would have been far wiser to make sure that I had the approval if I were reorganizing the corporation, and that it was possible. I have known of other corporations which hoped to be able to effect a reorganization and it was all done on paper until they got the legal opinion and had it confirmed.

Mr. DRURY: You mean having got your legal opinion then having it confirmed by another counsel?

Mr. LAMBERT: No, this is within the public service. I am not calling that into question. This was all within the public service.

Mr. LLOYD: Not being a member of the bar, some of these finer points may be escaping me and perhaps I am lacking in some duty I ought to perform, but it would seem to me when a member of a committee questions a legal opinion of the Department of Justice that other procedures than those we are following now should be followed. It should not be followed up here to ascertain whether it is correct.

The CHAIRMAN: Mr. Lloyd, I agree this Committee is not the place to indulge in legal arguments of a fine nature. Mr. Lambert's line of questioning, however, was to determine whether legal procedures had been followed and I believe, as far as he has gone, we have not yet got down to really challenging the opinions of the legal advice that was given. Therefore, I think we are in order, although I have some doubts of the benefits we can gain by following this too far.

Mr. LAMBERT: I have gone as far as I want on this particular question, Mr. Chairman.

Mr. WINCH: I have two more questions Mr. Chairman.

A submission was filed by the minister which I have read, but I would like to put a direct question to the minister.

Can the minister tell us how, after November of 1963, on the second change being made, the president of Canadian Commercial Corporation being left by himself with a secretary, the purchasing knowledge and the many years' experience of Canadian Commercial Corporation are being used officially for in the Department of Defence Production? I can put it quite bluntly now, because the evidence of two weeks ago shows that the assistant general manager is not being used in any way whatsoever in that regard. Does this apply to others who have a similar experience of 25 or 30 years?

Mr. LAMOUREUX: Is the question directed to me or to the minister?

Mr. WINCH: To the minister, first.

Mr. DRURY: In front of me I have a copy of a memorandum relating to the terms of reference of the president of the Canadian Commercial Corporation which I will read to the hon. member:

> With complete integration into Department of Defence Production of the working functions of Canadian Commercial Corporation, the office of President of Canadian Commercial Corporation is retained separately and re-established in a defence export market advisory role directly responsible to the Department of Defence Production A.D.M. in charge of Department of Defence Production defence export activity.
>
> Without day-to-day management responsibility which becomes a Department of Defence Production function, the President of Canadian Commercial Corporation will be expected to devote his entire attention to identification and assessment of defence export market opportunities.
>
> *Specifically*
>
> Acting under the direction of the Department of Defence Production A.D M. responsible for Department of Defence Production defence export activity:
>
> (*a*) Maintain an up-to-date knowledge of the defence R.D.P. Capabilities of the various sectors of Canadian industry and of special capabilities which have good defence export potential.
>
> (*b*) Maintain a thorough knowledge of current Department of Defence Production defence export policies and procedures.
>
> (*c*) Engage in public relations activity with Canadian industry as required to support and promote Canadian sales of defence equipment abroad.
>
> (*d*) Provide advice as required on:
>
> (i) New defence export opportunities not currently receiving attention.
>
> (ii) New methods or procedures designed to make Department of Defence Production efforts in this field more effective.
>
> (iii) Defence export marketing problems generally.

These are the terms of reference indicating the new responsibilities of the president of Canadian Commercial Corporation to replace the efforts previously he had been devoting to administrative duties in respect of the personnel of the corporation.

Mr. WINCH: You still are not telling us how often since November you have consulted with the president.

Mr. DRURY: No.

Mr. WINCH: Then may I ask how often has he consulted with you or advised you?

Mr. DRURY: How many times has he been to my office? I do not think that is an appropriate question, Mr. Chairman.

Mr. WINCH: Will you answer my question with regard to what has happened to the others who had experience and knowledge in connection with Canadian Commercial Corporation. How many actually are used now? I am not referring to stenographers, clerks or secretaries, I am referring to the top officials of Canadian Commercial Corporation. Of those who have knowledge and experience in Canadian Commercial Corporation, how many are you using?

Mr. DRURY: I would have to go through the current employment of the whole 84.

Mr. WINCH: No. I am speaking of the tops, the assistant general manager and the executives.

Mr. DRURY: The assistant general manager now is in the emergency supply planning organization, and his function is, as you are well aware, to plan the supply of commodities and material needs of the Canadian economy in the event of a major disaster. I would suggest this does call upon his knowledge of Canadian manufacturing and supply.

Mr. WINCH: I see I am not going to obtain an answer, so I will move on to my next question.

Mr. DRURY: I already have dealt with one. Perhaps you might give me a chance and I could go on. One of the employees is in the general services branch of the Department of Defence Production.

Mr. WINCH: What is the general services branch; does it have to do with purchasing, and so on?

Mr. DRURY: The general services branch of the department is the branch responsible for the administrative arrangements in the department.

Mr. WINCH: What was his position in the Canadian Commercial Corporation?

Mr. DRURY: His job was general manager of the Canadian Commercial Corporation. Excuse me; not general manager, but executive assistant.

Mr. WINCH: He was not the assistant general manager either, because Mr. Harris was the assistant general manager. What was his job?

Mr. DRURY: It is Mr. Harris to whom I am referring, who now is with the emergency supply planning organization.

Mr. WINCH: I know it is getting on so I will just ask my last question. In defence production do you have anything to do with the general purchases of the Department of National Defence, or are you concerned only with capital expenditures like airplanes, guns, and so on; or do you have control over general purchases of the Department of National Defence?

Mr. DRURY: With the exception of the local purchasing authority for which is granted to officers of national defence, all other purchases are made on behalf of the Department of National Defence by the Department of Defence Production.

Mr. WINCH: That being the case, what is the relationship of your department with the quartermaster's office of the Department of National Defence in respect of purchasing?

Mr. DRURY: Good.

Mr. WINCH: Then how could a situation develop, such as a situation which is *sub judice,* if you do the purchasing; how could such a situation develop between the quartermaster's branch of the Department of National Defence if you are doing the purchasing?

Mr. DRURY: I am sorry; I do not know the circumstances of this particular case.

The CHAIRMAN: I think, Mr. Winch, this probably is outside the terms of reference of the Canadian Commercial Corporation; in addition, as you have mentioned the case to which you have reference is *sub judice.*

Mr. WINCH: I was not referring to the Canadian Commercial Corporation. We now are investigating the Department of Defence Production and I have an answer to the effect that not only do they deal with capital purchases such as guns and equipment, but also, outside of the local area, they do all purchasing for the Department of National Defence, and therefore there must be some relationship with the quartermaster's section of the Department of

National Defence. How could a situation develop such as the situation which has developed?

Mr. DRURY: First you would have to describe the situation to me.

Mr. WINCH: The case of Brigadier Allan.

The CHAIRMAN: This matter is *sub judice*. I think we will get the answer to this question as the trial progresses.

Mr. WINCH: I am not going into it; however, I am asking how could that situation develop in view of the fact that you make the purchases. What is the tie in between you and the quartermaster's department?

Mr. DRURY: Generally speaking the Department of National Defence issues its requisitions to the Department of Defence Production.

Mr. WINCH: Through the quartermaster's office?

Mr. DRURY: In some cases it is through the quartermaster general's branch, as the requisitioning authority within the Department of National Defence.

Mr. WINCH: But you make all purchases except local purchases?

Mr. DRURY: Yes, except for local purchases, we make them.

Mr. WINCH: We may have an interesting meeting some time later on, Mr. Chairman.

The CHAIRMAN: Do the requisitions for purchases coming from the quartermaster's branch sometimes carry recommendations with regard to the source of supply, or is this always left to the Department of Defence Production?

Mr. DRURY: The statutory authority for selecting the supplier resides with the Department of Defence Production. Sometimes these sources are limited in that the Department of National Defence writes the specifications for what is to be provided. They are responsible for drafting the specifications, and these can be specific; they can be general or they can be in a proprietary name.

Mr. WINCH: The Chairman asked a most interesting question, and I am very glad he did. When you say proprietary, does that mean that basically you have received a recommendation concerning where it should be purchased and because of the way it is written it could be purchased only from one place or company?

Mr. DRURY: If the Department of National Defence specifies the Ford motor car, it is unlikely we would be able to procure this from General Motors or Chrysler. That is what I call a proprietary name.

Mr. WINCH: Would you say it ever goes beyond that?

Mr. DRURY: Well now, what do you mean by beyond that?

Mr. WINCH: That it be bought from a certain firm.

Mr. DRURY: Unless, to the knowledge of the Department of National Defence the firm is the sole source of supply, we would not entertain recommendations with regard to source.

Mr. WINCH: The specification could be such that it has to be purchased from only one source of supply?

Mr. DRURY: This is correct; it could be.

Mr. LLOYD: Mr. Drury, at the inception of this program to phase out the administration operations of the Canadian Commercial Corporation to the Department of Defence Production it became obvious that the office of the president would shrink to that of purely a nominal position, essential to maintaining the corporate status of Canadian Corporation only. Being aware of this, certainly you would be concerned about the staff of the corporation who would be affected by this policy decision. At that time I presume the staff members were appraised of the policy and of the significance of the effect of

this move on their respective positions. Was the president offered any alternative position in other departments of government, or in the Department of Defence Production at the inception of this program?

Mr. DRURY: I wonder, Mr. Chairman, whether the committee really wants to go into this.

Mr. WINCH: How could you; by statute you must have a president of the corporation. Is that not right, Mr. Lloyd?

Mr. LLOYD: I am quite satisfied to stop here.

The CHAIRMAN: On your behalf, Mr. Lloyd, may I ask a question which might fill in a gap.

The technical functions of the president of the corporation could be fulfilled by any one of a number of people who were carrying on other jobs and responsibilities. Is that correct?

Mr. DRURY: That is correct.

Mr. LLOYD: That is why I said that it had shrunk to nominal positions only.

The CHAIRMAN: My second question is that other duties—without getting into any other options which may have been offered to the President of the corporation—were assigned to the President of the Corporation. Were they all new functions which had not been done before, including requirements of the Department of Defence Production, rather than of the Canadian Commercial Corporation?

Mr. DRURY: That is correct.

Mr. WINCH: As long as the Canadian Commercial Corporation Act is on the statute books, then by law you have to provide that corporation with a president. Is that correct?

Mr. DRURY: That is correct.

Mr. WINCH: Unless it be repealed or amended by law, you have to maintain that statute?

Mr. DRURY: You have to have a president.

Mr. LLOYD: But there is nothing in the law that you must continue to pay a salary at a certain level. I do not know what the present salary is.

Mr. WINCH: It is $16,000.

Mr. LLOYD: Certainly when you change the policy you do not continue to pay $16,000 a year to a man purely to occupy a position of nominal president.

Mr. DRURY: Obviously, and that is the reason the terms of reference I read out were issued, and Mr. Lamoureux was given substantially alternative responsibilities to his administrative one only to Canadian Commercial Corporation.

Mr. WINCH: Why will you not tell us—because you said you would not—how since November, 1963, under the terms of reference, you have been utilizing his services and he has been advising you?

Mr. LLOYD: I thought it was made quite clear this morning with the long list of the terms of reference for the position now held by Mr. Lamoureux, when it was read to this meeting. He was to be responsible in the future under those terms of reference to the Department of Defence Production, and his job as president was simply that of a nominal position to help maintain the status of the corporation. He had in fact changed his responsibilities from that of president with administrative responsibilities in the Canadian Commercial Corporation to that of an employee of the Department of Defence Production, along, or within the terms of reference which are set forth in the document read to us this morning, but he continued as nominal head or president of the corporation.

Mr. DRURY: That is correct.

Mr. LLOYD: That is the reason his salary has continued. Presumably if those terms of reference are being observed, he is performing, and I presume he earns the salary for the duties that he undertakes as an employee of the Department of Defence Production. Is that not right?

Mr. DRURY: Well, to be technically correct, he is not an employee of the Department of Defence Production. He is an employee of the Canadian Commercial Corporation, but there are duties and responsibilities which he has as adviser to the Department of Defence Production.

Mr. LLOYD: There are specifically new duties with which he was not charged prior to this change of policy.

Mr. DRURY: That is correct. I am glad you brought this up, because I think a grave injustice was done to Mr. Lamoureux, certainly in the newspapers, to say that he was drawing $16,000 a year and not doing anything.

Mr. WINCH: That was no statement of my own.

The CHAIRMAN: I might suggest from the evidence that has come forth that this was a possible and apparent interpretation of that evidence, and I think it is wise that it has been cleared up. It is past one o'clock, so the Committee now stands adjourned to the call of the Chair, which will be sometime after the turn of the year.

APPENDIX "A"

Bylaws Nos. 5, 6 and 7 of the Canadian Commercial Corporation

BY-LAW NO. 5

Being a General By-Law of Canadian Commercial Corporation amending, consolidating and superseding By-Laws Nos. 1, 2, 3 and 4.

Be it enacted by the Board of Canadian Commercial Corporation, as a By-Law of the Corporation as follows:

1. All By-Laws of the Corporation shall be subject to the provisions of The Canadian Commercial Corporation Act, as amended, and unless the context otherwise requires, whenever any matter or thing is expressed in the present tense, the expression shall be applied to the circumstances as they arise, so that due effect may be given to each provision and part thereof according to its spirit, true intent and meaning. The definitions contained in The Canadian Commercial Corporation Act shall apply and other words and phrases shall be interpreted in accordance with The Interpretation Act.

2. The Seal, an impression of which is made in the margin hereof, is the Seal of the Corporation.

3. The fiscal year of the Corporation shall be the twelve months ending on the 31st day of March in each year.

4. (*a*) The President of the Corporation shall be Chairman of the Board but in his absence from any meeting of the Board, the Directors of the Corporation present at such meeting shall appoint another member of the Board to act as Chairman.

(*b*) The Chairman shall preside at all meetings of the Board.

(*c*) The members of the Board shall meet together for the despatch of business from time to time, on reasonable notice given by the President or any two Directors, at any convenient place to be specified in the notice. The President shall call or cause to be called at least one such meeting in each quarter of the fiscal year of the Corporation.

(*d*) Notices of meetings of the Board shall be given to each member thereof by delivering or mailing or telegraphing the same to his usual address. Failure to give or receive notice due to inadvertence shall not invalidate any meeting and the presence of any member of the Board at the place and time of the meeting shall be considered waiver of notice to such member.

(*e*) Each member of the Board present at any meeting thereof shall have one vote with respect to any question arising at such meeting and the decision of the Board shall be in accordance with the majority of the votes. In the event of an equality of votes the Chairman shall have a second or casting vote.

(*f*) The Board shall cause to be entered into one or more books provided for the purpose, the minutes recording the proceedings and giving the names of those present at meetings of the Board.

5. (*a*) The President shall be responsible to the Board for the lawful conduct of the business of the Corporation.

(*b*) The President may make rules and regulations not inconsistent with the By-Laws of the Corporation, governing the work of the officers and employees of the Corporation and their relations to the Corporation and to the public.

(c) The President shall, from time to time, prepare and deliver or cause to be prepared and delivered such reports of the activities and finances of the Corporation as the Board may request.

(d) The President shall have control and supervision of the staff of the Corporation and shall have authority to delegate any of his powers in this regard to any officer or employee of the Corporation.

(e) The President shall cause paragraph 10 of this By-Law, and may, in his discretion, cause any other paragraph thereof, to be drawn to the attention of every officer and employee of the Corporation.

6. There shall be a Managing Director of the Corporation who shall be appointed by, and hold office during the pleasure of the Board. He shall, in the absence of the President, exercise the powers and assume the duties of the President and at other times shall exercise the powers and assume the duties of the President to such extent as may be, in the discretion of the President, expedient in order to give effective assistance to the President.

7. (a) There shall be a Secretary of the Corporation who shall be appointed by and hold office during the pleasure of the Board. It shall be the duty of the Secretary to issue notices of meetings of the Board and to attend all such meetings and act as Secretary thereof. The Secretary shall record all votes and the minutes of all proceedings taken and had at such meetings in books of the Corporation to be kept for that purpose.

(b) The Secretary shall be custodian of the Seal of the Corporation and of all books, papers, records and other documents belonging to the Corporation.

(c) The Secretary shall perform such other administrative duties and have such other authority as may be designated by the President and shall be responsible for the maintenance of proper legality in all actions and undertakings of the Corporation.

(d) The President of the Corporation may appoint an Assistant Secretary of the Corporation, whose duty it shall be to assist the Secretary generally in the performance of his duties, and in the absence of the Secretary, the Assistant Secretary shall assume the duties of the Secretary.

8. (a) There shall be a Comptroller of the Corporation who shall be appointed by and hold office during the pleasure of the Board. The Comptroller shall maintain records of all property of the Corporation and, subject to paragraph 15 hereof, shall receive, disburse and have custody of all funds and securities belonging to the Corporation and shall keep full and accurate accounts of receipts, disbursements and all financial transactions, in books belonging to the Corporation, and shall deposit all monies, securities, negotiable instruments and other such property in the name and to the credit of the Corporation in such depository as may be designated or approved from time to time by the Board.

(b) The Comptroller shall disburse the funds of the Corporation in such manner as may be requisite for the conduct of the business of the Corporation, taking proper vouchers for such disbursements, and shall render to the President and to the Board, as may be required, an account of his transactions as Comptroller and of the financial position of the Corporation. He shall perform such other duties as may, from time to time, be determined by the Board and subject to the Direction of the Board shall have, generally, control of all funds in the Corporation's hands either as trustee or otherwise.

(c) The Board may require the Comptroller to give the Corporation a bond in a sum and with either one or more sureties as may be satisfactory to the Board for the faithful performance of the duties of his office and for the restoration to the Corporation in the event of his death, resignation, retirement or removal from office of all books, papers, vouchers, money and other property of whatsoever kind in his possession or under his control belonging to the Corporation.

(*d*) The President of the Corporation may appoint an Assistant Comptroller of the Corporation, whose duty it shall be to assist the Comptroller generally in the performance of his duties, and in the absence of the Comptroller the Assistant Comptroller shall assume the duties of the Comptroller.

9. (*a*) The employment, suspension, dismissal and re-employment of the officers and other employees of the Corporation shall be in the discretion of the President; provided that no appointment of an officer or employee whose salary exceeds $5,000.00 per annum shall be confirmed until the Board has had an opportunity to consider the proposed appointment and to indicate its desire with respect thereto.

(*b*) No officer or employee of the Corporation shall engage in any other work for remuneration or profit unless authorized by the President.

10. No public statement shall be made in speech or writing purporting to be in the name of the Corporation, and no officer or employee shall be a candidate for any public elective office, or support a candidate for any such office by public speech or writing, without the express authority of the President or the Board.

11. No member of the Board or any officer or employee of the Corporation shall derive any profit from or in any way be pecuniarly interested in or be concerned directly or indirectly in a pecuniary way in any contract which shall be entered into by the Corporation.

12. All letters applying for employment or recommending persons for appointment in the Corporation shall be forwarded to the President and be kept by him at the disposal of the Board.

13. The Board shall determine what officers and employees of the Corporation shall be bonded and all matters relative thereto.

14. (*a*) All formal contracts, leases and other formal documents requiring execution under the seal of the Corporation, and all other documents requiring such execution, shall be signed by any two of the following, namely:

the President;
the Managing Director;
a Director (other than the President and the Managing Director);
the Comptroller;
the Secretary;

provided, however, that the President may, subject to paragraph 15 hereof, authorize in writing any other officer or employee of the Corporation or of the Department of Defence Production to sign the documents hereinbefore in this paragraph 14 referred to, along with any one of the above-mentioned persons, and the President may at any time revoke such authorization.

(*b*) In respect of invitations to tender, agreements, purchase orders and amendments thereto, tenders, terminations of contract, bills of lading, other documents of title and other informal documents not under seal, the President may, subject to paragraph 15 hereof, authorize any officers or employees of the Corporation and of the Department of Defence Production to sign the same on behalf of the Corporation either alone or together with any other such officers or employees and the President may at any time revoke any such authorization.

15. The Board shall from time to time by resolution confirm the banks in which the necessary bank accounts of the Corporation shall be opened and maintained, and shall also from time to time by resolution designate the person or persons who shall have authority to draw and accept drafts, and to sign

cheques, promissory notes, bills of exchange, letters of credit and orders for money in respect of such accounts, including endorsements for deposit to the Corporation's credit.

16. By-Laws Nos. 1, 2, 3 and 4 of the Corporation, enacted on the 3rd day of May, 1946, the 13th day of August, 1946, the 30th day of May, 1947 and the 29th day of September, 1950, respectively, are superseded by this By-Law.

(Sgd) W. D. LOW,
President.

(Sgd) F. F. WADDELL,
Secretary.

Ottawa, Ontario,
May 9, 1951.

BYLAW No. 6

BE IT ENACTED by the Board of Directors of Canadian Commercial Corporation as Bylaw No. 6 of the Corporation, as follows:

Paragraph 14 of Bylaw No. 5 of Canadian Commercial Corporation is deleted and the following substituted therefor:

"14. (*a*) A bid, proposal or quotation on behalf of the Corporation will be signed by any one of the following:

Mr. M. H. Lamoureux
Col. B. Lake
Mr. D. R. Beardshaw
Mr. D. C. Thom
Mrs. E. M. Lamb
Mr. J. J. Tevlin
Mr. D. H. Gilchrist
Mr. A. K. Aspden
Miss E. M. Heath

(*b*) A contract between Canadian Commercial Corporation and a foreign government, or between Canadian Commercial Corporation and a domestic supplier, where the estimated value exceeds $50,000 and a contract of any value of it is a formal contract requiring execution under the seal of Corporation will be signed by any one of the following:

Mr. M. H. Lamoureux
A Director of the Corporation
Mr. D. C. Thom
Mr. F. F. Waddell
Mr. G. F. Wevill
Mr. J. J. Tevlin
Col. B. Lake
Mr. J. P. Stirling

together with the Director or Deputy Director or Assistant Director of the contracting branch concerned.

(*c*) A contract between Canadian Commercial Corparation and a foreign government, or between Canadian Commercial Corporation and a domestic supplier, where the estimated value does not exceed $50,000 and execution under the seal of the Corporation is not required will be signed by one of the officers specified in sub-paragraph (*b*) or by an officer of the contracting

branch named in Section 1 of Chapter 8 of the Departmental Manual of the Department of Defence Production, which Section deals with authority to sign contracts and amendments in accordance with the financial limitations prescribed in that Section.

(*d*) Subject to sub-paragraphs (*a*), (*b*) and (*c*) of this paragraph 14 and to paragraph 15 hereof, the President may authorize any officers or employees of the Corporation and of the Department of Defence Production to sign, either alone or together with any other such officer or employee, miscellaneous documents including bills of lading, terminations of contracts, Invitations to Tender, certificates of cost or pricing data, requisitions, releases, internal administrative documents and similar documents whether or not they are required to be under seal; and the President may at any time revoke any such authorization.

(*e*) Notwithstanding anything contained in this paragraph 14, in cases of urgency where a United States Military Department or other government requests, or where it is expedient, that Canadian Commercial Corporation sign a contract in the United States or other country, the President may designate any one of the signing officers of Canadian Commercial Corporation or of the Department of Defence Production to sign a specific contract in the relevant country and, for this purpose, to carry with him the corporate seal and to affix the seal to the contract at the time of signing."

Enacted by Resolution of the Board of Directors of Canadian Commercial Corporation on the 19th day of March, 1963.

(Sgd.) M. H. Lamoureux,
President

(Sgd.) F. F. Waddell,
Secretary

BYLAW No. 7

BEING A GENERAL BYLAW OF CANADIAN COMMERCIAL CORPORATION.

BE IT ENACTED BY THE BOARD OF CANADIAN COMMERCIAL CORPORATION, AS A BYLAW OF THE CORPORATION AS FOLLOWS:

1. All Bylaws of the Corporation shall be subject to the provisions of the Canadian Commercial Corporation Act, as amended, and the definitions contained in the said Act shall apply.

2. The Seal, an impression of which is made in the margin hereof, is the Seal of the Corporation.

3. The fiscal year of the Corporation shall be the twelve months ending on the 31st day of March in each year.

4. (*a*) Notices of meetings of the Board shall be given to each member thereof by delivering or mailing the same to his usual office address. Failure to give or receive notice due to inadvertence shall not invalidate any meeting, and the presence of any member of the Board at the place and time of the meeting shall be considered waiver of notice to such member.

(*b*) Each member of the Board present at any meeting thereof shall have one vote with respect to any question arising at such meeting and the decision of the Board shall be in accordance with the majority of the votes.

(*c*) The Board shall cause to be entered into one or more books provided for the purpose, the minutes recording the proceedings and giving the names of those present at meetings of the Board.

5. There shall be a Secretary of the Corporation who shall be appointed by and hold office during the pleasure of the Board. It shall be the duty of the Secretary to issue notices of meetings of the Board and to attend all such meetings and act as Secretary thereof. The Secretary shall record all votes and the minutes of all proceedings taken and had at such meetings in books of the Corporation to be kept for that purpose, and shall be the custodian of the Seal of the Corporation.

6. (*a*) There shall be a Comptroller of the Corporation who shall be appointed by and hold office during the pleasure of the Board. The Comptroller shall maintain records of all property of the Corporation and, subject to Paragraph 11 hereof, shall receive, disburse and have custody of all funds and securities belonging to the Corporation and shall keep full and accurate accounts of receipts, disbursements and all financial transactions, in books belonging to the Corporation, and shall deposit all monies, securities, negotiable instruments and other such property in the name and to the credit of the Corporation in such depository as may be approved from time to time by the Minister of Defence Production.

(*b*) The Comptroller shall disburse the funds of, or in the custody of, the corporation in such manner as may be requisite for the conduct of business of the Corporation, taking proper vouchers for such disbursements, and shall render to the Board as may be required, an account of his transactions as comptroller and of the financial position of the Corporation. He shall perform such other duties as may, from time to time, be determined by the Board and subject to the Direction of the Board shall have, generally, control of all funds in the Corporation's hands either as trustee or otherwise.

(*c*) The Comptroller shall, from time to time, prepare and deliver or cause to be prepared and delivered such reports of the finances of the Corporation as are called for by the Canadian Commercial Corporation Act and as the Board or the Minister of Defence Production may request.

7. The Board, or the Minister of Defence Production, may from time to time request any officers of the Corporation or of the Department to prepare such reports of the activities or proposed activities of the Corporation or reports relating thereto as the Board, or the Minister, may require, and such officer shall forthwith comply with such requests.

8. No public statement shall be made in speech or writing purporting to be in the name of the Corporation, and no officer or employee shall be a candidate for any public elective office, or support a candidate for any such office by public speech or writing, without the express authority of the Board.

9. No member of the Board or any officer or employee of the Corporation shall derive any profit from or in any way be pecuniarly interested in or be concerned directly or indirectly in a pecuniary way in any contract or transaction which shall be entered into by the Corporation.

10. All bids, proposals or quotations to be submitted by the Corporation and all contracts and agreements between the Corporation and other governments or other parties; and all invitations to tender, contracts, agreements, purchase orders and amendments thereto between the Corporation and its suppliers; and all miscellaneous documents including bills of lading, terminations of contracts, certificates of cost or pricing data, requisitions, releases, internal administrative documents and similar documents, shall be signed by one or more persons as may be designated from time to time by the Minister of Defence Production, who may also designate those contracts and documents which are to bear the Seal of the Corporation.

11. The banks in which the necessary bank accounts of the Corporation be opened and maintained shall be such banks as the Minister of Defence Production may from time to time approve; and the person or persons who shall be opened and maintained shall be sucs banks as tne Minister of Defence notes, bills of exchange, letters of credit and orders for money in respect of such accounts and in respect of the transactions of the Corporation, including documents for deposit to the Corporation's credit, shall be such person or persons as may be designated from time to time by the Minister of Defence Production.

12. Bylaws 5 and 6 of the Corporation enacted on the 9th day of May, 1951, and the 19th day of March, 1961, respectively, are superseded by this Bylaw.

Dated the 18th day of December, 1963.

Sgd. M. H. Lamoureux,
President

Sgd. F. F. Waddell,
Secretary

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964-1965

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 26

THURSDAY, MARCH 25, 1965

Respecting the

NAVAL SHIPBUILDING PROGRAMME

WITNESSES:

The Honourable Paul T. Hellyer, Minister of National Defence; Commodore John A. Charles, R.C.N., Director General of Force Development; and Commodore S. Mathwin Davis, R.C.N., Director General Ships.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1965

21666—1

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. David G. Hahn

Vice Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),	Langlois,	Martineau,
Béchard,	Laniel,	Matheson,
Brewin,	Lessard (*Lac-Saint-Jean*),	McMillan,
Deachman,	Lloyd,	McNulty,
Fane,	MacInnis,	Pilon,
Groos,	MacLean,	Smith,
Harkness,	MacRae,	Temple,
		Winch—24.

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

MINUTES OF PROCEEDINGS

THURSDAY, March 25, 1965
(40)

The Special Committee on Defence met at 9:45 a.m. this day. The Chairman, Mr. David C. Hahn, presided.

Members present: Messrs. Béchard, Deachman, Fane, Groos, Hahn, Harkness, Lambert, Laniel, Lloyd, MacLean, Matheson, McMillan, Pilon, Smith, Temple and Winch (16).

In attendance: Honourable Paul T. Hellyer, Minister of National Defence; Honourable Léo Cadieux, Associate Minister of National Defence; Commodore John A Charles, R.C.N., Director General of Force Development; and Commodore S. Mathwin Davis, R.C.N., Director General—Ships.

The Chairman presented the Thirteenth Report of the Steering Subcommittee as follows:

Your Subcommittee recommends:

1. That the Committee meet on Thursday, March 25th to receive a briefing on the Naval Shipbuilding Programme.
2. That the Committee meet on Tuesday, March 30th to receive a briefing on the integrated Armed Forces Recruiting Programme.
3. That the Committee meet on Thursday, April 1st to receive a briefing on the Allied Command Europe mobile force.
4. That future meetings of the Committee be held to receive briefings on:
   (*a*) the Construction Engineering Programme for the Armed Forces
   (*b*) the integration of Armed Forces Communications
   (*c*) the Special Service Force
   (*d*) the Land Forces Equipment Programme
   (*e*) the Airforce Procurement Programme
   (*f*) Developments in the field of Air-transportability of modern forces
   (*g*) a Report by Minister of National Defence on the progress of integration of the Armed Forces.
5. That the Committee make arrangements, in the future, to visit the Defence Research Board establishment at Shirley's Bay.

On motion of Mr. Deachman, seconded by Mr. Béchard,

Resolved,—That the Thirteenth Report of the Steering Subcommittee be adopted.

The Honourable Paul T. Hellyer, the Minister of National Defence, introduced to the Committee the Associate Minister of National Defence, the Honourable Léo Cadieux.

Commodore Charles was called and he read a prepared statement respecting the Naval Shipbuilding Programme.

21666—1½

Commodore Davis explained the technical, production, and financial considerations involved in this programme.

The witnesses were questioned on their statements and on related matters.

At 12:10 p.m. the Committee adjourned until Tuesday, March 30, 1965.

E. W. Innes,
Clerk of the Committee.

THURSDAY, March 25, 1965.

EVIDENCE

The CHAIRMAN: Gentlemen, we have a quorum. We have lined up a programme which will continue on into the next session.

At this time I will present to you the steering committee's report, which met yesterday, outlining our future programme. The report is as follows:

Your Subcommittee recommends:

1. That the Committee meet on Thursday, March 25 to receive a briefing on the Naval Shipbuilding Programme.
2. That the Committee meet on Tuseday, March 30 to receive a briefing on the integrated Armed Forces Recruiting Programme.
3. That the Committee meet on Thursday, April 1, to receive a briefing on the Allied Command Europe mobile force.
4. That future meetings of the Committee be held to receive briefings on:
   (*a*) the Construction Engineering Programme for the Armed Forces
   (*b*) the integration of Armed Forces Communications
   (*c*) the Special Service Force
   (*d*) the Land Forces Equipment Programme
   (*e*) the Airforce Procurement Programme
   (*f*) Developments in the field of Air-transportability of modern forces
   (*g*) a Report by Minister of National Defence on the progress of integration of the Armed Forces
5. That the Committee make arrangements, in the future, to visit the Defence Research Board establishment at Shirleys Bay.

I would like to give a brief word of explanation at this time. A number of these future briefings are not yet prepared but they will be available for the next session. I think it is important to put these on the record at this time so that we will have our programme outlined in advance of the formation of a new committee.

I would like a motion for the acceptance of the report.

Mr. DEACHMAN: I so move.

Mr. BÉCHARD: I second the motion.

Mr. WINCH: Mr. Chairman, will there be a recommendation made for the formulation of this committee next session so that this work can be continued?

The CHAIRMAN: Yes. Before the end of this session we will have to submit a Report to the House. The gist of the report will be that we continue with our work. We will be asking that the House consider constituting this committee again, with the same membership if possible. And, we will be requesting that the Minutes and Proceedings of this session be referred to the new committee to be established. We will submit that report for your consideration at our last meeting this session.

Is the motion moved by Mr. Deachman and seconded by Mr. Béchard agreed to?

Motion agreed to.

The CHAIRMAN: The briefing this morning is on the Naval Shipbuilding Programme. Before we proceed to the statement by officers of the Navy the Minister of National Defence, Mr Hellyer, would like to introduce the new Associate Minister.

Hon. PAUL HELLYER (*Minister of National Defence*): Mr. Chairman and gentlemen, it is indeed a pleasure to introduce to you the Associate Minister of National Defence, Mr. Cadieux.

You all know Mr. Cadieux and you know that he is a very able person. Also, I am sure you all know that he has a wonderful sense of humor, which should ably assist him in this most difficult assignment.

Mr WINCH: Are you implying, Mr. Minister, that he needs a sense of humour when appearing before this committee?

Mr. HELLYER: I am not too surprised that you took that inference from what I said. But, it is indeed a pleasure to have him in the Department. I know he will make a real contribution not only to the department but to the deliberations of this committee.

The briefing this morning is on the naval shipbuilding programme. It will be conducted by Commodore Charles.

The CHAIRMAN: I believe all members have received copies of the brief that has been presented. If not, we will see that you get one.

Mr. BÉCHARD: Mr. Chairman, at this time I want to congratulate the Minister of National Defence and his Associate Minister, as well as all members of the department, for their respect of the two official languages, in making available this morning all documents in both French and English.

Mr. HELLYER: Merci, monsieur.

The CHAIRMAN: Our first briefer this morning will be Commodore John A. Charles, R.C.N., Director-General of Force Development.

Commodore JOHN A. CHARLES, *R.C.N.* (*Director-General of Force Development*): Mr. Chairman and gentlemen.

The purpose of our presentation today is to describe the programme for the construction and conversion of ships for our maritime force.

To assist in this presentation we will use a series of charts which we will place on the easel. A copy of all these charts is included in the brochures available to you.

It is my particular task to outline the major programmes to you and to describe why we are building particular types of ships and in the numbers called for and why we are converting other ships. I intend staying within what is generally called the "military staff requirements". Commodore Davis who will follow me, will speak on the technical aspects of the programme.

It is suggested, Mr. Chairman, if convenient, that questions be raised at the end of the briefing.

Force Structure

The white paper on defence indicated in part that:

(*a*) Canadian maritime forces would continue in the anti-submarine role and a modern and well equipped fleet would be maintained; and

(*b*) that a modest additional sea lift for peace-keeping operations would be acquired.

Present ASW Capability

To establish the nature of a future ship building programme which will enable us to maintain an effective anti-submarine force we

must first examine our present inventory of ASW vessels and the period of time that they will be in operational service. We have available at this time 1 aircraft carrier and 38 ASW vessels of which 18 were laid down before the end of world war II. We also have 3 "O" class submarines now under construction. Taking into account a normal ship life of twenty to twenty-five years, it is clear that of our present force only the carrier, twenty destroyer escorts and 3 submarines will be in operational service in the early 1970's. During the life span of these ships there will be continuous technological advances in the weapons of war of all nations. To maintain our present effectiveness against submarines of the future and provide defence against surface and air attacks which can be expected during this time period our ships will have to be kept up to date with the most effective fighting equipment that is available.

Requirement

Therefore there is a requirement for a ship construction and conversion programme which will:

(*a*) Provide at an early date new ASW ships as a replacement for those reaching the end of their life during the next 5 years.
(*b*) Provide existing ships with improved ASW capability.
(*c*) Provide the fleet with defence against future air and surface attack.

The Programme

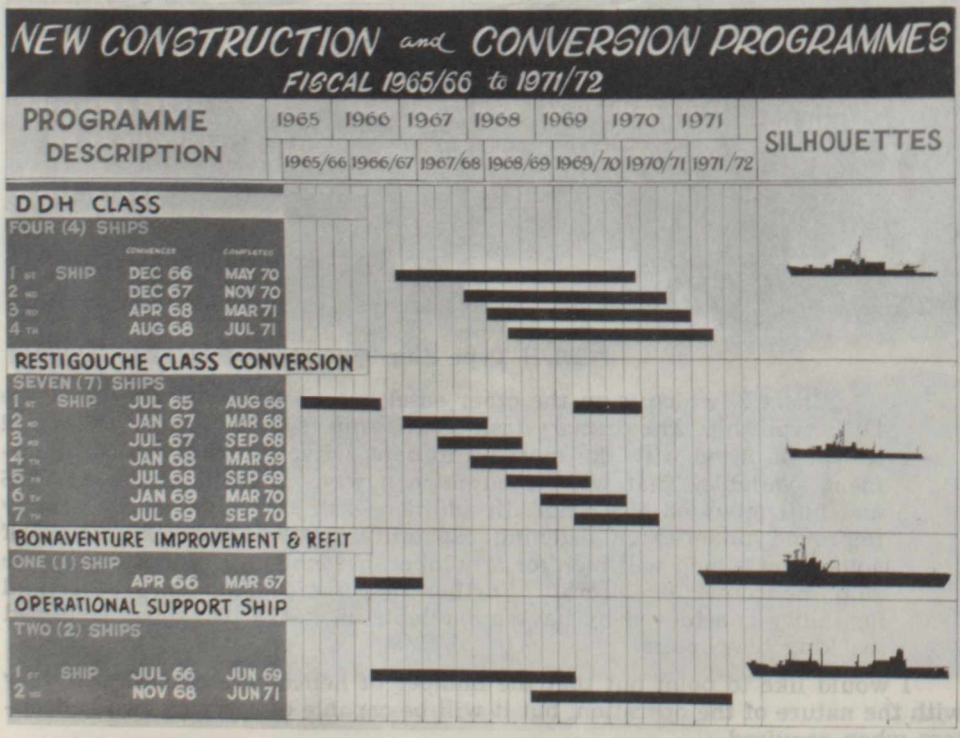
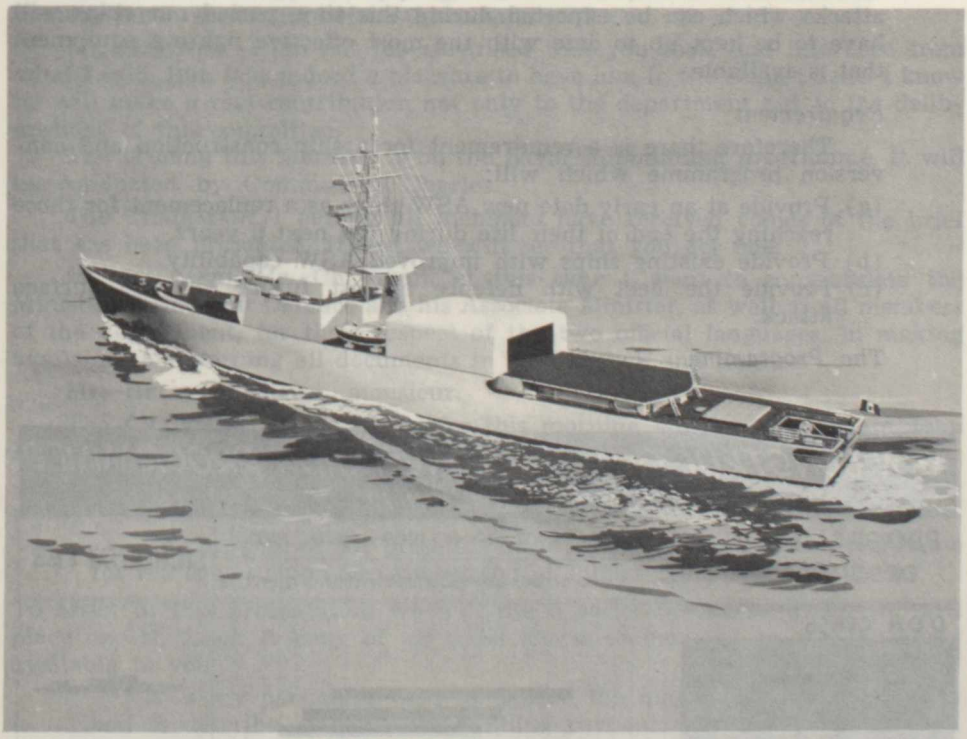


Chart 1, which is on the easel gives our current programme for the construction of new ships and conversion of existing ships to improve

their ASW capability. You will see that we plan to build four helicopter carrying destroyers, to which we have given the short title of DDH. We have scheduled a conversion programme to improve the ASW capability of the 7 Restigouche class destroyer escorts and we plan a major refit for *Bonaventure* commencing in 1966. We also intend to build 2 operational support ships as soon as possible.

I would like to give you a more detailed description of the improved capabilities which will result from this programme.

DDH Characteristics



DDH Type Ship

Chart 2, which is on the other easel is a photographic sketch of the DDH type ship. The primary task of this ship is hunting submarines and it will be fitted with the most up to date active sonar detection equipment available. That will be our own newly designed integrated VDS and hull mounted 505 sonar. In addition each ship will have a greatly improved underwater listening capability through the installation of equipment which will monitor a number of sonobuoys dropped from the ship, helicopter or aircraft. Further detection range and operational flexibility is achieved by having available on board two sonar equipped sea king helicopters.

I would like to point out that the number of helicopters carried will vary with the nature of the operation, but it will be capable of carrying two helicopters when required.

The ship and helicopters are equipped with underwater weapons capable of dealing with fast and deep submarines.

The hull will be increased in size to provide space for the fitting of a missile system for self defence against air attack. The ship will carry a 5″ gun for defence against surface attack and for support of land operations if required.

The question may be asked why we do not make our ASW destroyers go as fast as a nuclear submarine. Nuclear submarines are capable at the present time of running up to 35 knots. You will appreciate the problem of doing this in a destroyer in the north Atlantic in the winter. With a helicopter in a 27 knot ship we are satisfied that it will be possible for the destroyer to maintain contact with a 35 knot submarine which continues to move at high speed for a period of up to 10 hours, unassisted by outside forces. This would give plenty of time to call in additional assistance if the task is simply to track the submarine, or to carry out effective attacks in event of hostilities.

It may be worth mentioning here that in my opinion the last thing nuclear submarine commanders are likely to do is rush along at 35 knots in a tactical situation for any extended period. At any speed over 20 knots they are detectable at extremely long ranges, and, moreover, are blinded by the noise they generate into their own detection equipment. A blind and noisy submarine is a very vulnerable target to any type of ASW force.

I will not go on with the techniques of hunting nuclear submarines but we feel that this DDH design will provide a versatile up to date ASW ship which will hunt nuclear submarines successfully and will have sufficient flexibility to provide an appropriate measure of self defence and ability to support peacekeeping operations.

Restigouche Conversion Programme

RESTIGOUCHE Class Destroyer

The Restigouche Class conversion programme provides for updating of the ASW capability of seven ships of this class. This involves the fitting of the same

sonar system and equipment that is being installed in the DDHs and which I described before. These ships will also be provided with a long range quick reaction anti submarine rocket weapon called ASROC. This will provide these ships with an ability to deal with nuclear submarines in the 1970's. The photograph on the chart is an actual photograph of the *Restigouche,* with the modifications made in accordance with our conversion programme.

The ASROC is a fully operational weapon system in use in the USN which can fire a homing torpedo or a depth charge to ranges of up to 5 miles. This means we will have the ability to immediately attack our sonar detections at long ranges in all weather. We envisage employing an ASROC fitted ship in company with a helicoper fitted ship to provide an ASW force with the maximum capability and flexibility to detect and attack submarines.

Bonaventure Improvement and Refit

HMCS BONAVENTURE

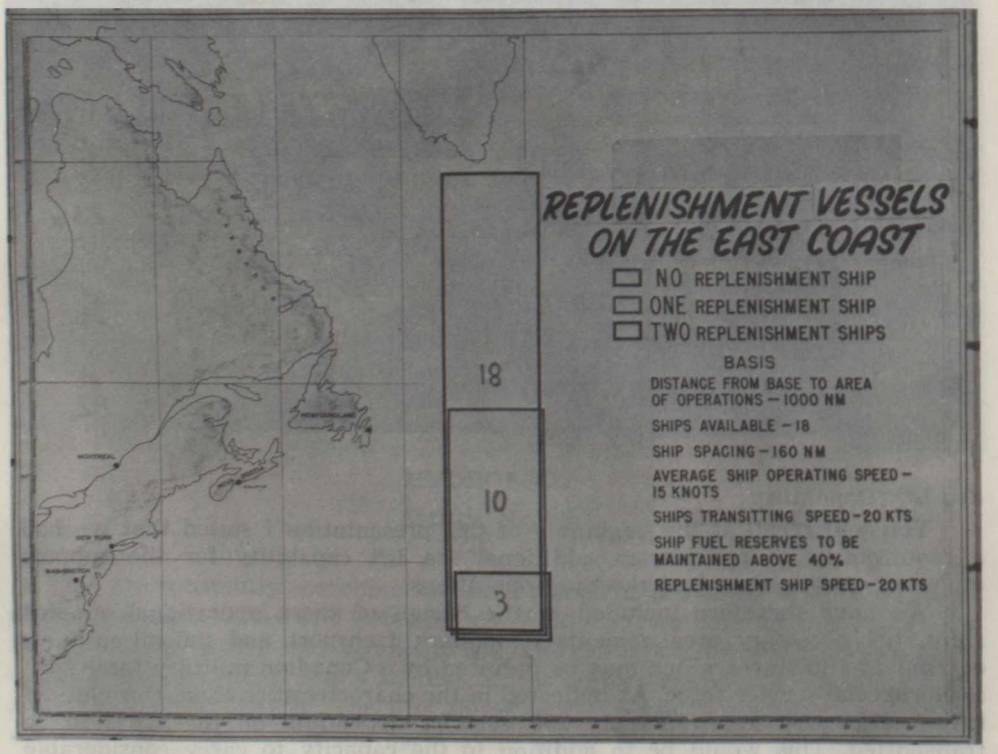
Bonaventure, which is next on the programme chart, is scheduled to go into normal half life refit in the spring of 1966 and during this refit it is planned to up date some of the systems on board. The main change in the ship's characteristics is in the long range radar. With the fitting of the new radar we are able to make a significant improvement in our ability to operate and control ASW aircraft and helicopters.

It may be worthwhile to remark on *Bonaventure's* operational capability which has been repeatedly demonstrated in tactical exercises. In general terms, with a load of sixteen S2F aircraft, she is capable of conducting effective ASW and surface surveillance and attack over a large area of the ocean and with

refuelling at sea this effort can be maintained for a continuous 30 days. Five aircraft can be kept airborne continuously, and this ASW effort can, of course, be moved to any part of the world where it is required. A carrier as compared to land-based aircraft is most effiectively employed when the area of operations is more than about 600 miles from a shore air base.

Operational Support Ships

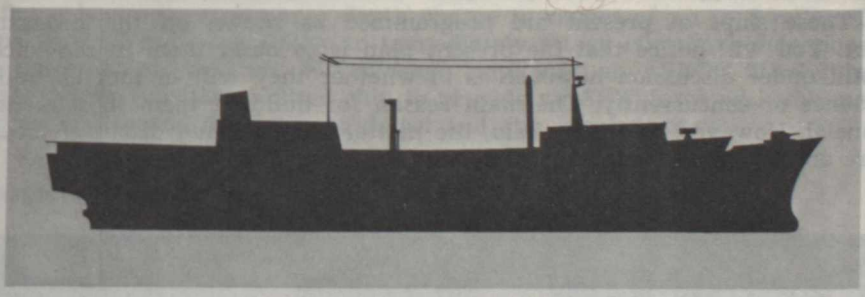
These ships at present are programmed as shown on the programme chart. You will notice that the present plan is to build them in sequence. It is still under discussion however as to whether they will in fact be built in sequence or concurrently. The main reason for building them in sequence is financial. However, as I have said, the matter is still being discussed because there are savings to be made if the ships are built more or less together.



I would like to explain how these support ships improve our operational ASW capability. The limiting factor in the time our forces can maintain patrol in a surveillance area is fuel available. Taking the hypothetical case—and, I emphasize that this is a hypothetical case—shown in Chart 5 of 18 ships on patrol 1000 miles from Halifax it will be seen that because of transit time involved and if no on station refuelling capability is available only 3 ships can be maintained constantly on patrol and these would give a ASW surveillance of the area enclosed by the yellow line. If one operational support ship is available for at sea refuelling the number of ships on station would increase to 10 and the area covered would be that enclosed in the blue line. If two operational support ships are available 18 ships can be maintained constantly and cover the area within the red line. One operational support ship based in Esquimalt could maintain the ASW ships presently allocated

to the Pacific command constantly on AS patrol in our area of responsibility. Therefore to make the maximum use of our present and planned operational ASW forces we require 3 operational support ships. At the present we have one in the *Provider*.

OPERATIONAL SUPPORT SHIP



REPLENISHMENT ROLE

PETROLEUM PRODUCTS	
FURNACE FUEL OIL	- 11,000 TONS
DIESEL OIL	- 450 TONS
AVIATION FUEL	- 760 TONS
LUBRICATING OILS	- 30 TONS
AMMUNITION	- 315 TONS
REPLACEMENT HELICOPTERS	- 3 CHSS 2
STORES	537 TONS
PROVISIONS	403 TONS

MILITARY SEA-LIFT ROLE (TYPICAL)

ARMY HELICOPTERS	- 2
ARMD PERS CARRIERS	- 12
SCOUT CARS	- 23
TRUCKS 2½ TON	- 8
" ¾ "	- 7
" ¼ "	- 36
TRAILERS 1½ "	- 1
" ¾ "	- 4
" ¼ "	- 82

Sea Lift Capability

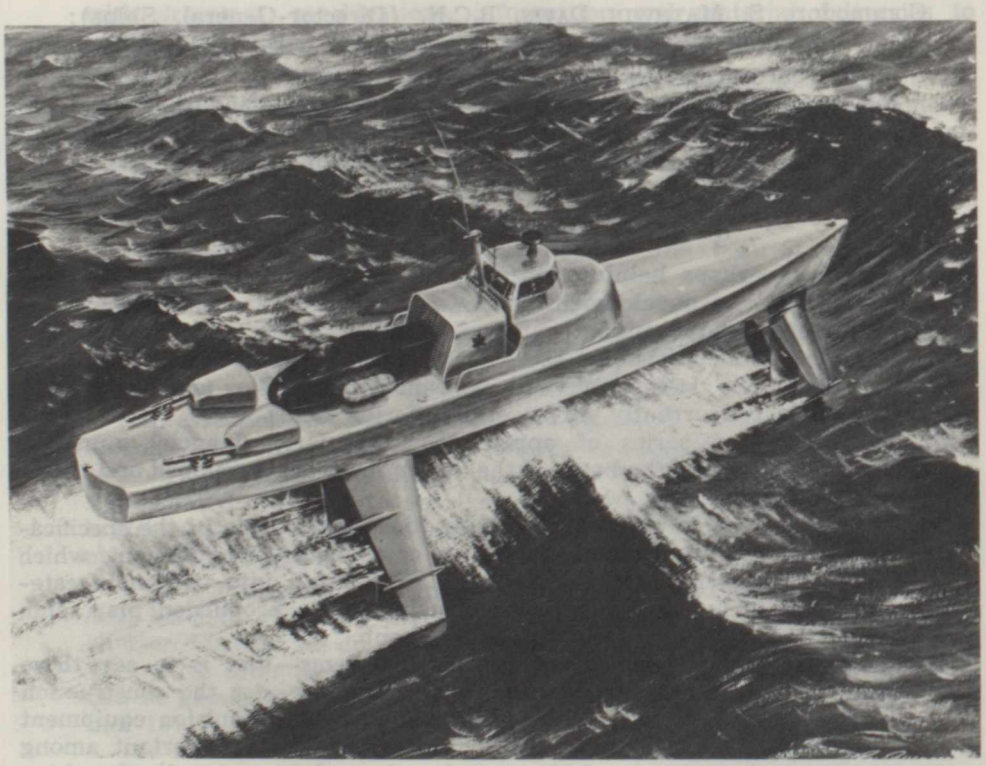
You will recall at the beginning of this presentation I stated that we had a requirement to provide an additional sea lift capability for the support of forces employed in peacekeeping operations.

We have therefore included in the design of these operational support ships, the necessary arrangements to embark transport and unload military equipment and stores which may be required by a Canadian military force such as the special service force. As indicated in the characteristics chart this class of ship could carry approximately 200 vehicles depending on the types to be transported. This would be in addition to the capacity to carry considerable tonnage of fuel, ammunition and stores shown in the left hand column of the chart. It is evident that this ship would also provide a self-contained Canadian supply base and medical facility for troops ashore in some country where local supply may be inadequate. To give the operational support ship self protection against small local surface and air attack we intend to fit a 3" gun and make provision for the fitting of the same type of missile system that will be fitted in the new DDHs.

It should be noted that two of these ships with *Provider* and *Bonaventure* could carry up to 7000 tons of military stores to any place in the world and therefore will provide the necessary sea lift to meet our peacekeeping commitments.

There are two other ship programmes not shown in chart 1 which are of considerable import.

Hydrofoil Programme



HYDROFOIL
(Artist's Sketch)

We are constantly searching for some means of providing a more effective submarine surveillance and detection capability at less cost. In this search we feel that the hydrofoil may be able to combine the capability of an AS destroyer escort and a helicopter into a smaller, a less costly vehicle and requiring considerably less manpower. The first thing to determine is whether a hydrofoil can effectively operate in the open ocean under all weather conditions. After trials with scale models we are now developing and producing a prototype ocean going ASW hydrofoil which should provide the final answer to the question on seagoing capability by the end of 1967. If this prototype is successful, and we are confident that it will be, there will be a requirement to build a number of these vessels.

Submarine Programme

At the present time we have one training submarine, H.M.C.S. *Grilse*, on the west coast which is of world war II vintage and which will reach the end of her useful life in the early 1970's. We are presently actively investigating means of providing a more modern submarine to replace H.M.C.S. *Grilse* and which will also contribute to our own anti-submarine capability.

I will now ask Commodore Davis to explain some of the technical aspects of this shipbuilding and conversion programme.

Commodore S. MATHWIN DAVIS, R.C.N. (Director-General, Ships):

You have heard from Commodore Charles of the major constituents in the current programme. I should like to speak for a moment on the technical, production and financial implications involved—the considerations that must weigh with the industry, and ourselves serving the chief of logistics, engineering and development.

WARSHIP DESIGN AND CONSTRUCTION

It is perhaps helpful, initially, to review generally the activities involved in the development of a warship design and the construction of a programme of major war vessels. Here, it must be observed that from the enunciation of a set of ship characteristics, which essentially is a document describing what is wanted in a ship, actions proceed, sometimes concurrently, in several differing fields.

Initially, a series of approvals, particularly financial, must be obtained; similarly the bases of the design itself are developed and themselves approved.

Further, at an early stage, preparations must begin of the specifications and contract demands for major components of equipment, which are bought by DDP on a class basis. These fall into two main categories—those for the ship itself, principally the propulsion plan, and, concurrently, items of fighting equipment.

Investigation shows that the 'pacing' items—that is to say those which govern the overall speed of a programme—for the construction programme are, in fact, major components of the propulsion equipment —turbines, gearing, boilers, etc. These are the most important among several score of items which must be planned to arrive in the shipyards when the hulls are ready to receive them. They gather this importance from the considerable period necessary for their specification, procurement and manufacture. This is, in fact, considerably in excess of the time necessary to construct the hull to the point at which the items should be appropriately installed.

Thus, when we speak of starting a building programme for a class of destroyer escort type vessels we must, of necessity, comprehend that the start is made in industrial plants rather than in the yards themselves.

While procurement and manufacture of items of equipment are under way, work can proceed on the design, drawings and specifications of the vessel itself, so that construction can commence as required by the overall programme.

DDH's

In the light of the above observations I would now like to deal in more detail with the DDH's, which is the sketch you see here.

Treasury Board approval has been obtained for this programme and the first specifications and contract demands for major components have been passed to DDP, while others will follow in an orderly and planned fashion.

In dealing with the programme as a whole we are benefitting from our growing experience, and that of our colleagues in the air force, with programming techniques. Scheduling and planning is being given particular prominence and it is our hope and anticipation that the first contract can be let to a shipyard by December 1966.

I should like to emphasize here that a 'symbolic' keel laying could take place much before that date. All concerned, however, are determined not to start work in the shipyards until these are fully supplied with drawings, specifications, information and material deliveries to ensure a continued and economic application of manpower.

The basic design of DDH's is now firm and we are proceeding with its detailed development. In order to carry the additional armament, to meet the demands of exacting stability criteria and to provide a margin for future growth, the vessels will be somewhat larger than earlier destroyer escorts. This larger size will also enable them to carry more fuel with an increased endurance.

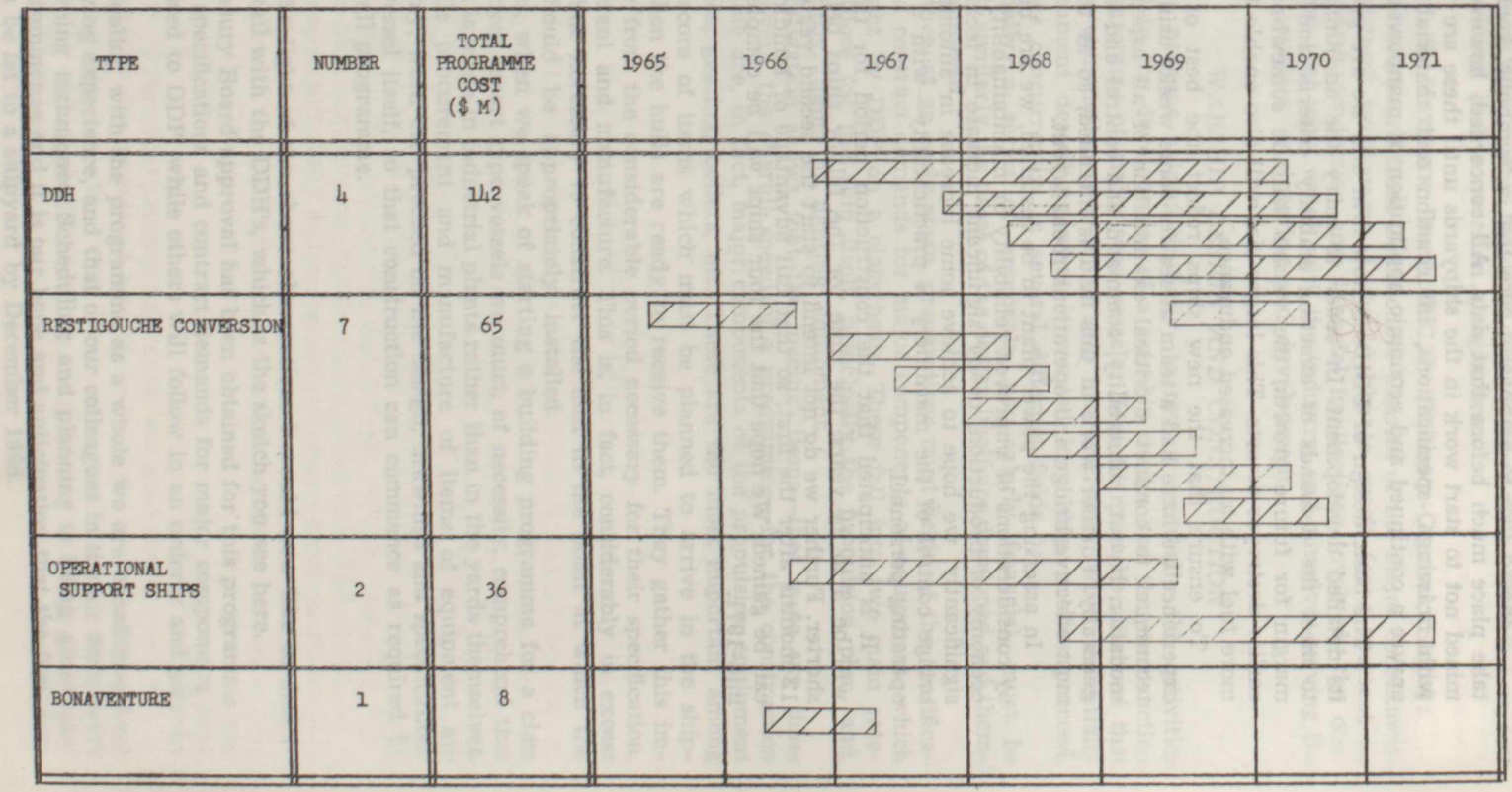
To ensure that the new ships reflect the best of our current experience we have had a team at sea for some weeks using work study techniques to conduct a critical examination of all aspects of accommodation layout, habitability, command and control and ship operation generally. Further work in this field is intended, so as to produce the most effective bridge and operations room layout.

In assessing the power plant to be installed, we are being governed by considerations of improved reliability or maintainability, by ease and economy of production, or by significant increase in technology. Here, significantly, we hope to achieve some increase in automation, making bridge control of the machinery a practicability—with a reduction of operating personnel.

It is anticipated that the construction period for the first vessel will be 3 to 3½ years, the time for the follow ships being somewhat shorter. Further we do not intend to start the second vessel until about 12 months after the first, so that full advantage of building experience can be gained. We hope that the four ships will be completed by about mid-1971.

APPROVED BUILDING AND CONVERSION PROGRAMME

APPROVED BUILDING AND CONVERSION PROGRAMME



Operational Support Ships

Here we are concerned with what is fundamentally an improved *Provider*. This vessel has been the subject of a good deal of comment from time to time and I am glad to have this opportunity to dwell for a moment on her good points.

HMCS PROVIDER

We have indeed had technical difficulties with *Provider*, but these were, in large measure, a reflection of the demanding tasks we have set ourselves. There are very few fleet replenishment vessels in any navy which attempt the demanding and varied replenishment tasks of *Provider* in such a relatively small vessel. It was therefore, by no means surprising that we should have a number of technical problems to resolve in ensuring that the equipment, and the men who operate it, meet the exacting standards we are seeking. Too often it is the problems that are highlighted—not the concerted effort that goes into their resolution.

I was, however, fortunate to be at sea in *Provider* during early December in one of the worst Atlantic storms of this century. She behaved splendidly at sea and shortly after this, still in adverse conditions, refuelled two DDE's simultaneously while proceeding at 18 knots in pouring rain and, ultimately, in darkness. This brings an encouraging sense of achievement.

However—there is no doubt that we have had our troubles, some of them are still with us and are receiving concentrated technical consideration, about whose outcome we are optimistic. Indeed *Provider* and *St. Laurent* recently gave a most successful replenishment demonstration in the Barbados for a group of N.A.T.O. and commonwealth naval attachés and our overall replenishment effort is highly regarded by the U.S.N.

There is, however, much to be achieved in preparing a comprehensive set of contract documents for tender purposes, and this will occupy us for most of this year.

Treasury board approval for this programme has been obtained, we hope that the contract for the first vessel can be let in mid 1966 and, as you have heard, the timing for the second vessel will be reviewed.

In our design work we recognize, of course, the particular importance of obtaining the maximum benefit from *Provider*'s experience and to this end we have mounted a major work study of all her operational activities—including the experience gained during a recent exercise in an army support role. In addition, we are employing consultants to engage in a critical examination of all the replenishment equipment.

Basically, the operational support ships will be generally similar to *Provider* below the main deck, but with appreciable changes to the superstructure—particularly in regard to the provision of additional accommodation and space for army vehicles and equipment. We feel that we can cope adequately with the replenishment activities by using four stations in the new ships, instead of the six in *Provider* and, as you have heard, this will enable us to fit some armament forward—in recognition of the army support role.

Restigouche Conversions

You will be aware that we have been progressively converting the destroyer escorts as they reach their mid-life. The turn of the *Restigouche*'s is now approaching and, as you have heard, installation of a Canadian developed hull-mounted and variable depth sonar and the provision of an ASROC missile system are being planned.

The first ship to be converted will be *Terra Nova*, which is to be taken in hand by Halifax naval dockyard in July of this year, for installation of the sonar system. There are many problems yet to be worked out in a prototype vessel and by carrying out this work in the dockyard we have the opportunity to produce for the follow ships more comprehensive and accurate drawings for tender purposes.

The remaining six ships will be undertaken in sequence from the beginning of 1967, with the work being carried out in private yards. *Terra Nova* returns at the end of the programme for the fitting of the ASROC system and it is anticipated that work on this class will be completed by mid-1970.

Bonaventure conversion

This task does not properly come under the heading of new construction, since the prime objective will be, as you heard from Com. Charles, a major refit of the vessel—the first of such magnitude she has had. In conjunction with this refit it is intended to improve and simplify a number of important systems which have, over the years, proved to be excessively demanding in maintenance effort. There will also be some changes in radar, communication equipment and in accommodation and maintenance workshops appropriate to the aircraft to be carried.

Finance

Now coming to the more sober matter of finance, it is our practice to deal with costs on a program basis with appropriate allowances for spares and associated equipment. Present estimates—which are all in 1964 dollars are as follows:

	$ Million
DDH programme (4 ships)	142
Restigouche conversions (7 ships)	
Prototype by dockyard	65
Operational support ships (2 ships)	8
Bonaventure improvement and refit	8

It is perhaps of interest to observe that the overall value of Canadian content in this total program is estimated to be about 85 per cent.

Conclusion

These then are the major tasks before us technically. While it may seem to be some time before work appears in the shipyards, I hope to have succeeded in impressing you that we in the Department of National Defence and our colleagues in defence production have a great deal to accomplish in what to us, is a relatively short time. Above all, we will be jointly expending very considerable effort to ensure that our contractual documents, specifications and overall planning will facilitate orderly, economic and timely production of vessels. Thank you.

The CHAIRMAN: Thank you Commodore Davis and Commodore Charles. We are now open for questioning. I have Mr. Groos, Mr. Winch, Mr. Temple and Mr. Harkness on the list. You are first, Mr. Groos.

Mr. GROOS: I wonder whether Commodore Charles could tell us the difference between the DDH, which has just been described to us, and the general purpose of the frigate that was proposed previously. It would be of some interest to me to have some idea of the difference in the cost of equipment that will be installed and the capability.

Mr. CHARLES: Mr. Chairman and gentlemen, the general purpose frigate was a ship that was designed for general purposes, and one of the major equipment items was an advanced and expensive missile air defence system. In the DDH ship we are fitting improved ASW capability over what we had planned in the frigate, due to the advance in technology and the time period involved. We are also fitting a short range missile system which is not nearly as complicated or as expensive.

I wonder if that answers your question?

Mr. GROOS: Is there any difference in the hull or the propulsion unit?

Mr. CHARLES: I wonder if I might ask my colleague, Commodore Davis, to answer that question.

Mr. DAVIS: There are differences in the hull, yes. We are putting to good use in the DDH the experience we gained in designing the general purpose frigate. The size is similar. The propulsion plant is very similar. Certain of the components that we plan to use in the general purpose frigate, however, will not be used in the DDH. They have been overtaken by advances in technology.

Mr. GROOS: Is it correct that the cost of some of the equipment in the DDH ship will be less than in the proposed frigate?

Mr. DAVIS: I would say that a large measure of the expense in the general purpose frigate program arose from the very sophisticated armament, particularly the long range missile system and all of the associated electronic equipment, and indeed the cost of the missiles themselves. These very large expenses will not be present in this program. This accounts for the major differences.

Mr. GROOS: I notice that the DDH, according to your cost program, will be $142 million. This will make the individual cost around $37 million; is that right?

Mr. DAVIS: About $35 million. This cost also includes a fair proportion for support and for ammunition.

Mr. GROOS: Does this cost include the cost of the equipment?

Mr. DAVIS: Yes. This is the cost of the program.

The CHAIRMAN: Does that complete your questioning, Mr. Groos?

Mr. GROOS: Yes, thank you.

Mr. LAMBERT: Does this include the cost of the two helicopters?

Mr. DAVIS: No, it does not.

Mr. WINCH: Mr. Chairman, there are a number of questions I would like to ask at this time, although I recognize that perhaps all of us would like at some time to study the two presentations made to us. However, there are a number of questions I would like to ask now. Before doing so, I would like to express my very great appreciation of the fact that, as a result of an invitation from the navy, four members of this committee were requested to attend and did attend the Springboard exercises at Puerto Rico. I want to say that it was one of the most fascinating experiences of my life. I also want to express my appreciation, Mr. Chairman, for the fact that within about 30 minutes of our being landed on the aircraft carrier *Bonaventure*, both the Commodore and the Captain informed the four members of this committee that although exercises were set out, if there was anything not there that we wanted to see or take part in, or anything about which we wanted to ask questions, we had absolute freedom to do so. It was because of that latitude that was given to us that I think we, on behalf of this defence committee had an experience which I hope will be of benefit to the committee in our discussions.

It is because of that fabulous one week of experience and the presentations now made to us that I would like to ask three or four questions.

I would like to direct this question to Commodore Davis. In paragraph 3 of page 3 of your presentation you state:

> To ensure that the new ships reflect the best of our current experience, we have had a team at sea for some weeks using work study techniques to conduct a critical examination of all aspects of accommodation layouts and habitability...

and so on.

We had the opportunity of being not only on the *Bonaventure* but also on a number of destroyers. On this question of accommodation layouts and habitability, we ran into one big problem, and that was air conditioning. In view of the fact that you are building new ships and you are now in the planning stage, my first question is what is being done in that regard?

Let us take the case of the destroyer *Annapolis*, which has just been put into service, there you have complete air conditioning. This is on a basis where the air conditioning has a series of pipes. At times the weather is cold, so you get cool air; and on other occasions it is warm, so you get the warmth. We discovered, sir, that even down off Puerto Rico in certain rooms, officers' quarters in particular, they had to have two or three blankets a night because there was no controlled air conditioning. We then went on the *Provider* where we were not only nine month ago but just a week ago, and one of the major complaints was air conditioning.

Without mentioning any names, I assure you that I—and I think the others—asked questions about this, and one answer we got was that whoever is the air conditioning engineer, when transferred to a warship does not know what the problems are. I am not going to mention the *Bonaventure* which has no air conditioning, in which they operate in many sections, from 120 degrees to, on occasion, 180 degrees.

In view of what you have in mind now in the planning of new ships or reconversion, is this matter of air conditioning being tackled in a different manner from the way on which it was handled even as late as the commissioning of the *Annapolis*, which has not functioned as it should? That is my first question.

Mr. DAVIS: Air conditioning is a matter for which we have been criticized by a great many people at many different times. It is our aim in air conditioning, as it is our aim in all of our many problems, to improve. However,

I must say that the prime purpose of air conditioning is not initially for the comfort of people. It is to ensure particularly that the temperatures are controlled in various electronic spaces, to ensure that the vessel can operate in a closed down condition on those occasions when they have to go through a toxic cloud of one sort or another. Sometimes it is difficult to ensure that these various requirements are met at the same time as human comfort is considered. Sometimes the equipment and systems which are installed and are balanced, are deliberately put out of balance by people in one area closing off ventilation which irritates them, then other people receive an excessive amount. It is difficult occasionally to match our ingenuity with the ingenuity of the people who mishandle the system. However, we are very sensitive about your criticisms, Mr. Winch, and about the criticism of any ship's company. We do have it closely under review.

Mr. WINCH: May I just add this? Would you agree that if Canada is going to spend a few hundred million dollars on new ships or reconversions that morale is a factor, to use your own term, that is sometimes governed by your word "habitability"?

Mr. DAVIS: Without question there are many things we have to achieve in ship design; morale is not the least of these.

Mr. WINCH: On my second question, Commodore Davis has given us considerable information on new ships or reconversions. We know that the ASW capability is still going to hold very top priority. Therefore, that must entail the use of a variable depth sonar.

About nine months ago we were in Halifax, and from the airbase we went to Bermuda. At that time they had demonstrated one destroyer of a variable depth sonar. I was somewhat amazed in our recent week off Puerto Rico to discover that they did not have a variable depth sonar. Therefore, following the information given to us by the Commodore and the Captain, I and the others asked questions. My information, after this period of having seen it nine months ago, on why they did not have a variable depth sonar on our destroyers is that on steel cable there was a compression factor which was detrimental. Nylon cable stretches.

In view of that information on why we still do not have variable depth sonar on our destroyers, in view of the fact that under the contruction program or reconversion that we have now, are you able to tell us whether that problem has been or is being solved? You cannot utilize this marvellous Canadian invention or discovery if you do not solve the problem.

Mr. DAVIS: May I ask you, Mr. Winch, which vessels you were aboard?

Mr. WINCH: We were on board the *Bonaventure* and *Annapolis*, the *Gatineau* and the *Terra Nova*.

Mr. DAVIS: The *Gatineau* and the *Terra Nova* will be coming into conversion in the conversion program of the seven Restigouche class; and during this conversion they will be receiving the variable depth sonar.

Mr. WINCH: My question is: Have you resolved the problem of the cable which we were told about?

Mr. DAVIS: I have not resolved it. I am afraid this is not my responsibility. These ships will be getting a different kind of variable depth sonar, an advance upon the present one. I am informed that the cable problem is resolved, yes. It is a difficult problem though. I should perhaps emphasize that the question of cable behaviour in variable depth sonar is one of the more difficult technical problems to be solved, and it is an area in which we in the R.C.N., with the help of the Defence Research Board, are pioneering. It is not unusual that one would expect problems in the development.

Mr. WINCH: I am sorry, Mr. Chairman, but this now indicates what I am after to some extent. In view of the fact that you place emphasis on ASW and that it is therefore going to be based to considerable extent on the variable depth sonar, have you resolved that problem before you go into production?

Mr. DAVIS: Now we have, yes. I am speaking now of sometime past, the early days.

Mr. WINCH: I am not quite certain about this, but it is one of the matters that intrigues me. Perhaps if we do not have the information here it could be obtained. Another matter was drawn to our attention. This comes to my mind now because it is not only going to be on the destroyers or one of the Sea Kings; there are going to be two. I am speaking of this request to pursue the policy and the facet of ASW by the navy on a 24 hour basis. We were informed that one of the big problems with helicopters—and this is on the Sea King—is on night operations, that there is no facility or no instrument in night time operations on ASW that will let them know how they can overcome the relationship between the height of the aircraft and the water. Is it possible for this committee to have any report on whether that major problem is being resolved?

Mr. DAVIS: Not from me.

Mr. CHARLES: The situation is that it is indeed a difficult problem to maintain height above the water at night in the hover position with the helicopter. In fact, the helicopters are doing this at the moment. The same helicopter is operating from American carriers at night, so it is done. What we have to do is improve the safety factor in this and we are certainly doing everything we can to provide a more sophisticated and capable device to achieve a higher safety factor in this operation. However, it is true to say that the helicopters can and do in fact operate at night now.

Mr. HELLYER: Mr. Winch, I might just add that I would suspect that it would be possible to develop instrumentation to overcome this problem. I am speaking now more from general principles than specifically.

Mr. WINCH: I notice in Commodore Davis' report he speaks about the Pacific coast where there is also an ASW. Is there any contemplation of training of ASW with an aircraft carrier on the Pacific coast?

Mr. DAVIS: Not to my knowledge.

Mr. WINCH: How are you going to complete training or is it going to move both aircraft, men and ships to the Atlantic in order that on the Pacific coast they have the same training and experience as they have on the Atlantic coast because any probable attack could be just as instantaneous on the Pacific coast as on the Atlantic coast.

Mr. CHARLES: So that I may understand your question, you feel that a training submarine has been allocated on the west coast for ASW training and not on the east coast.

Mr. WINCH: No; I am talking about an Aircraft Carrier.

Mr. HELLYER: Mr. Winch, in the antisubmarine role there are different weapons systems. A carrier and its complement of airplanes or helicopters is one; land based airplanes is another one; destroyer escorts with or without helicopter support is another; submarines is another one and, if the development works out properly, hydrofoils is also another one. So, there are many different antisubmarine weapons systems. Now, there are mixes of these systems which probably are more effective than others. But, you do not necessarily use nor do you have to use all the different systems on every occasion. Indeed, they are not because we have only one carrier, for example, and it can only patrol or participate in the control of a certain area. We have to cope with other areas

by means of other antisubmarine weapons systems. It is impossible when we have only one carrier to have this particular weapons system on the west coast. The fact it is confined to the east coast does not mean the antisubmarine weapons systems we have on the west coast are not effective; it just means we do not have that particular one as part of our west coast complex.

Mr. WINCH: In April of next year the aircraft carrier *Bonaventure* goes in for a refit, and I have been given to understand that it is going to cost around $8 million.

Mr. DAVIS: The combined refit and the new work will amount to that.

Mr. WINCH: In connection with that refit and the figure of $8 million I will have to make an approximate estimate but I would say between 300 and 400 men out of 1,341 that were on board the *Bonaventure* the week we were billeted there lived and worked in what I would call unmitigated hell, and I mean unmitigated hell. I realize it is a warship but their accommodation is terrible. I was in one mess which catered to a total of 48 men and it was so crowded that there was not room for even one card table for the men to play cards. There was no recreational room whatsoever. I have discussed this with the other three members, who were also in the lower deck, as I was, and the temperature was very extreme not only in the working areas but where they lived and ate. Honest to God, the temperatures are such that, in my opinion, they should get double what they get, not only because of where they have to work but where they have to live 24 hours a day. Do not forget, we have only one aircraft carrier and it has to be at sea in order to give the necessary training. It is at sea for a fantastic length of time. I would like to ask in respect of the $8 million reconversion programme, which will take over a year, if any consideration has been given to accommodation and air conditioning.

Mr. DAVIS: Mr. Winch is quite justified in saying what he has. These characteristics are representative of the ship's age and the fact that we consistently have tried to do too much with her. They are typical not only of this vessel but all vessels of similar age in other navies. We have here a clipping from the *Guardian* two weeks ago, in respect of the *Ark Royal* which is almost word for word with what Mr. Winch said.

Now, in the changes that will be made to the vessel as part of its modernization, which is perhaps the best word to use, we are proposing to improve the ventilation as well as the accommodation by taking certain spaces which are being vacated and making them into additional mess decks. However, I must be quite clear and say that these improvements can only be marginal; they are not going to make a fundamental difference to the ship itself. A fundamental difference can only be achieved by the expenditure of a very large amount of money and, furthermore, by very marked reduction in the ship's complement. At the moment the latter does not seem possible. By removing or simplifying our systems on board we are attempting to reduce a large amount of maintenance work which is now necessary. We hope by reducing the amount of maintenance we then could reduce the numbers of people who are on board doing this maintenance work. But the plain fact is that we are trying to do more with the ship than she is really capable of because of her size. We are trying to put a quart in a pint bottle.

The CHAIRMAN: I have Mr. Temple, followed by Mr. Harkness, Mr. Lambert, Mr. MacLean and Mr. McMillan.

Mr. TEMPLE: Mr. Chairman, I would like to clarify a few matters which previously have been raised by Mr. Winch in respect of a particular exercise. I am sure that the *Annapolis* has variable depth sonar.

Mr. DAVIS: This is so, although I did not want to contradict Mr. Winch.

Mr. WINCH: Well, I understood they were having trouble in this connection.

Mr. DAVIS: They may be having trouble, but she is fitted with this equipment.

Mr. TEMPLE: In respect of the new Sea King it is my understanding with regard to night flying manually it would be very difficult to position it and keep it in the hovering position over the water. I understand it is equipped with a machine of some type which takes over and allows for this to be done. Am I correct in this assumption?

Mr. CHARLES: This is correct; it has automatic hovering.

Mr. TEMPLE: With the new ship program will we have, in 1971, as much ASW capability as we presently have?

Mr. HELLYER: I am not sure both the commodores will support this but we will have a great deal more. Each of the new DDH's will have an ASW capability, I would say, in excess of several of the world war II frigates currently being paid off. In addition, the installation of the hull mounted sonar and variable depth sonar, the addition of the ASROC and the improvement in techniques, together with the use of additional helicopters, should increase the antisubmarine capability very markedly. Then, in addition to that, as has been demonstrated, the acquisition of an additional support ship increases the operational capability of the antisubmarine fleet very considerably. I do not think anyone has worked this out mathematically so we cannot say just what order of magnitude it is. But, it is my belief that both in the surveillance area and in the potential kill capability the increase is really very substantial, and when I say "substantial" I think that is an understatement.

Mr. TEMPLE: Thank you. I realize that the *Bonaventure* usually would not operate alone, that it has escorts with it which have anti-aircraft capabilities; but, in the refitting of it is consideration being given to equipping it with missiles?

Mr. CHARLES: No.

Mr. TEMPLE: I understand the cost of the four new DDH's works out to $35½ million each. Would the cost be exactly that for each one or would the first one cost more and the second, third and fourth less?

Mr. HELLYER: I think this depends on what tenders are received, and that is a little hard to predict. And, it might have some relationship to the private wishes of shipbuilding companies. I do not think that you could tell at this stage what the individual price might be. However, I think there is some potential advantage to be gained from the methods in which contracts are let, and this is being studied now, I hope, by the Department of Defence Production, in order to determine if we cannot obtain a reduction in the cost of subsequent ships due to the learning curve and the experience obtained in building the first one of the series. I can tell you from my standpoint that I am taking an interest in this and I have made a note to follow it up to make sure that full consideration is being given to obtaining the maximum benefits from the learning experience on the lead ship.

Mr. GROOS: Has the minister given any directives to the Department of Defence Production in respect of the method in which these contracts should be awarded or have you made any special arrangements?

Mr. HELLYER: There is no directive but there was a request that the alternatives be looked at with the advantages and disadvantages of each alternative from the standpoint of getting the best price and the most efficient production.

Mr. GROOS: I have a supplementary question.

The CHAIRMAN: Mr. Groos, I would prefer if you waited. Our experience in this Committee has been that when supplementaries are allowed we get away from the real topic and it is very difficult to get back to it.

Would you proceed with your next question, Mr. Temple.

Mr. TEMPLE: I do not know whether or not my next question is in order but could you tell us what the approximate cost of a new carrier would be.

Mr. DAVIS: Well, of course, this would vary with its size. Pursuant to my answer to Mr. Winch's question, I think if we were going to consider a new carrier we inevitably would think of one larger than the *Bonaventure*—that is, to operate as a carrier—and I will amplify that point in a moment. If you consider such a vessel with the rather complex electronic equipment that would be necessary for handling aircraft and directing them you are not going to get much change out of $100 million. And, it would be quite appropriate in that size of vessel to think of a nuclear carrier which would be somewhat more expensive.

However, there are simple carriers, or what appear to be simple carriers. For example, there are the American commando ships, which carry marines, the Iwo Jima class, which have the appearance of an aircraft carrier but, in reality, operate only helicopters and carry some 2,000 marines. Their cost would be of the order of $60 million. A great deal depends, not so much on the size of the ship, but on the sophisticated equipment, both electronic and mechanical, which is necessary to handle the aircraft. They are not cheap.

Mr. TEMPLE: My last question may have been away out and perhaps this one is, but rather than reconverting, say, an existing ship, if we were offered an American carrier which is not up to date, do you think we should accept that?

Mr. WINCH: The *Eagle*.

Mr. TEMPLE: Would one which has to be reconditioned, refurbished and re-equipped cost almost as much as a new one?

Mr. DAVIS: No, I do not think so. But, I must say that we have been along this path in connection with the *Bonaventure*, and I am sure you have heard the results. Mr. Winch has been aboard this carrier. Certain people have indicated there are American carriers that could be used. This could be an advantage; you would spend a lot less money than building a new one, but—

Mr. TEMPLE: Would it not be penny wise and pound foolish more or less to think in those terms?

Mr. DAVIS: It has been my experience, not only with shipbuilding but in other fields, that by and large you get what you pay for.

The CHAIRMAN: Would you proceed now, Mr. Harkness.

Mr. HARKNESS: In respect of the four new DDH ships you state on page 3 that the hull would be increased in size. How much increase would there be in the size of the hull?

Mr. DAVIS: They will be about 30 feet longer and about a 4 foot increase in beam.

Mr. HARKNESS: Is this essentially the same hull that was planned for the general purpose frigate?

Mr. DAVIS: It will be similar. It is of the same rough dimensions, but the character of the vessel itself in this area to which I am pointing is quite different. Its dimensions are about the same and certain of the techniques we were developing in structural design will be used. But, it is not the same hull. We have gained from experience.

Mr. HARKNESS: But, you are making use of a good many of the plans which were drawn up for the hull of the general purpose frigate?

Mr. DAVIS: I would not put it as specifically as that. We are making use of a number of techniques that we developed in the preparation of that design, as well as some of the experience we gained. But, we really cannot use the plans, no.

Mr. HARKNESS: What specific difference is there in the size of the two hulls?

Mr. DAVIS: Very little; they are very close.

Mr. HARKNESS: What difference is there in the general construction of the hull? You were speaking a minute ago about the superstructure of the equipment.

Mr. DAVIS: All this area to which I am referring is different; the bow is different. Everything inside is different. But, again I must emphasize that we gained a lot of experience in design techniques, all of which we are putting to good use.

Mr. WINCH: On the *Annapolis*?

Mr. DAVIS: No. Colonel Harkness is speaking of the general purpose frigate. But, I do not exclude *Annapolis*; we have learned from everything we have done before.

Mr. HARKNESS: You spoke of the fitting of a missile system; what type of missile system is it and what is its range?

Mr. CHARLES: At the present time we are investigating the availability of a short range missile system, which is primarily a Sparrow missile fitted on to a 3 inch 50 gun mount.

Mr. HARKNESS: What is the range of that?

Mr. CHARLES: Mr. Chairman, I would like to be excused from answering that question, if I may.

Mr. HELLYER: Of course, this has a much shorter range than the one planned. It is entirely different, as you know. I think I should emphasize, however, the decision with respect to the missile has not yet been made, as pointed out when the programme was announced.

Mr. HARKNESS: I believe you stated in answer to a question before that it would be a short range missile system and not nearly as complicated as the one proposed for the general purpose frigate. In actual fact we know there were two missile systems proposed for the general purpose frigate, one a short range one and the other a long range. I presume this one, as far as its function and its range is concerned, is the same as the short range one which was planned for the general purpose frigate. Of course, the result will be there will be no long range defence against enemy aircraft as far as these vessels or the fleet as a whole is concerned.

Mr. HELLYER: I think you will agree with me that describing the Tartar as a long range missile system is something of a misnomer. In my opinion, the effectiveness of some of these systems is open to serious question.

Mr. HARKNESS: Well, that is a matter of judgment. But, basically, the general effect of this will be there will be no long range defence against enemy aircraft as far as these vessels or the fleet generally is concerned. Is that not a fact?

Mr. HELLYER: Well, I think you have to define what you mean by long range and, as the commodore has indicated, I do not think we should get into that in an open meeting. I do not think you could say that even the Tartar had a long range anti-air defence even though it was longer than the short point defence. Whether there is an advantage and how much the advantage is at the intercept point is a highly technical matter which, if you wish to pursue, we would consider in a closed meeting. But, I would not wish to get into this matter at the present time.

Mr. HARKNESS: Well, the point I really was making was that in respect of the general purpose frigate there were two systems, one designed for short point defence and one long range defence, and in respect of these present vessels we are making no provision for the long range defence.

Mention has been made of space being provided for the fitting of a missile system. I take it the missile system is not to be fitted immediately. When is it proposed that it will be fitted?

Mr. HELLYER: As soon as the choice has been made and the proper missile is available. We want to make sure we get one that is worth the money. Up until the present time we have not been able to come to the conclusion that we have the right one that is worth the money. But, we hope a decision can be made in this respect in the not too distant future.

Mr. HARKNESS: But the plan is it will be fitted some time after these ships have been in operation.

Mr. HELLYER: The plan is to retrofit, unless a decision is reached in time to parallel construction.

Mr. HARKNESS: But, at the time these ships go into operation, starting in 1970, they will not be fitted with the missile system.

Mr. HELLYER: In respect of this point, as the commodore pointed out, if we can make the decision in the meantime they will be installed as soon as the decision is made. It is quite possible, in fact, they will be installed by the time the ships become operational.

Mr. HARKNESS: Then the cost of the vessels as outlined does not include the missile system.

Mr. HELLYER: That is correct.

Mr. HARKNESS: What will be the additional cost estimated for the missile system?

Mr. CHARLES: It really is quite a relatively cheap missile system. We use the existing gun mountings; all it involves is a frame that goes on it, so it will be approximately $10 million for the program.

Mr. WINCH: Without automatic control?

Mr. CHARLES: I am afraid we are getting into technical detail here.

Mr. WINCH: But automatic control would add a great deal to the cost of the installation?

Mr. CHARLES: Yes.

Mr. WINCH: Are you planning on manual or automatic control of missiles?

Mr. CHARLES: We will have the same facilities as the escorts have on the 3-inch gun at the moment.

Mr. HARKNESS: Then the cost of these ships will be $45 million instead of $35 million.

Mr. HELLYER: No, the $10 million estimate is for the four ships. Each will be $2½ million.

Mr. HARKNESS: Which will bring the cost up to about $38 million?

Mr. HELLYER: Something of that order.

Mr. HARKNESS: Now, in respect of the Restigouche conversion programme there are essentially two changes being made, as far as I can make out; one is the installation of the variable depth sonar and the other is the installation of ASROC. Those really are the two changes being made.

Mr. CHARLES: That is correct.

Mr. HARKNESS: And the cost of that will be $9 million plus for each vessel?

Mr. HELLYER: I think there is another change, the larger hull mounted sonar, which increases range.

Mr. CHARLES: The sonar equipment being installed is variable depth and hull mounted; it is integrated into one package.

Mr. HARKNESS: What is the cost distribution between sonar improvements and installation of ASROC in this $9 million plus.

Mr. DAVIS: Perhaps I can take this step by step. The shipyard work itself comes to about $3 million per ship.

Mr. HARKNESS: That is the cost of installation of changes in the superstructure and that sort of thing which is required to accommodate this.

Mr. DAVIS: Yes. If I took these figures in round terms for the programme would that satisfy you for the moment.

Mr. HARKNESS: All right.

Mr. DAVIS: The sonar improvements are approximately $17 million.

Mr. WINCH: For the four ships?

Mr. DAVIS: For the seven ships, and the ASROC is about $15 million. In addition, you add to the sonar equipment about another $1 million for the handling gear. Those are the approximate figures. But, the ASROC cost does not include the cost for the first outfitting of missiles, which amounts to about $2 million for the program.

Mr. HARKNESS: Well, what this essentially would amount to, if you break up the $9 million plus, is that a little over half of it would be for the sonar and a little less than half for the ASROC.

Mr. DAVIS: Yes, or to put it another way, the total fighting equipment changes represent about half the cost of the overall program.

Mr. HARKNESS: Then how many of these missiles would be provided to each ship for the $2 million odd that you indicated they would cost?

Mr. DAVIS: I would prefer not to say.

The CHAIRMAN: Gentlemen, I think I should interject here, if I may, and say that at times we may be treading on areas that are classified. As you know, this is an open meeting, and I hope you will all understand when our witnesses refuse to answer certain questions.

Mr. HARKNESS: Mr. Chairman, I will not push that at this time. I was just trying to get some general idea of the total cost of these things.

Now, I would like to turn to the submarine program. You state here on page 7, I think it is, that you are investigating the means of providing more modern submarines to replace the HMCS *Grilse* on the west coast. Is that of the Oberon class or is it a different type of submarine altogether?

Mr. CHARLES: We are investigating the various submarines available and what is required to replace this ship. We have not decided on the specific type at this time.

Mr. HARKNESS: In other words, this is just a general investigation which you have made?

Mr. HELLYER: This is a general investigation, but the anticipated replacement would come into this five year period.

Mr. HARKNESS: You have no cost figure on that?

Mr. HELLYER: No. It would depend on whether it was a new ship or a converted ship, just what the ultimate cost might be.

Mr. HARKNESS: But there is no plan in mind to put in one of the Oberons of the three that you now have, in the west coast?

Mr. HELLYER: Not of the three that are presently on order.

Mr. HARKNESS: As far as the support ships are concerned, you said you will have a three inch gun. Is that a three inch 50 or a three inch 70?

Mr. CHARLES: Three inch 50.

Mr. HARKNESS: That will be a gun taken off one of the present destroyer aircraft that are fitted with them, I presume?

Mr. CHARLES: That is right. In fact we have a gun now.

Some hon. MEMBERS: Is that an English gun?

Mr. CHARLES: No, it is not a three inch 70.

The CHAIRMAN: Does that complete your questioning, Mr. Harkness?

Mr. HARKNESS: I have one other matter here in relation to operational support ships. You say they will be generally similar to *Provider* below the main deck, but with appreciable changes to the superstructure. By that you mean it has the same hull, the same propulsion machinery and so forth?

Mr. DAVIS: It has the same hull, Mr. Harkness, and we hope that it will have very similar propulsion machinery. The question of tenders and price will come in here. However, I can certainly say it will be very similar.

Mr. HARKNESS: In other words, there is nothing firm on the propulsion machinery. The only thing that is firm is the hull?

Mr. DAVIS: No. The propulsion machinery will be very similar to that of the *Provider*. Any components of it may, in the long run, turn out to be made by different manufacturers, but we do not know yet.

Mr. HARKNESS: Is that in view of the difficulty you had as far as some of the equipment is concerned?

Mr. DAVIS: No. The propulsion plant has operated extremely well. We are very well satisfied with it.

Mr. HARKNESS: Well in regard to the *Bonaventure* conversion, what are these systems which you are going to simplify which have over the years proved to be excessively demanding in maintenance effort?

Mr. DAVIS: There is a variety of them. I might just run through them very rapidly. Ventilation is perhaps the most important, and in the ventilation we include a good deal of the heating that is associated with it. The de-icing system, which is provided to openings of various kinds to the ship's heating system itself. There is to be some work on the flight deck systems. We have to take out a great deal of weight of various kinds. The ship is particularly heavy at the moment. That is why she has had the reputation, as Admiral Rayner said earlier, of suffering damage at sea from time to time. So we are going to reduce the displacement. We are providing additional air conditioning equipment. There will be an additional evaporator. Fresh water has been a problem. The steering system will be changed to electric hydraulic, and the rest are minor changes. Those are the most significant ones.

Mr. HARKNESS: Would not all of these things perhaps increase maintenance?

Mr. DAVIS: It is not our intention.

Mr. HARKNESS: I know.

Mr. DAVIS: I think it would be almost impossible to increase the amount of maintenance involved.

Mr. HARKNESS: You are adding more evaporators. I would think that by adding such things you would be in danger of increasing your maintenance?

Mr. DAVIS: At least we can replace the evaporators which are now almost 20 years old.

Mr. HELLYER: We are hopeful that some of the maintenance problems will evaporate.

Mr. HARKNESS: I guess I have taken long enough.

Mr. LAMBERT: In comparison with the DDH class ships and the GP frigates, what were the differences in personnel requirements? Were the more sophisticated frigates calling for an increase in personnel over the DDH?

Mr. CHARLES: That is correct. The number of personnel that would be required in the GP frigates would have been larger and would also involve a considerably larger amount of training in the technology involved in the sophisticated missile system.

Mr. LAMBERT: Then is it a fair general statement to say that the GP frigates were a much more sophisticated ship?

Mr. CHARLES: Yes, sir. However, I will qualify that; we say that the DDH has a better sonar ASW surveillance capability than the GP frigate had.

Mr. LAMBERT: Is it also fair to say that the GP frigate had quite a different concept, both as to role and design? In other words, the DDH is a step-up of refinement and design?

Mr. CHARLES: Well, sir, any destroyer we have today, you might say, is a redevelopment of the old destroyer which was designed back in 1904. Every ship is a progression.

Mr. LAMBERT: I suppose you could say the 1965 Cadillac is a progression of the original model-T.

Mr. HELLYER: As a matter of fact, that is an excellent analogy, Mr. Lambert.

Mr. LAMBERT: On the other hand, we know as between the model-T and the 1965 Cadillac that they both belong to the genus of automobiles but these ships belong to the genus of ships. Yet they are conceivably quite different.

Mr. CHARLES: I could answer this way, sir: First of all, a ship is a platform in which you carry fighting equipment and the big question really is how you progress with its ability to fight. Without giving you the classified ranges, the biggest advance in this DDH is, as I said, in its fighting submarine capability and the range of sonar. The area under surveillance varies as the square of the range of the sonar set, therefore as the ranges have increased, the area of surveillance capability has increased considerably, as the minister has pointed out.

Mr. HELLYER: In addition, I think I might add that considering a ship as a carrier for weapon systems to carry out certain roles, a ship which has the advantage of a heavy helicopter has a very great surveillance capability and at the same time the kill capacity increases very dramatically for the weapon system as a whole.

Mr. LAMBERT: In other words, the emphasis has been placed more on the DDH role against the role of the GP frigate. Have any of the features of the GP frigate been imported into these operational support ships? If I recall, some of the ancillaries of the GP frigate seem to have been put into the operational ships which are not common copies of the *Provider*.

Mr. DAVIS: During the development of the general purpose frigate, we conceived an advantage to have been designed, which I somewhat regret we mentioned, in the fact that there was the ability to carry a small number of troops. Now, in that particular broad sense, the operational support ship contributes to a sea lift capability. It does not carry the troops, but it carries equipment, vehicles, and so on. That is the only connection I can think of offhand between the general purpose frigate and the operational support ship.

Mr. LAMBERT: As you said, I do not suppose the *Bonaventure* was ever designed for the role it actually carried out?

Mr. DAVIS: True.

Mr. LAMBERT: Therefore, the ships do have certain capabilities. You have said you mentioned, with some regret, the disclosure that the GP frigate might have as one of its roles the transport of a limited number of armed personnel.

Mr. DAVIS: Lightly armed.

Mr. LAMBERT: That is so. However, on the other hand, is it also conceivable that the operational support ships, if indeed in a crux could do it, the same way as in a crux we have had to put the *Bonaventure* to some rather strange uses.

Mr. CHARLES: You should put bunks in the helicopter hangar and carry people, yes, if the helicopters was not carried on board.

Mr. LAMBERT: I think this has been pretty well covered except for one observation. I think it must be emphasized that the building programs, or the financing at this time of the building programs have been stated to be constant in 1964 dollars. Therefore, by 1971 it is conceivable that some of these units might have climbed up to 15 to 20 per cent higher, taking into account the usual experience of some modification in design, refinement in design, plus the annual creep in the dollar.

Mr. DAVIS: That is a measure to be accepted, yes.

Mr. HARKNESS: On that point, what figure for accelerated costs has been included here? Or has any figure been included?

Mr. DAVIS: No, it has not. That is why I emphasize that these figures are in 1964 dollars.

Mr. HELLYER: What we are doing is making some provision in the over-all program.

Mr. HARKNESS: These figures make no provision for acceleration of the costs which always takes place.

Mr. DAVIS: I wonder if I could amplify that remark a trifle. In the costing program we have made an allowance for changes that we expected to develop during the program. This is included, but we are not allowing here for the inevitable increase due to a rise in the cost of living. That part is not included.

Mr. MACLEAN: Mr. Chairman, most of the questions which I had intended asking have been already answered. However, I would like some further clarification with regard to chart 5, which deals with replenishment vessels on the east coast, and the hypothetical situation which is set up and referred to on page 6 of the brief.

> Taking the hypothetical case shown in chart 5 of 18 ships on patrol 1000 miles from Halifax, it will be seen that because of transit time involved, and if no on station refuelling capability is available only 3 ships can be maintained constantly on patrol and these would give an ASW surveillance of the area enclosed by the yellow line. If one operational support ship is available for sea refuelling the number of ships on station would increase to 10 and the area covered would be that enclosed in the blue line if two operational support ships are available 18 ships can be maintained constantly and cover the area within the red line.

Therefore, to make the maximum use of your operational forces, you require only three. Would this be the operational situation?

Mr. CHARLES: Mr. MacLean, as I emphasized, it was a hypothetical case. We were talking about maintaining a surveillance patrol constantly in an area of the east coast of Canada—in this context I am talking of a conceivable type of operation—that you could use either in peace or in war.

Mr. MACLEAN: Well, in this set-up the supply ship, I take it, would be shuffling back and forth between some naval base, Halifax, for example, and the operational area. Would this be a fairly continuous operation? In other words, with one load of fuel and supplies, how long would this maintain the destroyers and aircraft in operation?

Mr. CHARLES: The ships require replenishment approximately every five or six days. Depending on what sort of reserve of fuel you have, and assuming a speed of 15 knots, this means each ship has to be topped off every four or five days. So that one support ship moving from Halifax out to the operating area takes two days; and then it spends a day or a day and a half topping off all the ships. Then it goes back and refuels. If you have one support ship you can maintain 10 ships constantly. You cannot refuel them all, all the time. If you had two, you could top off 18 constantly.

Mr. MACLEAN: In other words, the supply ship would be shuttling back and forth when it was not actually refuelling the ships in the area. What self defence is there, or has any provision been made for an escort for the supply ships? In this calculation, what self defence would this supply ship have? It would seem to me that in a situation of war the other side of the coin would be that the thing to get is the supply ship; it is just as big a concern as getting any of the operational ships. What defence is this supply ship going to have? How are you going to get it back and forth from the operational area?

Mr. CHARLES: You are quite correct that if you are operating the ship in a submarine attack area you have a risk to take. We provide the ship with a torpedo detection sonar. It is quite a fast ship; it can go 20 knots. In addition, it has a helicopter capability. We have told you that we are providing a missile defence system with the operational support ships, and this provides an air defence capability.

Mr. MACLEAN: But it is on that aspect of it that you are placing reliance, contemplating that it would be escorted by some other vessel or some other ship or ships?

Mr. CHARLES: In this type of operation this ship would not normally be escorted.

Mr. MCMILLAN: Mr. Chairman, I was interested in the hydrofoil program and building a prototype ship for next year. Do the operation, trials and tests of those scale models indicate that you can operate in the open sea under all weather conditions?

Mr. DAVIS: Yes, Dr. McMillan. We have carried out quite extensive model trials in several sizes, up to a quarter full size. This last has operated in the Bedford Basin and in the approaches to Halifax harbour the progress from the $\frac{1}{25}$ scale to the 1/16 scale to the quarter scale provides a good basis for the predictions of full size behaviour. All of this data from the beginning to the end was fed into a computer which in turn simulated random seas. The most serious sea state we could get in a model tank was state 6. We are hopeful that this ship will be able to operate certainly in state 5. As I mentioned, we have gone to the quarter full size. There is not much one can do beyond that on the model scale. Up to about 80 per cent of the time you are not in more severe sea conditions than a state 5 sea.

If the vessel is in worse open ocean conditions than those, it cannot fly, but it is an extremely good sea-boat. The foil system acts as an exceptionally good stabilizer, so that it can exist in much worse sea conditions on the rare occasions that those occur. I would like to emphasize here, that this ability to operate in open ocean under all weather conditions is the main criterion for the whole concept.

Mr. MCMILLAN: I think Admiral Wilson, who is in charge of Atlantic Command, mentioned this program. Are the Americans in this program as well?

Mr. DAVS: They have two hydrofoils, one of which is completed and is doing trials; it is about half the size of ours. They have a further boat which

they have started to build, and it is just half as bid again as ours. Their foil systems are quite different from ours. We are closely in contact with them, and they with us, in all aspects of the program.

Mr. McMILLAN: What is the comparative cost of nuclear propulsive power and what we are using?

Mr. HELLYER: Conventional.

Mr. DAVIS: This is not too easy to say because when you have nuclear power it gives you ability to do so many other things. Nuclear submarines, if one can use those as an example, are costing twice as much, or perhaps a little more, than conventional submarines, but the difference is not necessarily so great when you come to much larger ships. Nuclear power is certainly becoming cheaper all the time.

Mr. CHARLES: May I mention something with respect to the question of the hydrofoil? We have a series of films which were made on the tests of these models, and I am sure we can make those available to you.

The CHAIRMAN: I am sure this might be something the committee would like to see. Dr. McMillan have you finished?

Mr. McMILLAN: Yes.

Mr. MATHESON: Mr. MacLean anticipated in a sense something that I was going to ask with respect to our operational support ship. It appears that an overwhelming tonnage carried is oil and fuel of one character and another. Nevertheless, there is considerable capacity with respect to fighting equipment. I am thinking of the two army helicopters, 12 armoured personnel carriers, 23 scout carts. What is it contemplated that the operational support ship can do when participating in a battle condition?

Mr. CHARLES: I will answer that question. First of all, in the left hand column is the type of load that the ship would carry in its normal replenishment category. In other words, operating as a replenishment vessel for anti-submarine warfare forces, you will see that practically all replenishment requirements are there including the helicopters which would also have a capability in flying operations. In the right hand column is shown our capability to take military equipment in a peacekeeping role, embark it, transport it and unload it. The actual support they would give to the forces ashore would to a large extent be involved in what you might call a base support. They have good hospital facilities; they have maintenance workshops; they have communication facilities. So we could operate as a base support for troops ashore and indeed carry food for the troops ashore.

Mr. MATHESON: In an army sense—quartermaster stores and this type of work; is that it?

Mr. CHARLES: Yes.

Mr. MATHESON: Does it have anything in the category of fighting capacity? Does it have a gun at all?

Mr. CHARLES: It has one 3 inch gun. In other words, if some local insurgents want to move out and attack it, that is the sort of defence it provides for itself.

Mr. MATHESON: With respect to the hydrofoils, do I anticipate or do I appreciate that in some measure the hydrofoil may be able to take on tasks that cannot be done with the more conventional equipment that fits the rest of the class?

Mr. DAVIS: I think we must say that at the moment our first thought for the hydrofoil is in an antisubmarine role; that is to say, a similar role to the DDH. This vehicle something quite new to us, and once one has it, it is not easy to forecast just in what way you will be able to use it. It has much

in character, for example, with the small fast patrol boats that we saw used a great deal in the war. It may be used in this particular role, but our first thought is to make sure that it works and to evaluate it for ASW work, and then indeed consider other roles that might be appropriate.

The CHAIRMAN: Mr. Winch has one final question, and I believe Mr. Groos has a final question; and then we will adjourn.

Mr. WINCH: I want to take advantage of the fact that we have Commodore Davis with us. I understand, if my information is correct, that you are a naval architect?

Mr. DAVIS: That is so.

Mr. WINCH: May I ask whether you have ever been at sea on the *Annapolis*?

Mr. DAVIS: No, I have not been at sea on the *Annapolis*. I have been at sea on several of her sister ships.

Mr. WINCH: I have had the privilege of spending some six hours on board the *Annapolis*, after which I joined my colleague Mr. Temple on the *Gatineau*. It was quite an experience, I can assure you. If you do not believe me, ask the other members of the committee.

Mr. HELLYER: I agree with you. Like yourself, I was grateful that they did not take that opportunity to drop me.

Mr. WINCH: They had a helicopter to pick me up. My reason for asking this question is that in my approximately six hours on the *Annapolis* I spent about five hours on the bridge. Therefore, I had an opportunity of speaking with a great number of the bridge officers. I am going to say that without exception there were two things which struck me, and this is a newly commissioned ship. One, on the outside bridge there are three levels. The result is that at night they say they do not know how they have not broken their necks.

As an achitect, can you tell me if it is necessary to have three different levels and, of course, all completely unlike? On the architectural structure of the *Annapolis*, a bridge officer is absolutely blind as to what is going on behind him. The structure is such that it is absolutely impossible for a bridge officer to know anything that is going on astern except what he can get from a man who has spent 24 hours a day for communication astern and tell the bridge what is going on. I assure you, sir, without exception the officers said something must be wrong and corrections can be made. In view of the fact that we are contemplating reconversion and new ships, and the fact that this is what I maintain is a unanimous view of the bridge officers on the *Annapolis*, is this the sort of thing that will be corrected? These are the criticisms of the men at sea on a ship which was only commissioned not too many weeks ago.

Mr. DAVIS: We certainly take into account as many criticisms of the men at sea as we can. We had 15 of them from both coasts in Ottawa last week, listening to all their complaints, and where possible we will take them into account. I must say on the occasions when I have been at sea it seemed to me that bridge officers spent most of their time inside the bridge and not outside at all. And, as for viewing aft may I say that the *Annapolis* is, in fact, a helicopter carrier. Perhaps we could be shown the slide of the DDH class. Inevitably you will have this large structure of the hangar above the bridge, and it is by no means easy to ensure that you are going to have a clear view aft.

Mr. WINCH: I am now giving you the suggestions made by the different officers.

Mr. DAVIS: Oh, they have many suggestions and they are not ignored.

Mr. WINCH: Is it not possible—

Mr. DAVIS: You mean to extend the bridge wing?

Mr. WINCH: Yes.

Mr. DAVIS: Yes.

Mr. WINCH: I know in port you have a problem. There is no extension of the bridge wing whatsoever on the *Annapolis*.

Mr. DAVIS: Not very much. However, we are not unaware of all these things.

Mr. WINCH: I am giving you what I think are the honest views of the officers and men, and I think that the other members who were with me will confirm these.

Mr. DAVIS: Perhaps I should say a word or two at this time. I agree that they are indeed honest views. Our trouble sometimes is not that we lack criticism but that we have too much of it. We have a plethora of honest views, all of which tend to be different.

Mr. HELLYER: Hear, hear!

Mr. DAVIS: We have tried, as I mentioned twice during my observations, to rationalize these by sending work study teams to observe, to record figures and so on so that we can get a synthesized view of complaints which have some general reality. Whatever they may have told you, we are by no means insensitive to what people want. It is unfortunate we cannot please everybody but we try at least to leave them all about equally dissatisfied.

Mr. WINCH: I am not being impudent at all, but what is the weighting between the man at the desk on land and the man who has to operate at sea?

Mr. DAVIS: It is not a question of weighting; it is a question of philosophy. Our purpose here is a single one; we are to serve those who are at sea and to do it to the best of our ability.

Mr. CHARLES: If I may interrupt, may I say that I have commanded a squadron of this type of ships. I have ridden the *Annapolis* and I have had a considerable amount of experience in handling this type of ship.

Mr. WINCH: Does the captain also express the same views?

Mr. CHARLES: Yes. Only three or four weeks ago these opinions were expressed. We feel that if this is the sort of thing that they really only have to complain about we are not too worried. If you see the bow of the ship and you know where it is going you know the stern has to come after. But, I do appreciate the fact that they feel on occasion they would like to look aft.

Mr. WINCH: Yes, to see if they are being followed.

Mr. CHARLES: Yes, especially if they are in line. We can take steps to improve future designs. But, it is not a serious problem and it has to be kept in perspective in reference to the provision of space for all the equipment in the ops. room down below and aft of it. We have to make the best arrangement in that area because this is where we are actually operating the ship. In ASW operations one must realize that any mistake on that side results in very serious effects. This is a most important aspect of ship control.

The CHAIRMAN: Gentlemen, we are past our hour for adjournment.

Mr. WINCH: Before we adjourn, Mr. Chairman, I think it is most amazing to spend a week among service personnel—and we met plenty of them—and to note not one had a complaint about the food. They all thought it was marvellous. I am sure the other members who were there will verify this.

The CHAIRMAN: I believe Mr. Groos has a final and, I hope, short question before adjournment.

Mr. GROOS: Well, Mr. Chairman, I hope it is. I think perhaps it is a question that should be directed to the Minister, although Mr. Davis is here. My question is really one which covers the policy of designing our own vessels in Canada.

As you know, we have had some rather painful experiences in the military in connection with designing our own military equipment. We are endeavouring to design and build our own aircraft, personnel carriers and so on, and we are continuing still with a policy of designing our own vessels, As you realize, this requires a corps of ship designers in Ottawa, a large drawing office in Montreal, and a great number of people. I am not questioning the desirability of having a corps of ship designers or a drawing office but, on the other hand, we are not the only navy that sails the seas and we are not the only ones who build operational support ships or anti-submarine vessels. I have noted that when we try to do these things ourselves it costs a fair amount of money, and if we are going to use purely Canadian equipment we find that we have difficulty with interchangeability of parts. Our ships sail around the world and inevitably they have breakdowns. I am not saying that breakdowns are peculiar to our navy, but things do break down and spare parts are required. This also results in very considerable delay between the time the parts are ordered and fitted to the ship. Also, it has an effect on training. We have different ships with different equipment. Because there is no definite standard of training amongst our allies this affects the production of operating manuals, analyses of how effective the ship is and analyses of different procedures. The whole thing becomes exceedingly complicated. But, we have available to us at the same time because of our good contacts with the United States and the United Kingdom navies, that are doing the same sort of things, designs which we could obtain from them and use in our own ships.

Mr. Hellyer, I know there is another side to this question. I have stated some of the difficulties but I would like to hear from you as to how you justify maintaining this policy of designing our own vessels.

Mr. HELLYER: Mr. Davis can hardly wait to answer this question, but before he does maybe I can say that this problem is not unique to ships. It is one which applies to all military hardware, and the solution is obviously a compromise. We cannot design all our military hardware because the unit requirements are too small and the cost would be prohibitive. As a nation it would mean we would not get sufficient hardware to maintain a viable operational force. So, inevitably, we have to rely to a considerable extent on other people's design capabilities. But, at the same time, in order to have and maintain a highly technical force and to maintain an industry which has a broad capability it is necessary to do some research, development and design work in this country. And, of course, where one draws the line is a matter of judgment. We have benefited from this capability of designing ships. The amount of resources involved in it proportionally is not great; it takes considerably less in resources than, say, designing a highly complicated airplane. I think you could make the same argument in all areas, and one has to decide in which areas design capability is maintained. We have up to the present time, and this seems to be accepted, maintained some ship design capability. Personally, I think it is a good thing to do. I cannot see that the limited savings involved are such that we should give it up. It does increase our costs but, at the same time, it does give us some additional flexibility in that we are able to introduce Canadian concepts, improvements and adapt Canadian equipment, which has an industrial application as well. I am sure Mr. Davis would like to say a few remarks at this time.

Mr. DAVIS: Mr. Chairman and Mr. Hellyer, if I may be permitted I would like to say a few words in this respect. Of course, we have followed this procedure from time to time. The *Labrador* itself was built to an American

design, and so is the Oberon class we are now buying from Britain. But, several matters do arise. For example, with the Oberon class it is rather serious to start changing matters, and this is the case in all submarines. But, we had to alter certain things. The communication equipment had to be changed to make it compatible with North American standards. We had to improve the air-conditioning. We had to improve the de-icing ability. Similarly, if you take an older design, say, the *Charles F. Adams*—

Mr. GROOS: This is not the cartoonist you are speaking of?

Mr. DAVIS: No, it is somewhat old; it would have to have some minor Canadian changes, even in respect of the spirit room, and, of more importance, significant changes in fighting equipment to bring it up to date. But, the real problems arise when you consider building. Suppose we wanted to build in Canada a class of American designed vessels. We are confronted immediately with the procurement problem of all of the equipment that goes in it. There are many thousands of items from main turbines down and, quite properly, emphasis is put upon the fact that this equipment, to the greatest extent possible, must be produced in Canada. Thus we ask for bids and receive a number of tenders. Immediately there must be close scrutiny of all these components to see if they meet the original characteristics and, particularly, to ascertain if they are compatible one with the other. You do not string the components of any propulsion equipment as you would a string of beads. These investigations must be gone into in detail, which involves drawing changes to take care of the difference in physical shape of the individual components. So, in all this you are beginning to see a fairly demanding design effort, initially to assess what you are buying, and then to modify either to bring it up to date or to meet Canadian production policy. All of this inevitably will take time, so you do not save as much time as you might imagine. The design costs for all the programs which we have done since 1950 are about 3 per cent, so they are not particularly significant. Perhaps I might also emphasize that since we are a very small navy, with specific requirements which are our own, it is sometimes not easy to find a precise set of compromises in the designs of someone else. For instance in the case of the O.S.S., the nearest American answer to this, is about two and a half times as big and costs four times as much; they are on a different scale from us. I do not want to emphasize this point but I think a warship is very much a Canadian entity. It is much more representative of our national ethos than is an airplane. It represents a way of life, which is one thing in the destroyers we have designed ourselves and is a very different thing when you come to try it out in a vessel of another nation, such as *Bonaventure*. I am glad the minister is for us. I subscribe to our doing our own design.

Mr. GROOS: Are we going to have another chance to talk about this? I do not wish to delay it now.

The CHAIRMAN: If it is a short question I think we should try and clean it up now.

Mr. GROOS: Yes, it is pretty short. I just wanted to say that by continuing on with this method, we went into the design of the frigate program at about the time that we were building our own design under our own aircraft. As a result we seem to be locked into certain aspects of the shipping industry. I am thinking particularly of an engine. As I understand it—and you can correct me—we thought we were going to put into the DDH vessels the same engine that went into the Restigouche class and the same engine that went into the first destroyer aircraft and it has not produced any greater power. I cannot help but think that you, as a ship constructor, would prefer to have a slightly more flexible engine than the one that you are putting into this generally bigger vessel. We are using this same basic engine and it does seem to

me, Mr. Hellyer, that in the same way that we have been able to share programs with the United States in the aircraft industry and other defence procurements, there is a scope for sharing in programs of ship procurement and I would just like to hear your comment on that.

Mr. HELLYER: There is indeed some sharing. As you know, we are buying Oberons abroad. We are making parts in this country for American ships. We are buying equipment in the United States for our ships. To support an industrial base which will permit this kind of sharing we have to do some original work in this country. Now I cannot answer the question about the engine. I am sure that if better engines are available and if Commodore Davis wants them he will be able to put a bid in for them.

Mr. GROOS: Is there anything in any of these vessels that we are producing that is of our own design, that we are giving or selling to any other navy?

Mr. HELLYER: Yes, the sonar, for example.

Mr. GROOS: But this is not a ship construction or ship design program.

Mr. HELLYER: If the hydrofoils prove successful I have no doubt there will be a market for them in other countries.

Mr. GROOS: We have been in this business for some time. I am just wondering what you have been able to produce.

Mr. DAVIS: You have to remember that it is one thing to talk about equipment; it is another thing to talk about whole ships and whole aircraft and it is becoming increasingly difficult to sell whole ships or whole airplanes to other countries, particularly bigger countries that have the same industrial capability. Therefore, I do not really think it is realistic that in this country we should expect to sell whole ships of our design.

Mr. GROOS: I hope you did not actually think that I meant we should sell whole ships.

Mr. HELLYER: I think there definitely are some things which we have developed and which are of interest but they are usually in the equipment or derivative class, because those are the kind of things that other nations can involve themselves in without running into political obstacles.

Mr. GROOS: And they have nothing to do with our shipbuilding construction.

Mr. DAVIS: I must say that this is not entirely true. There are pieces of equipment, particularly in the replenishment area, in areas of the N.B.C.D., where we have advanced further than other nations. In certain of the components of the propulsion plant that we have initiated ourselves while we have not sold any abroad we have certainly caused an interest in their use. The minister is quite right in saying that the ships we design are meant for us and are not necessarily satisfactory or suitable for other people but we are not doing badly in certain component items. Our first criterion has not been 'is it a good thing to sell'. However we are beginning to find out that some of the things we do are attractive to other people, yes.

The CHAIRMAN: On behalf of the committee I would like to thank our witnesses for, I think, a very interesting presentation. The committee stands adjourned until Tuesday. Thank you.

HOUSE OF COMMONS

Second Session—Twenty-sixth Parliament

1964-1965

SPECIAL COMMITTEE

ON

DEFENCE

Chairman: Mr. DAVID G. HAHN

MINUTES OF PROCEEDINGS AND EVIDENCE

No. 27

THURSDAY, APRIL 1, 1965

Respecting

INTEGRATED RECRUITING ORGANIZATION

Including

FIFTH REPORT TO THE HOUSE

WITNESSES:

Honourable Paul T. Hellyer, Minister of National Defence; and Group Captain C. R. Knowles, Director of Recruiting, Canadian Forces Headquarters.

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1965

21668—1

SPECIAL COMMITTEE
ON
DEFENCE

Chairman: Mr. David G. Hahn

Vice Chairman: Hon. Marcel Lambert

and Messrs.

Asselin (*Notre-Dame-de-Grâce*),
Béchard,
Brewin,
Deachman,
Fane,
Groos,
Harkness,
Langlois,
Laniel,
Lessard (*Lac-Saint-Jean*),
Lloyd,
MacInnis,
MacLean,
MacRae,
Martineau,
Matheson,
McMillan,
McNulty,
Pilon,
Smith,
Temple,
Winch—24.

(Quorum 13)

E. W. Innes,
Clerk of the Committee.

REPORT TO THE HOUSE

THURSDAY, April 1, 1965

The Special Committee on Defence has the honour to present its

FIFTH REPORT

Your Committee was appointed, by Order of the House of Commons, on May 8, 1964.

Since that time, your Committee has considered many matters relating to Defence, has received evidence thereon from numerous witnesses, and has made a number of progress reports.

Your Committee will not complete its tasks during the present session of Parliament. Under these circumstances this Committee recommends that it be reconstituted at the beginning of the next session of Parliament, and that, as far as possible, the present members of this Committee be appointed thereto.

Your Committee further recommends that the Minutes of Proceedings and Evidence of this Committee be referred, by the House, to the Committee when it is established during the next session.

A copy of this Committee's Minutes of Proceedings and Evidence (*Issues Nos. 1 to 27*) is appended.

Respectfully submitted,

DAVID G. HAHN,
Chairman.

21668—1½

MINUTES OF PROCEEDINGS

THURSDAY, April 1, 1965
(41)

The Special Committee on Defence met at 11:15 a.m. this day. The Chairman, Mr. David G. Hahn, presided.

Members present: Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Brewin, Deachman, Fane, Groos, Hahn, Harkness, Lambert, Laniel, Lessard (*Lac-Saint-Jean*), MacLean, MacRae, Matheson, McMillan and Winch—(16).

In attendance: Honourable Paul T. Hellyer, Minister of National Defence; and *from the Department of National Defence:* Group Captain C. R. Knowles, Director of Recruiting; and Lt. Col. L. E. C. Schmidlin of the Recruiting Directorate, Canadian Forces Headquarters.

The Chairman submitted a draft "Report to the House".

On motion of Mr. Winch, seconded by Mr. Lambert,

Resolved,—That the said draft report be adopted and submitted to the House as the Committee's "Fifth Report" (*For contents of Report—see "Report to House" on previous page*).

On motion of Mr. Lessard (*Lac-Saint-Jean*), seconded by Mr. Winch,

Resolved,—That the "Reports to the House", submitted by this Committee during the present session of Parliament, be assembled in bilingual booklet form; and that 1,500 copies of that booklet be printed.

Group Captain Knowles was called and he read a prepared statement respecting the *Newly Created Integrated Recruiting Organization.*

Agreed,—That Annexes "A", "B", "C" and "D" to the above-mentioned statement, be included in the Committee's printed proceedings.

The Honourable Mr. Hellyer and the witness were questioned on the statement and on related matters.

Mr. Winch, on behalf of the Committee members, thanked the Chairman of the Committee and the Minister for their assistance and co-operation.

At 1:00 p.m. the Committee adjourned to the call of the Chair.

E. W. Innes,
Clerk of the Committee.

Note—The evidence, adduced in French and translated into English, printed in this issue, was recorded by an electronic recording apparatus, pursuant to a recommendation contained in the Seventh Report of the Special Committee on Procedure and Organization, presented and concurred in, on May 20, 1964.

EVIDENCE

THURSDAY, April 1, 1965.
11.15 a.m.

(*Text*)

The CHAIRMAN: Gentlemen, we have a quorum. Before we hear the briefing this morning there are two procedural items we have to deal with. If the schedule in the House goes according to everyone's hopes and expectations this will be our last meeting this session. Therefore, I would like to submit a "Report to the House." We have a draft report, which has been reviewed by the Steering Subcommittee, that I would like to read to members of the Committee:

"The Special Committee on Defence has the honour to present its

FIFTH REPORT

Your Committee was appointed, by Order of the House of Commons, on May 8, 1964.

Since that time, your Committee has considered many matters relating to Defence, has received evidence thereon from numerous witnesses, and has made a number of progress reports.

Your Committee will not complete its tasks during the present session of Parliament. Under these circumstances this Committee recommends that it be reconstituted at the beginning of the next session of parliament, and that, as far as possible, the present members of this Committee be appointed thereto.

Your Committee further recommends that the Minutes of Proceedings and Evidence of this Committee be referred, by the House, to the Committee when it is established during the next session.

A copy of this Committee's Minutes of Proceedings and Evidence (*Issues Nos. 1 to 27*) is appended."

The real purpose of this report is to put on record a request that this committee be reconstituted next session, with the same members, if possible, as well as to put on record a request that the Minutes of Proceedings and Evidence from this session be referred forward to next session.

Mr. WINCH: Mr. Chairman, I move the adoption of the report.

Mr. LAMBERT: I second the motion.

Motion agreed to.

The CHAIRMAN: There is a further item I would like to deal with at this time. We have had a number of inquiries for printed copies of the reports we have issued this session. Therefore, I would like a motion that the "Reports to the House", submitted by this committee during the present session of parliament, be assembled in bilingual booklet form; and that 1,500 copies of that booklet be printed.

Mr. LESSARD (*Lac-Saint-Jean*): I so move.

Mr. MACLEAN: I second the motion.

Mr. MACRAE: Mr. Chairman, why do we need 1,500 copies? Is there that much demand?

The CHAIRMAN: This is the standard number of copies printed; there are 1,000 in English and 500 in French.

Mr. WINCH: It is a consolidation.

Mr. MACLEAN: Will they be bilingual or will there be 1,000 of one and 500 of the other?

The CHAIRMAN: Bilingual.

Motion agreed to.

The CHAIRMAN: Now, I have a final item. As you know, we have a group of prepared papers, and we already have passed a motion calling for the printing of them. We have been waiting a very long time for one paper which is coming from the Department of National Defence. However, I have been assured that will be forthcoming very quickly and, as soon as it is, all the papers will be printed in booklet form.

The briefing today covers the integrated recruiting organization of the armed forces. The brief will be read by Group Captain C. R. Knowles, Director of Recruiting, Canadian Forces Headquarters. Group Captain Knowles is going to be assisted by Lieutenant Colonel L. E. C. Schmidlin of the Directorate of Recruiting, Canadian Forces Headquarters. I believe all members have copies of the brief.

Will you proceed now, Group Captain Knowles.

Group Captain C. R. KNOWLES (*Director of Recruiting, Canadian Forces Headquarters*): Mr. Chairman, gentlemen; the purpose of our presentation to you today is threefold.

Firstly, to acquaint you with the three recruiting systems as they exist today.

Secondly, to describe to you our considerations and the factors that determined the form of the new Integrated Recruiting System approved by the Minister of National Defence on 8 Mar. 65.

And thirdly, to tell you very briefly of the requirement for recruits as we foresee it over the next two years.

Present Recruiting Systems

1. The systems have been developed over the years to meet specific service requirements. They are based on different recruiting concepts stemming from organizational and functional differences.

2. The Army recruiting system is designed to fulfil Corps requirements. In the Navy and the Air Force, recruiting is done by service, since in their form of weapon employment it would be impractical to recruit to either squadron or ship or other sub-formation.

3. Another fundamental difference between the Services in their approach to recruiting falls in the field of what we might call "selection philosophy". Within the Army, heavy reliance is placed on interviews, which is probably an expansion of the need for the very close personal relationship that develops amongst the fighting elements of the Army. In relation to the Navy and the Air Force, the Army uses a smaller battery of formal tests—on which the Navy and Air Force principally rely. In these latter two Services, relatively little reliance is placed on interview techniques.

4. Again, through organizational and functional differences, command and control of the recruiting units vary between the Services. In the Army, command of the recruiting units is vested in Commands and Areas on a geographical basis, while control is exercised by Canadian Forces Headquarters through these levels of command. This command and control organization was developed in part to meet mobilization needs. In the Navy, command is exercised principally

by Canadian Forces Headquarters, although it is filtered in part through 10 Area Recruiting Officers. Control of the Recruiting Units runs direct from Canadian Forces Headquarters to the Recruiting Units. In the Air Force, both command and control are vested in the recruiting organization at Canadian Forces Headquarters and recruiting units are directly responsive to direction emanating from this organization.

5. A further difference which we may describe as the technique of recruit contact is apparent: In the Army there are a large number of units—Regular and Militia—the latter having regular force advisory staffs associated with them. Over the period of years the Army have developed a system of providing initial recruit contact through these well known local units and have established a recruiting element in conjunction with many of them.

6. The Navy and the Air Force, on the other hand, have a lesser number of recruiting units, for the most part situated in the major centres, and they rely on periodic mobile operations into the small cities and towns to produce the recruit flow. Thus, three systems have developed over the period. The Royal Canadian Navy has 21 recruiting units to recruit approximately 3,000 personnel. The Canadian Army has 47 recruiting units to recruit 5,000 per year. The Royal Canadian Air Force has 17 recruiting units to recruit approximately 4,000 personnel per year. The total personnel employed number 490.

Advertising Support

7. Over the past ten years the recruiting operation has been supported by advertising monies in various amounts and by the appointment of Advertising Agencies. These Agencies have varied in number from three to five and have been Service-oriented in the main.

8. To give you an indication of the variation in recruiting emphasis over the past ten years, Annex D shows the variation in the yearly budget. I should like to point out at this time that certain types of advertising and intensive advertising campaigns have a positive carry-over so that the impact of sharply reduced financial allocation is not normally felt immediately; rather, the effect of advertising—the mental carry-over in the public mind—gradually erodes away and rebuilding the public understanding takes almost as long. Thus, the steady decline in funds has brought us to a point where modest increases are required for the coming year to bolster public consciousness of service in the Canadian Armed Forces.

Commencement of Integration

9. During the two years prior to integration of the Forces, significant accomplishments in the establishment of common standards for these three systems were made. Certain tests were adopted as common; some progress was made in developing common documentation. Seventeen Canadian Armed Forces Recruiting Centres were established in which the three Services work side by side to present a common front to the public. However, up until April 1965—today actually—each Service system was essentially separate. In October 1964 the Headquarters elements of the Navy, Army and Air Force Recruiting Organizations were consolidated in one Directorate under the Chief of Personnel/Director General of Training and Recruiting, and integration of the Headquarters staff came about. However, to ensure that the recruit flow continues uninterrupted, the field organizations retained their separate identities and procedures pending thorough study of the requirements of an integrated system. These studies culminated in the Minister's decision of March 8.

Recruiting Task

10. We can look upon the recruiting operation as one of selling—the recruiter's task is to sell the idea of service to country and the personal career

advantages of undertaking employment in the Canadian Armed Forces. The system that we devise must cater to the best selling practices;

(*a*) The recruit must be attracted, and in this regard the establishment of good public relations (PR) and advertising are our principal methods. Advertising may be divided broadly into two areas—National and Local—with National aimed at developing the atmosphere and Local directed to specific requirements. However, it is important to realize that the National and Local campaigns must be closely co-ordinated and controlled in time and content to achieve the greatest dollar value. Additionally, the full impact of advertising can be realized only if the Public is convinced of the need for maintaining Armed Forces and is impressed by the quality and dedication of those Forces.

(*b*) the recruit must be contacted by knowledgeable Service personnel without causing the recruit undue inconvenience. We must be prepared to meet him in the vicinity of his home or school or work, at times convenient to him.

(*c*) To convert the contact to an enrollee we must be able to determine his employability rapidly. We must convert interest to intention—to signature without delay.

(*d*) Once signed on, the recruit needs to be indoctrinated to military life and commence training as soon as possible. He must be kept moving to involve him in his new life and thus reduce the chances of his changing his mind.

Throughout the recruiting process, rapid, steady progression is essential.

11. Thus, the principal aims of the recruiting operation can be defined as follows:

To attract, contact, determine employment suitability, and enrol personnel in the numbers and qualities required, as economically as possible.

Each of the existing three systems has been examined for its ability and efficiency in meeting the aims, and, while each one contains desirable aspects, each has serious shortcomings when viewed against today's competition for manpower.

Correlation Between the Recruiting System and Initial Training

12. Discussion of a recruiting system cannot be divorced from the requirements of initial recruit training. Therefore, in considering the development of a recruiting system, or recruit flow, cognizance must be taken of the initial entry point of the recruit into the Service training structure and what that structure requires in the way of quality. Historically, quality at the recruiting level was reflected by attempting to recruit to job vacancies, but this system did not work; for example, a recruit might want to be enrolled as a carpenter but his ability might be clerical in nature and no amount of training would enable him to assimilate the trade requirements of a carpenter. From this developed the current differing systems of measurement and variations in recruit flow. These measurement systems are still somewhat coarse. The problems inherent in developing a single, more definitive measurement system have been recognized and studies are under way to resolve them. A common selection and classification system is under development and an extensive program of defining job specifications and related quality requirements is well started. Initial examination of both of these programs, and consideration of the aims of integration and unification, predicate a system of recruitment starting from determination of quantities governed by qualities; the development of a measurement system definitive enough to determine employability by the recruit-

ing agent; the establishment of job classification centres for refinement of initial selection into job determination (and, we suggest, for basic training), and ending up with the movement of the recruit into specialized training schools or units.

Organizational Flexibility

13. The need for integration of the recruiting systems is urgent as a first and most logical step in the integration process of the field organization, and as a positive public step towards unification. Although the Command Structure has not yet been established, the recruiting system must be developed now and must be capable of alignment with one of the field components should it become desirable to take this step in the future. In this regard, there are three alternatives, each of which has some merit and each of which has some disadvantages:

(*a*) We could align it with a functional command, presumably Training Command because of the direct relationship between recruiting and initial training; or

(*b*) We could align it with regional organizations; or

(*c*) We could direct control from Canadian Forces Headquarters with recruiting centres and subordinate elements supported administratively and logistically by appropriate Commands.

Organizational Assumptions and Principles

14. Against the above background and broad considerations, the following organizational assumptions and principles develop:

(*a*) Assumptions

(1) that the recruiting system will be developed on a completely integrated basis;

(2) that the recruiting system will be responsible for attracting, contacting, selecting and enrolling all Other Rank recruits for all Services and recommending enrolment for all officer recruits for all Services;

(3) that the recruiting system should be capable of alignment with a component of the new Command Structure;

(4) notwithstanding, it may be desirable to control and direct the system from Canadian Forces Headquarters.

(*b*) Certain principles evolve:

(1) Command and Control. A single line of command and control is required.

(2) Flexibility: Flexibility in the application of advertising and personnel resources is required to obtain sufficient quantities and qualities of recruits in relation to geographic areas and changes in economic conditions and Service requirements.

(3) Economy: The system should contain as few parts as possible consistent with maintaining adequate control to practise economy.

(4) Simplicity: Simplicity is associated with economy and speed of reaction. A simple system will enable individual Service recruiting personnel to interchange on recruiting tasks; the system will be able to react rapidly to quota adjustments and changes to procedures and policy; the lack of complexity will promote rapidity of induction and decrease the loss of potential recruits.

(5) Delegation of Authority: To promote efficiency and reduce processing time, authority and responsibility should be delegated to the lowest level commensurate with maintaining adequate control.

Outline of Functional Organization

15. Application of the above assumptions and principles to the recruiting aims produces the centrally controlled functional organization outlined below:

Organization and Function

(a) Canadian Forces Headquarters

(1) Determination of Canadian Armed Forces quotas (to include the required quantitative and qualitative elements) will be carried out with input to Directorate of Recruiting by Directorate of Personnel Requirements Control and Directorate of Personnel Selection and Research.

(2) Directorate of Recruiting (DR).

(a) Responsible to the Director General of Training and Recruiting for supervision, control and monitoring of the recruiting operation in the field.

(b) Directorate of Recruiting will be a small, completely integrated Directorate and will operate on a functional basis.

(c) Functions

(i) Implementation of recruiting plans and policies for officers and men, with respect to selection procedures covering their entry into the Canadian Armed Forces.

(ii) Promulgation of recruiting quotas to field recruiting organizations.

(iii) Promulgation of recruiting instructions.

(iv) Arrangement for, and centralized control of, commercial advertising, including concept, budget preparation and subsequent expenditure control.

I would like to interject at this point that in previous years we employed five Advertising agencies through each of whom a portion of the total advertising budget was expended. Co-ordination of the advertising programme was difficult and our approach to the whole field of attracting recruits tended to be cellular and rigidly oriented to individual Services. In keeping with the concept of integration, the Minister of National Defence determined that a single advertising agency with a strong bilingual capability would provide more depth of creative and placement effort; would resolve the co-ordination problem and would enable funds to be applied where they were required most without prolonged inter-agency consultation. Effective 1 April, 1965, Vickers and Benson will be this single agency.

(v) Development of Canadian Armed Forces static recruiting displays for local recruiting use.

(vi) Preparation and distribution of brochures, career outlines, films, leaflets, posters and displays related to recruiting.

(vii) Co-ordination with Directorate of Information Services for Advertising concept, counsel and Public Relations exploitation.

(b) Canadian Armed Forces Recruiting Centres

(1) Single Service Recruiting Units now in existence in major population centres will be replaced by integrated Canadian Armed Forces Recruiting Centres.

(2) A single Commanding Officer for each Canadian Armed Forces Recruiting Centre will replace the three Service Commanding Officers now exercising single Service command.

(3) Canadian Armed Forces Recruiting Centres Commanding Officers will be responsible directly to Canadian Forces Headquarters (Directorate of Recruiting).

(4) Canadian Armed Forces Recruiting Centres will be responsible (within quotas assigned by the Directorate of Recruiting and within a specified geographical area) for the attraction, contacting, processing, selection and enrolment of suitable quality men for the Canadian Armed Forces, and for recommendation for selection of suitable potential officer candidates. These units are the prime contact agency, although the Directorate of Recruiting will be involved from direct enquiries and coupon replies.

(5) Composition. Each Canadian Armed Forces Recruiting Centre will have a fully integrated staff, common reception area, common Orderly Room and common test rooms. These staffs will be trained (with technical assistance from the Directorate of Personnel Selection and Research) to permit conduct of all selection tests by any Service for any Service.

(6) Functions.

(a) Preparation and insertion in appropriate media, of local advertising material, designed to follow up and exploit National advertising in conformity with Canadian Forces Headquarters policies, entailing one third of the total Advertising budget.

(b) Counselling, interviewing and screening of all recruit applicants to determine basic acceptability.

(c) Application of appropriate tests to determine suitability for employment in the Canadian Armed Forces.

(d) Arrangements for the conduct of recruit medical examinations; medical examinations—to be carried out at nearest Service facility provided no delay is involved to recruit enrolment. When delay results from referral to Surgeon General agency, civilian practitioners certified by the Surgeon General will be used. It is essential that there be no disruption to the documenting, testing and enrolment process.

(e) Enrolment of suitable and acceptable Other Rank candidates and despatch to appropriate classification centres.

(f) Despatch of basically acceptable officer candidates to designated centre(s) for comprehensive selection process.

(g) Conduct of school approach visits, within policy and authority laid down by Canadian Forces Headquarters Directorate of Recruiting.

(h) On authorization by Canadian Forces Headquarters Directorate of Recruiting, arrangements for band tours, and visits by high school principals, guidance counsellors, students, press, etc; to selected military establishments.

(*j*) Mobile recruiting, as an adjunct to Recruiting Centre operations.

(*k*) Arrangements for placing Canadian Armed Forces static recruiting displays in the Canadian Armed Forces Recruiting Centre local area.

(*l*) Direction of activities of subordinate sub-Canadian Armed Forces Recruiting Centres.

(c) Sub-Canadian Armed Forces Recruiting Centres

(1) Within the area of operations of a Canadian Armed Forces Recruiting Centre, Recruiting Units will be redesignated as sub-Canadian Armed Forces Recruiting Centres.

(2) Each sub-Canadian Armed Forces Recruiting Centre will be commanded by an officer.

(3) Sub-Canadian Armed Forces Recruiting Centres will be responsible to a parent Canadian Armed Forces Recruiting Centre.

(4) With appropriate cross-training, each sub-Canadian Armed Forces Recruiting Centre will have recruiting responsibilities parallel to parent Canadian Armed Forces Recruiting Centres.

(5) *Composition.* Each sub-Canadian Armed Forces Recruiting Centre will have a small integrated (or cross-trained single service) staff.

(6) *Functions.* With suitable cross-training, an Officer-in-Charge, and availability of appropriate medical facilities, each sub-Canadian Armed Forces Recruiting Centre will be able to carry out all the contacting, testing and enrolment functions of a parent Canadian Armed Forces Recruiting Centre (as outlined under *Functions* sub-subpara *b.* (6) above). To economize on staff the responsibility for co-ordination of school approach, the conduct and administration of band tours, visits of high school principals, guidance counsellors, students, press etc to military establishments; local advertising, and the placing of recruiting displays in the local area, will remain with the parent Canadian Armed Forces Recruiting Centre.

Recommended Field Organization

(*a*) *General*

The foregoing paragraph outlined the general organization and functions of the new recruiting system. In adopting this centrally controlled integrated organization, it becomes quite obvious that manpower savings, both in numbers and in ranks, can be achieved. Additionally, there should be administrative savings in mileage and travelling expenses by the avoidance of duplication. While complete details of proposed establishments are not yet available, it is possible to present a general idea of the recommended structure, with a broad cast at savings that will accrue.

(*b*) *Background*

(1) Currently the recruiting network consists of seventeen (17) Canadian Armed Forces Recruiting Centres, thirty-five (35) single service Recruiting Units, and elements of four Command Headquarters, 11 Area Headquarters and 10 Personnel Depots. The staff actively employed on recruiting duties is 155 officers, 178 Senior Non-Commissioned Officers and 105 men and civilians, a total of 438 personnel against an establishment of 490.

(2) There is not a clear record of the yardsticks used in the development of the size and composition of the three existing field organizations. It appears that they were initially established in strength and location and then adjusted on the basis of personal assessment of work load and production variations over the years. Thus, although the current strengths and locations represent sound structures for the individual service systems, no definitive measure is available on which to base development of a new organization. Accordingly, the study has taken the approach that the requirement for Canadian Armed Forces Recruiting Centres must be related, in each case, to the following factors:

(*a*) Population density.
(*b*) Geographical size of area.
(*c*) Boundaries, natural and political.
(*d*) Communications (accessibility).
(*e*) Existing facilities.
(*f*) Number of sub-Canadian Armed Forces Recruiting Centres to be controlled.
(*g*) The state of the local economy.
(*h*) Recruiting history.
(*j*) Service considerations.
(*k*) Ethnic considerations.

I would like to refer you at this moment to annex A which is a typical organizational form of a Canadian Armed Forces Recruiting Centre and a sub-Canadian Armed Forces Recruiting Centre.

The CAFRC shown is the largest of its size, involving some 20 people, and the sub-CAFRC is standard. This approach results in a series of Canadian Armed Forces Recruiting Centres ranging in size, from a maximum of 20 all ranks to a minimum of 11 all ranks. Canadian Armed Forces Recruiting Centres will be supported by a number of sub-Canadian Armed Forces Recruiting Centres, located in smaller centres, with a historical record of good recruit productivity. Sub-Canadian Armed Forces Recruiting Centres are established at a standard two officers and three Other Ranks. (Annex A attached).

At this point I would refer to Annex C.

(c) *Numbers and Establishments*

(1) Based on the foregoing criteria, there will be a requirement for 15 Canadian Armed Forces Recruiting Centres and 19 sub-Canadian Armed Forces Recruiting Centres, located as shown on the map attached as Annex B.

There is a map there as well which shows the geographic spread of these various centres. Annex C contains a little more detail, with the numbers of personnel.

This will result in the closure of 18 single service Recruiting Units, and a reduction of Canadian Armed Forces Recruiting Centres from 17 to 15.

(*d*) Comment

(1) On the foregoing basis the proposed field organization would require a total of 140 officers, 68 Senior Non-Commissioned Officers and 114 Privates and civilians. This represents a possible saving against establishment of about 33 per cent.

(e) In completing discussion on the proposed organization, reference is again made to the entry point into the training mill, Job Classification, and Basic or Common-to-all Training Centres. The recruit would be sent to appropriately located centres following enrolment by the Canadian Armed Forces Recruiting Centre, sub-Canadian Armed Forces Recruiting Centre or Mobile Team. (Such centres now exist on a single service basis for Royal Canadian Navy and Royal Canadian Air Force. In the interim, Personnel Depots will continue to be used for the classification function for Army recruits pending development of the integrated centres). Following job classification and basic or common-to-all training, the recruit would be sent to specialized training establishments related to his future career in the Canadian Armed Forces.

Initial Implementation

16. It is necessary to move from the present arrangements to the new recruiting organization in phases which will ensure no hiatus in recruiting activity or effectiveness. The implication of this is that all changes in organization, responsibilities and procedures must be fully understood at the local level, made known in time to permit effective reaction, and in particular that changes do not cause confusion in the minds of the public and potential applicants. A number of the measures required can be put into effect in the approximate period 1 April to 1 October 65. It is anticipated that each of the three phases outlined below would take approximately two months to implement, but this must be considered only as a broad time allocation. Phases may shrink or expand as the operation proceeds.

(a) Phase 1

(1) Canadian Forces Headquarters (Directorate of Recruiting) assume direct control of all Army Recruiting Units.

(2) When feasible, Army Manning Staff Officers and subordinate staffs relocate to, and become part of, adjacent Canadian Armed Forces Recruiting Centres.

(3) With issue of May 65 quotas, Army monthly recruiting quotas will be issued direct to Canadian Armed Forces Recruiting Centres from Canadian Forces Headquarters (Directorate of Recruiting).

(4) Relocation of Naval Career Counsellors to Canadian Armed Forces Recruiting Centres and redesignation as Recruiting Officers. Naval Mobile Recruiting Units become integral parts of Canadian Armed Forces Recruiting Centres.

(5) Pending formal establishment action and the development of revised arrangements for administrative support, all personnel will continue to cover existing establishment positions, and administrative support will continue to be provided under current arrangements.

(6) Canadian Armed Forces Recruiting Centres and sub-Canadian Armed Forces Recruiting Centres to be positioned as indicated in Annex B, an officer named to be in charge of each, and recruiting boundaries adjusted.

(7) Inception and initial issue of Directorate of Recruiting Instructions.
These instructions will replace Recruiting or Manning Instructions issued by the three Services pre-integration, and will provide the medium for Directorate of Recruiting to transmit

recruiting policy, procedural and administrative instructions, etc. to the Canadian Armed Forces Recruiting Centre Commanding Officers/Officers-in-Charge.

(8) With effect from 1 April 65, responsibility for the allotment and control of 1965/66 local advertising funds to Canadian Armed Forces Recruiting Centres Commanding Officers/Officers-in-Charge will be assumed by Canadian Forces Headquarters (Directorate of Recruiting).

(9) Cross training of recruiting staffs is already under way and will be largely completed during Phase I.

(*b*) Phase II

(1) Development and issue of Organization Orders for Canadian Armed Forces Recruiting Centres will be completed.

(2) Physical relocation to Canadian Armed Forces Recruiting Centres, of Personnel Depot staffs involved in recruit processing to enrolment (less classification). Individuals will continue to be charged against Personnel Depot establishment positions pending promulgation of official Canadian Armed Forces Recruiting Centre establishments.

(3) Implementation of a common selection and enrolment procedure at Canadian Armed Forces Recruiting Centres will be accomplished.

(4) Establishment of common recruiting reports and returns for use by Canadian Armed Forces Recruiting Centres will be carried out.

(5) Current local administrative support to Canadian Armed Forces Recruiting Centres and sub-Canadian Armed Forces Recruiting Centres will be maintained during Phase II.

(*c*) Phase III

(1) Development and promulgation of revised Canadian Armed Forces Recruiting Centre establishments.

(2) Posting of all recruiting personnel to pertinent Canadian Armed Forces Recruiting Centre establishment positions.

(3) Development of final system of pay, medical, dental, vehicular and equipment support, and clear delineation of the extent of local administrative support required.

Future Development

17. Implementation of the three Phases outlined above will permit the new recruiting organization to function. However, there will be numerous refinements required, and these refinements of necessity will require detailed study, close liaison with the other Branches/Divisions/Directorates involved, and with the field organization; and, in addition, in some cases, creation of appropriate integrated policy. Certain of these areas are listed as follows:

(*a*) Costing Refinements. There is a need to develop a finite method of costing the recruiting operation when related to individual Canadian Armed Forces Recruiting Centres. Such finite costing would permit measurement of Canadian Armed Forces Recruiting Centre productivity and would provide a control "tool" for determining efficiency, staff composition, support requirements.

(*b*) Modernization of Display Facilities. Over the years, and pre-integration, the three services built up a considerable inventory of

display materials and exhibits. In many cases the material is now outdated and hence, non-effective. A complete re-examination of existing display inventories will have to be carried out, and modern, topical and mobile display facilities developed which can be moved from location to location and used time and time again.

(c) Development of Advertising Techniques and Facilities. This will involve careful examination of the costlier advertising media (radio, television, etc.), and the development of a library of suitable tapes and film clips, to augment and support advertising in the print media.

(d) Refinements to Establishment of Quotas. Currently, of necessity, quotas contain a relatively coarse measurement of quality, with refinement carried out in classification centres. It is considered that procedures must be developed to refine the element of quality in quotas to permit promulgation to field recruiting organizations of quotas bearing a direct relationship to enrolment tests applied at Canadian Armed Forces Recruiting Centres.

(e) Development of Common Pay Procedures. Variances in procedures in effect for travel claims, pay advances, privately owned motor car claims, etc., have an impact on Canadian Armed Forces Recruiting Centre operations. Common procedures, when developed, will be of great assistance.

(f) Recruiting Vehicles.

(1) A wide variance now exists in the holding and operation of recruiting vehicles. A common system of vehicular support must be developed with the ultimate aim of providing each Canadian Armed Forces Recruiting Centre with the quota of vehicles required and a common system of authorizing unit personnel to operate the vehicles.

(g) As Canadian Armed Forces Recruiting Centres/Sub-Canadian Armed Forces Recruiting Centres will be a form of "lodger" units, development of integrated personnel and logistic arrangements will be required.

(h) Medical Examinations. Development of recruit medical procedures, to the mutual satisfaction of the Surgeon General, and the recruiting organization, to permit competent medical examinations at the lowest enrolment level, with minimum disruption to the applicant in his progression to enrolment is a task to be done.

(j) Integrated basic (or Common-to-All Services Classification and Training Centres). Ultimately, it may be that there will be a requirement for a number (perhaps up to five) of fully integrated basic (or Common-to-All-Services) classification and training centres, to embrace the existing R.C.N. and R.C.A.F. centres and to assume the classification role now held by CA(R) Personnel Depots. This part of the recruiting organization is also the beginning of the training organization and must be examined in the light of the proposed development of the latter. It is envisaged that plans for the integration of training will have progressed sufficiently by Sep 65 to enable a study regarding integrated classification and training centres to be initiated. It is noted that the personnel now employed on classification work in the Army Personnel Depots would provide a valuable input and assistance to these more comprehensive centres.

Concluding our remarks on the new organization as such:

18. The proposed single line system will effectively meet the aim of a recruiting organization and is designed to serve the integrated Canadian Armed Forces. It can at a later date be aligned with a component of the new Command Structure if deemed appropriate. This system and new organization will result in economies in manpower and operating costs in the order of 168 men or ($1.1) million annually. The cost savings that we forecast here are primarily concerned with the savings in personnel costs and amount to about $1,080,000, and a reduction in staff transportation costs of around $11,000. As the system starts to operate and as we gain further experience, I am quite sure and I am quite convinced that we will find further minor areas of saving on the administrative side. In closing I would like to touch on our third phase of this briefing:

Recruiting Requirements

19. The requirement for recruits in the Canadian Armed Forces remains significant. Unfortunately, the reduction in force strength of 10,000 personnel has generated an impression that the requirement for recruits has abated. Nothing could be farther from the truth.

20. During the next two years, some 24,000 serving personnel will be lost to the Services through normal attrition—the largest part of them having reached retirement age; some through reduction in medical category which precludes re-enrolment; some who decide to take their Service-acquired skills into the booming commercial market of today, and, finally, a small percentage who will be retired prior to normal release age, to re-structure the forces in the light of the new roles and more modern equipments.

21. The 10,000 force reduction will be accomplished from within these personnel, leaving a requirement for 7,000 newly trained personnel per year. It has been our experience that to produce 7,000 trained personnel, we must recruit approximately 9,000 to take care of wastage. Wastage caused by new recruits who are unable to acquire the very high skills needed to maintain our modern complex equipment. Wastage—to a lesser degree—from recruits who prove to be unable to adjust to Service environment through homesickness, incompatibility and other similar causes.

22. To the recruit who has the ability, the desire, to serve his country in a real and vital way, we offer an exciting rewarding career. Opportunity to advance to positions of responsibility is greater than ever before. Variation in employment and the interest that such variation evokes increases steadily with re-equipment of our fighting arms. The shifting world scene opens up new places and ways in which to serve. The standard of excellence required of the military man ensures a camaraderie that is difficult if not impossible to realize elsewhere.

23. The benefits stemming from integration of the Services are real and tangible. It is our task to emphasize this to the public and to impress on our people the fact that service to country can be a way of life—wholesome, satisfying and worthwhile.

24. I solicit your assistance.

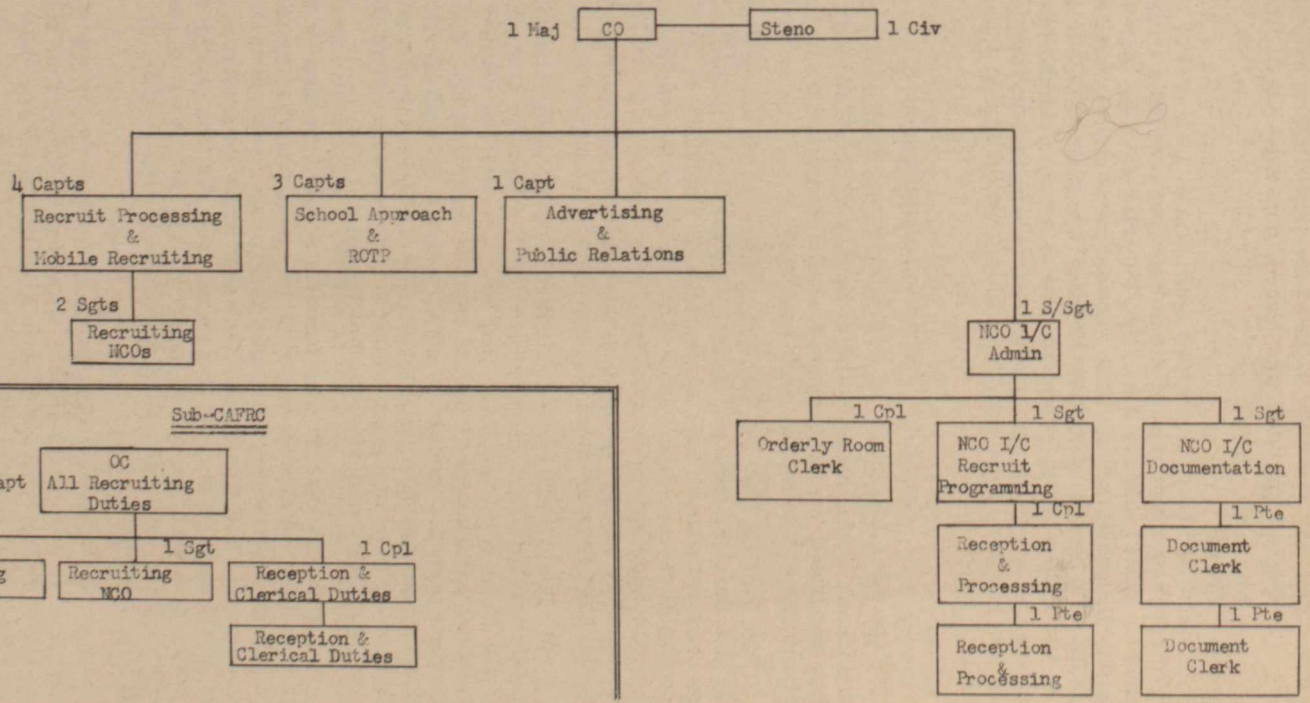
The CHAIRMAN: Thank you, Group Captain Knowles. Before we proceed with the questioning, annexations (*a*), (*b*), (*c*) and (*d*), that are included with the briefing, I believe should be included in the report. Does the committee agree on this?

Some hon. MEMBERS: Agreed.

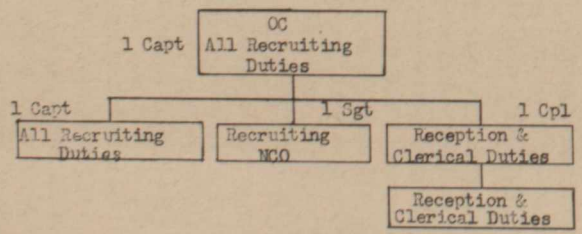
ANNEX A

EXAMPLES OF AN ORGANIZATION
FOR A CAFRC AND A SUB-CAFRC

CAFRC

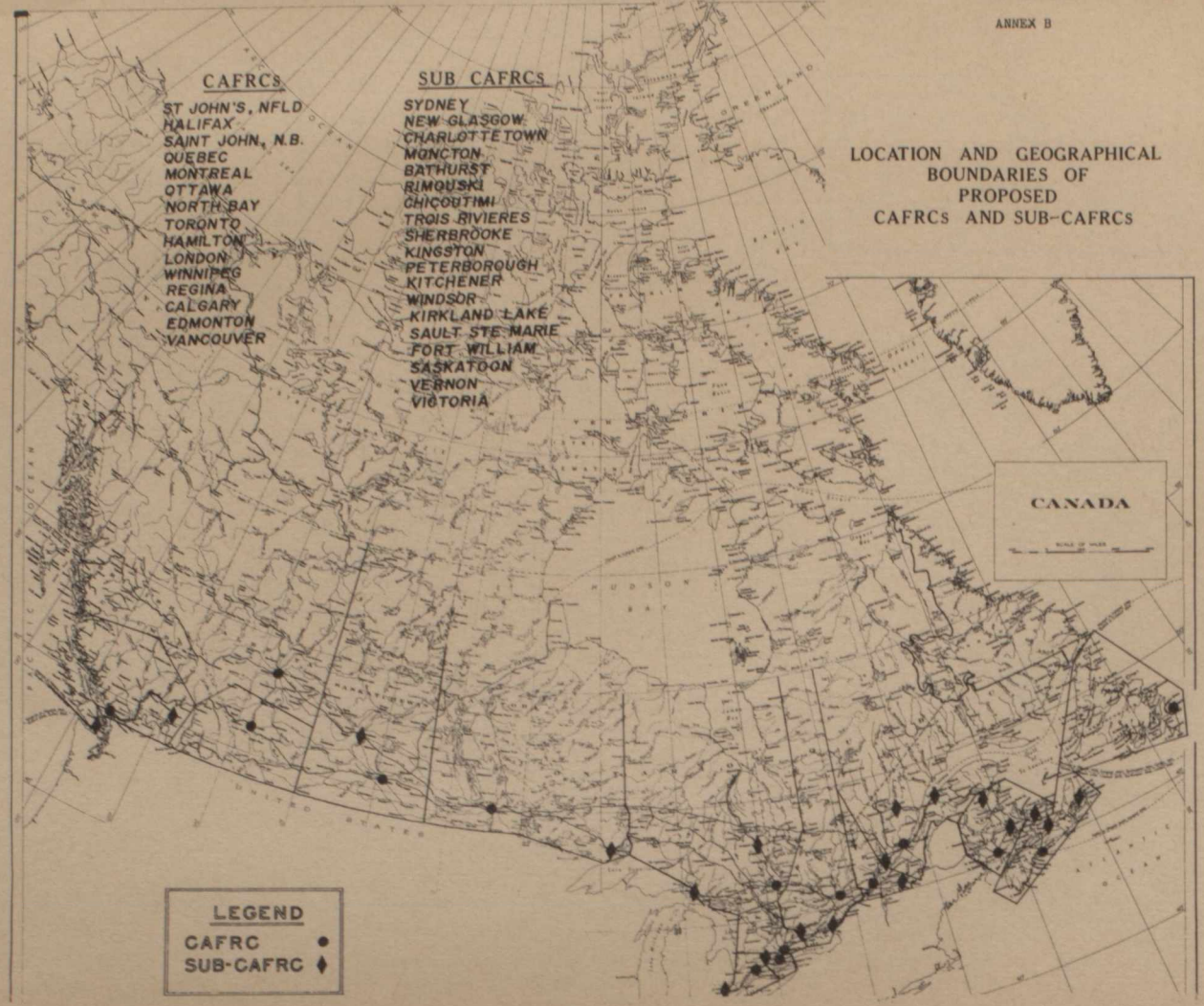


Sub-CAFRC



21668—3

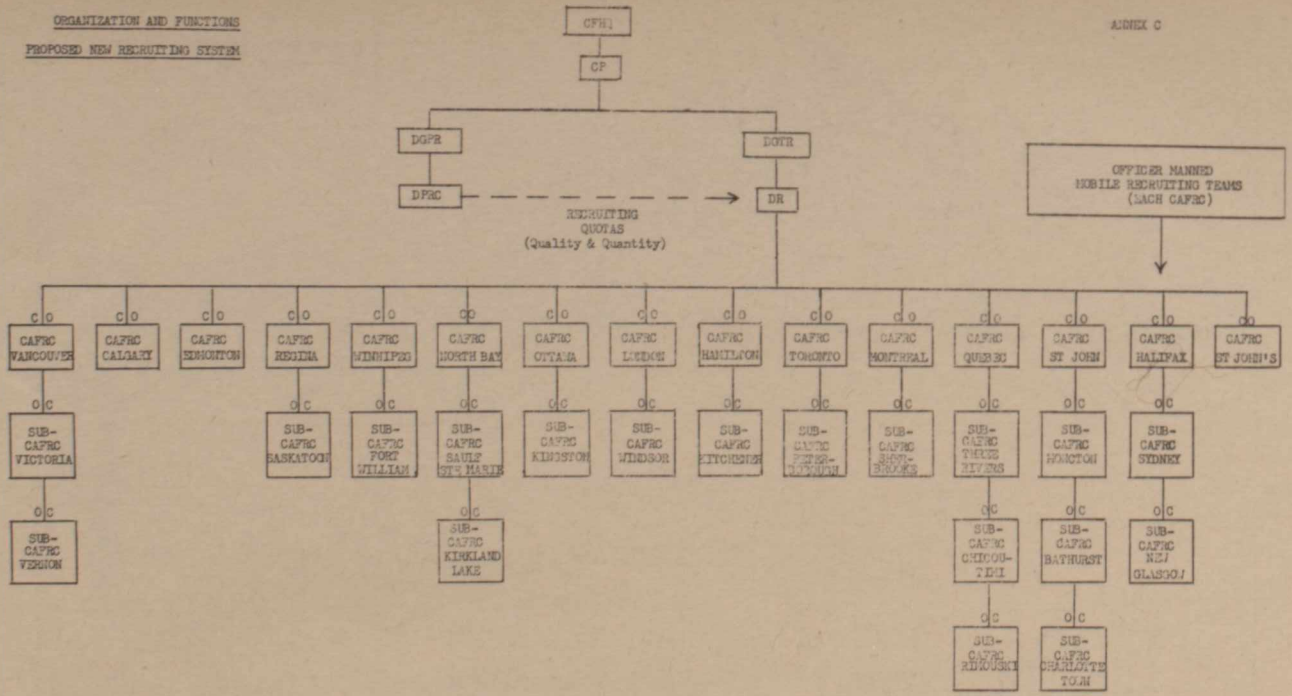
LOCATION AND GEOGRAPHICAL BOUNDARIES OF PROPOSED CAFRCs AND SUB-CAFRCs



ORGANIZATION AND FUNCTIONS

PROPOSED NEW RECRUITING SYSTEM

ANNEX C



NUMBER OF UNITS

UNIT	PRESENT	PROPOSED
CAFRC	17	15
SINGLE SERVICE RU	35	-
SUB CAFRC	-	19

NOTE: Re-designation of CAFRCs and creation of Sub-CAFRCs will result in complete elimination of 18 existing Single Service RUs.

STAFFING

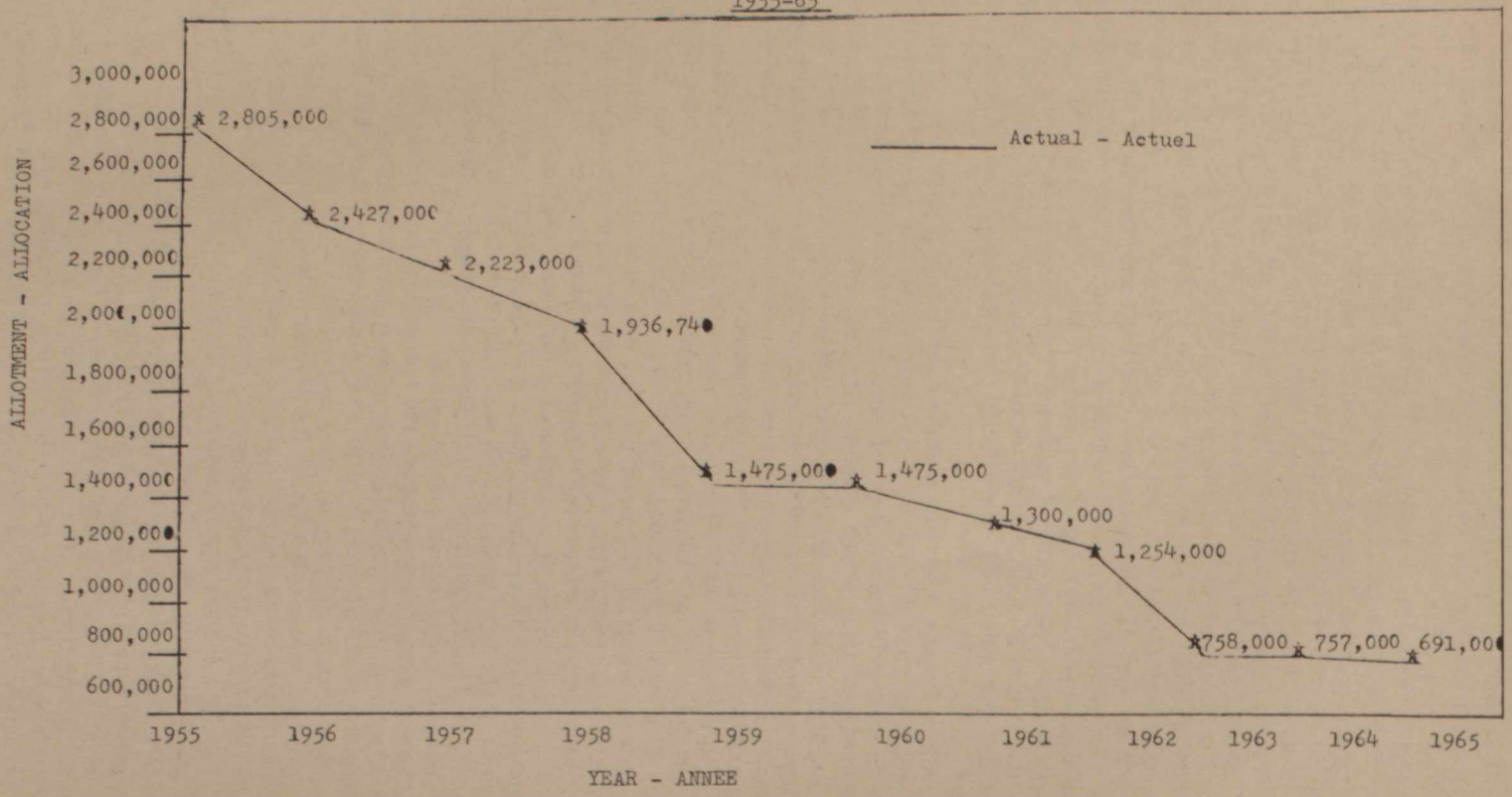
RANK	PRESENT ESTABLISHMENT	PRESENT STRENGTH	PROPOSED ESTABLISHMENT	INC/DEC OVER STRENGTH	INC/DEC OVER ESTABLISHMENT
MAJ	17	26	15	-11	-2
CAPT	51	38	125	+37	+74
LT	92	41	0	-41	-92
WO/S S/SGT SGT	190	178	68	-110	-122
CPL/STS/CIV	140	105	114	+9	-26
TOTAL	490	438	322	-116	-168

NOTE: Proposed establishment of 322 all ranks (including civilians) represents the MINIMUM OPERABLE ESTABLISHMENT, and must be filled completely to permit functioning of the Recruiting Organization.

TRI-SERVICE ADVERTISING COSTS - COUTS DE PUBLICITE POUR LES TROIS SERVICES

ANNEX D
ANNEXION D

1955-65



The CHAIRMAN: We can now proceed with the questioning. I have on my list Mr. Winch, Mr. Lambert, Mr. MacRae and Mr. Deachman. Mr. Winch you are first.

Mr. WINCH: Mr. Chairman, I am certain that we all on this committee appreciate a 14 page presentation on matters respecting defence relevant to the newly created integrated recruiting organization. Sir, there is one phase of this presentation which I am not going to say disturbs me but intrigues me and that is that outside of one sentence in paragraph 20 on page 13, the presentation deals wholly and solely with new recruits. Mr. Chairman, I myself cannot understand a presentation of the requirements of new recruits unless it is related to the policies governing re-enlistments of those already in service. I think this particularly applies to the navy and the air force where, to a considerable extent, our men and officers have to be highly trained in technology and all the new aspects of the navy and air force. If my information is correct, to give an example, it costs over half a million dollars to train a 15 man crew and supporting maintenance men for the operation of one Argus aircraft. Now, Mr. Chairman, I do not see how you can separate the question of new recruitment from the policy of retaining in service or re-enlisting the men who, after their first period of commitment, may want to leave.

Since I have had the privilege of being a member of this committee, in the past year I have had an opportunity to meet with both airmen as well as men in the navy. It is my personal conclusion—and I think I am correct —that many upon whom Canada has now spent fantastic amounts of money for training would re-enlist in the service for a second, third, or fourth term if there were policies, such as for one year's service at sea with separation allowance because one is at sea, or for men having been trained by Canada, a bonus for re-enlistment over a period of years.

I understand, Mr. Chairman, that this program has been tried in the United States. I have received conflicting rumours about how successful it has been. But what I am trying to drive at is this: I fail to see how we can have an understanding of the need for this new recruitment requirement unless it is tied in with a policy of re-enlistment of those whom we have trained, so that they may continue their careers in the service.

I think that this is a matter of policy, and that something along this line might get them to re-enlist. They now have been completely trained at the expense of Canada, and I feel it is of utmost importance, and something which cannot be separated from a program of training new recruitments where you have to spend money and to train.

I may have become rather confused, Mr. Chairman, but I do think this is a most important question. It is a basic and fundamental principle that re-enlistment must be tied in with re-enlistment policies and procedures, in a new recruitment policy.

Might I ask a question of the honourable gentleman who has given this most comprehensive brief? I am glad to see that the minister is here. Perhaps he might care to comment on it.

Hon. PAUL HELLYER (*Minister of National Defence*): You are quite right, the two subjects are related.

Mr. WINCH: There is nothing on re-enlistment here.

Mr. HELLYER: You are right, but the two subjects are related. However the brief this morning had reference only to one of the subjects, that is, to recruiting specifically, and to the manner in which it is carried out. No attempt was made to include policy respecting re-enlistment. If the committee is particularly interested in re-enlistment policy, it would be possible at a later date to have a discussion of that area.

There is one thing you should bear in mind respecting re-enlistment and the complexity of policy dealing with it. I refer to conflicting demands. You quoted figures respecting the Argus crew. I cannot accept your figures offhand. I do not have them. I suspect they are too low. But whether they are low or high, it will serve for the purpose of illustration of the very high cost in training highly technical personnel.

When the question of re-enlistment comes up it is a matter of getting the right people to re-enlist for the right length of time. Here you have conflicting requirements in some areas. In some areas the armed forces want a fairly rapid turnover, while in other areas where skills are higher, and where physical demands are not as rigorous, they want a longer period of service. So you have to have selectivity in respect of re-enlistment policy. This is extremely complicated.

In order to assist us in taking a look at this whole area of manpower policy, and precisely the questions you have raised this morning with respect to manpower, a study group has been set up at the present time under the chairmanship of Major General Anderson. He is looking at a number of fundamental questions including the recommended length of service for personnel in various employments in the armed forces, what are the required levels of training, and what is required of people doing specific jobs in the armed forces.

We expect to have this report later this spring and to use it as a basis for review of fundamental manpower policies, including this very difficult one of re-enlistments and the relationship between short, medium, and permanent commissions for officers and so on.

One further word: I would not want you to get the impression that our re-enlistment experience is not good compared to other forces in the same business. It is excellent. We have our naval re-enlistment rate for example. It has been reported to us to be higher than that of other navies that one can look at including the British, United States, and Australian navies. But it is not good enough, particularly in some skills that we need for long periods of time.

We are now taking steps and will take steps to do something about it. But the experience is still very good comparably, and it has improved in the last year and a half over the previous year and a half.

Mr. WINCH: I appreciate the comments from the minister. I would now like to direct two questions to him based on what he has stated. How can we have presented to us here in this brief and set forth in some detail the requirements of new recruitment which are definitely stated to be for a two year period without their being related to policies for holding in the service those who are now training? And secondly, if I may put my two questions together, you know, as a former member of this committee I had an opportunity of spending a week at sea off Puerto Rico on board *Bonaventure*, where there were 1,364 men and officers.

The captain told me that their average age was 22 years and seven months. These were the men and officers handling the tracker aircraft, the helicopters, and the ship.

These men have been trained at that age with their specific, fantastic responsibilities on all electronic equipment operating the ship, the trackers, and the helicopters. Surely it is of major importance to re-enlist and hold these men. I want to apply this to the recruiting program of brand new personnel that you train and then lose. My interest is in holding the men that Canada trains.

The CHAIRMAN: If I may interject as Chairman before the answer is given, I think we have a brief dealing with the problems of attracting new people

to the services. As the minister stated, the whole question of manpower policy in retaining these people within the service is interesting and one which perhaps the committee should look at. But I suggest that today while we have the people here who can explain the brief dealing with new recruitments, we should limit ourselves to a discussion of that brief, and leave the way open for future discussion of the questions in which you are interested.

Mr. WINCH: That is my very point. How can you separate the two?

Mr. HELLYER: I would like to comment briefly on your first question. It is perfectly legitimate. The estimate of recruits required over a period of time is a ball park estimate.

It cannot be refined down to the nearest person as far as two years in advance for obvious reasons. The reason the estimates will not change very much is that even major policy changes are not likely to affect re-enlistments by an order of magnitude which changes these requirements significantly. In other words, you have to make substantial changes in policy to improve the re-enlistment rate, say, by five percentage points. Although that much improvement would facilitate your problem and certainly assist in making better use of resources in certain areas, it would not affect the requirements substantially enough to concern you from the standpoint of an examination of this briefing.

Mr. WINCH: As the result of my discussion with men and officers I would like to direct a question to the minister. Is any consideration being given to the men in the navy with regard to a separation allowance, and is any consideration being given to a bonus to technicians and others you want to retain on re-enlistment.

Mr. HELLYER: The answer to the first half of your question is yes; this is under current study. The answer to the second part of your question is we have been looking at it, but how you can pay bonuses to the people that happen to be in short supply from moment to moment only, is something I do not know the answer to.

Mr. WINCH: Have you studied the policy of the United States on this matter?

Mr. HELLYER: We have been looking at their policy, yes. I suspect there will be some policy changes in this area in a fairly short length of time. But, if you start to apply re-enlistment bonuses they have to cover wide areas, and you cannot just say we have a shortage in a particular skill today, therefore, we are going to pay those men more to re-enlist because the inevitable effect would be to have shortages either spontaneously or otherwise in another trade very soon, when you would be required to do the same thing on a wider scale. This is a complicated problem.

Mr. WINCH: But you say it is under study?

Mr. HELLYER: Indeed it is.

The CHAIRMAN: Have you a question, Mr. Lambert?

Mr. LAMBERT: Mr. Chairman, Mr. Winch hit upon a point I had noted, as a matter of fact, because paragraphs 19 and 20 are sort of a plea, or there is an implied plea, for stopping up all the bleeding that has been going on in the last year or so as the result of what is indicated in paragraph 19. Mr. Chairman, we need not hide it because we know it does exist. There has been an excessive attrition in both the air force and the navy for a number of reasons. I think what is shown in paragraph 19 is one of the penalties for the ballyhoo which accompanied the announcement of the reduction in savings last year when integration was announced. This shows that every knife has two edges. But, I will leave this question other than to say that, as far as I am concerned, it is highly important and it must be always considered that recruitment includes re-engagement.

Mr. HELLYER: Mr. Lambert, before you leave this I wonder if I could put this matter into perspective, because that is what you are trying to do, and I think it should be done.

The group captain has indicated a requirement of the order of 9,000 recruits in each of the next two years. Last year we took in over 10,000 recruits, and to date this year each month has been an improvement on the same month last year. So, I would not want to give the impression that things are not under reasonable control.

Mr. LAMBERT: No; it may be that you are getting a number of recruits but, on the other hand, you will also admit that the gate at the other end has opened up a little wider and we are losing a lot of good men. I know this from personal experience. I have spoken to men who have cost this country a great deal to train and they would love to carry on in the armed services, but they say this is the end of the road because of certain changes. All right, this is one of the penalties, and let us recognize it as that. I am not faulting it, but I think we should recognize it as one of the penalties. We also should recognize that this is one of the penalties as the result of this slow down requirement. As the paragraph says, there is a slow down in recruiting. So, there has been a falling off in interest because of the announcement of a 10,000 cut in the armed forces. All right, you want to make a saving of 10,000, but you have to be prepared to pay a penalty for it, and I say this is the penalty.

Mr. HELLYER: May I say that we do want your assistance in letting people know we want new recruits but we would not want you to think the situation is worse than it really is, because it is not bad. I am sure, with your assistance, we will not have too much of a problem.

Mr. LAMBERT: The gates are wide open for recruits, but I also want to point out there is a corollary to it, that the gate at the other end has opened up, too. This is a great concern to myself, as well as to Mr. Winch and other members. I hope the means will be found to close that rather unnatural attrition rate.

Mr. HELLYER: I do not want to argue this, but it is a problem of taking people in the right numbers in the right trade; this is complicated because in some areas we have more personnel now than we really can use effectively, and in other areas we are short. What we are trying to do, in bringing in our recruits and keeping people through re-enlistment, is to balance out the force to effectively do the jobs which they have to perform with the least possible manpower, and this will take some time.

Mr. LAMBERT: All right. I would like to go to the footnote to annex C and the matter of savings. There is rather a significant comment there, which says:

> Proposed establishment of 322 all ranks (including civilians) represents the minimum operable establishment, and must be filled completely to permit functioning of the recruiting organization.

Having said that, I take it that paragraph 18 and the indicated savings in personnel and moneys are based on a reduction in the present strength or establishment to this paper establishment that is indicated in annex C, and that your forecasts are made on that basis. Does this take into account the effect of pre-transfer leaves, post-transfer leaves, sick leaves and annual leaves?

It seems to me that in the armed service structure all too often we have large gaps when people have been designated for a job but are away for some reason, perhaps undergoing training under some program, or on sick leave, or what have you, and somebody has to double up—quite often a civilian. Does this establishment take into account the margin of non-effective strength?

G/C KNOWLES: Yes, sir, it does.

Mr. LAMBERT: What is your margin of tolerance?

G/C KNOWLES: This establishment will allow for ordinary annual leave and ordinary sickness within the average sick leave period per year. I have not the exact details of that with me, but I believe it runs at about nine and a half days per year. It also takes into account ordinary career courses which are about a month in duration and would work out to about one quarter course per person per year.

Mr. LAMBERT: I see. Therefore, this paper establishment that is now indicated in annex C is not in the same category of effectiveness as is the present establishment. The present paper establishment is 490.

G/C KNOWLES: Yes.

Mr. LAMBERT: The strength is 438.

G/C KNOWLES: Yes.

Mr. LAMBERT: Does that mean the system is operating below par?

G/C KNOWLES: I would not say it is operating below par; it is operating at less than its established strength. One of the reasons is that we have not made an establishment review on the existing system for the last six months, because we were working on the integration of this system. We saw a few soft spots, and we did not replace people who were transferred out when we could keep going for a while. We have done that. We have let it run down a little. It has not hurt the recruitment.

Mr. LAMBERT: Then there would seem to be some fat on the personnel or establishment of the recruiting section of the armed services during the last year.

G/C KNOWLES: There has been a little, sir. If we were to retain the old systems—that is the three systems—running independently I would hesitate to say we could reduce it much below its current strength of 438. However, by combining the three systems we can eliminate a lot of duplication. For instance, at the present time we have in a relatively small centre an officer from the army, an officer from the navy and an officer from the air force; they are necessary to process the recruits, to enroll them, document them and swear them in, and to govern the small outfit. One officer could take on twice the number of recruits who actually come through his door, yet it was necessary to keep them there. Now, by combining, we are able to shrink our staffs quite considerably.

Mr. LAMBERT: I have two more questions.

When is it anticipated that you will be able to relocate these centres? What types of centres do you anticipate? Do you anticipate they will be in the present command locale or in armouries so that you can dispense with some of the rather expensive real estate that you have on lease, shall we say, on more travelled streets in some of the major centres?

G/C KNOWLES: We do not envisage giving up the accommodation on the more travelled streets, sir. Experience in the past has proven that if we are to sell our product, that is our idea of service, we have to make it convenient to the individual we want to get. We have found our efficiency of recruiting rises if we can have our show window on a good street where the traffic is fairly heavy, where facilities for transportation are good so the chap can get to the place and find his way easily, as opposed to other places.

A number of the armouries located in the same cities are in somewhat out of the way places, and it is a little difficult to give directions to people to find them. Once there, the operation of the armoury, as opposed to the operation of the recruiting organization, is such that clashes develop there. The armoury will be closed down at certain times of the day or certain times of the night or certain days of the month. The recruiting operation stays open—

Mr. LAMBERT: Twenty four hours?

G/C KNOWLES: No, not 24 hours. They stay open perhaps until eight o'clock or nine o'clock at night, depending upon the traffic in the particular city. We keep them open six days a week.

Mr. LAMBERT: I have one last observation on the new establishment. It seems that lieutenants have gone out of style, or the rank of lieutenant has gone out of style!

G/C KNOWLES: In actual practice, about half of the captain positions will be filled by lieutenants. However, the purpose of this is that the best recruiting officer is one who has done a tour of operational duties. In the army, by the time he finishes a tour, he has qualified for the captain's rank and is awaiting a vacancy. This is the quality of man we want. If we have a captain's vacancy, then he can move into it. We have the quality we are looking for. When he is promoted he does not have to be moved on somewhere else; we can keep him in this job for which he has been trained.

Mr. MACRAE: Group Captain Knowles, I should have heard, but I did not, what is your exact position now?

G/C KNOWLES: I am director of recruiting.

Mr. MACRAE: That is the title?

G/C KNOWLES: Yes.

Mr. MACRAE: In effect, I believe you said it is today that the whole thing swings into its new orbit.

G/C KNOWLES: Yes, sir.

Mr. MACRAE: Were you responsible yourself for, or did you have a large part yourself in the preparation of this brief?

G/C KNOWLES: Yes, sir.

Mr. MACRAE: It is an excellent job, if I may say so.

My first question, which perhaps should be directed to the minister, arises from page 2 of the brief which deals with the integrated recruiting system. Who comprises the committee, Mr. Hellyer, that actually sat on this? Do you recall? Perhaps Group Captain Knowles could advise you.

Mr. HELLYER: Do you mean who prepared this?

Mr. MACRAE: No, I mean who dealt with the whole broad spectrum of recruiting. Did you have a special committee of national defence which dealt with this matter?

Mr. HELLYER: Perhaps Group Captain Knowles could answer this question.

G/C KNOWLES: We prepared the paper, sir. It was then reviewed by the chief of personnel and his senior officers. I presented it to them. Minor changes were made. We then took it up to the chief of defence staff, and finally to Mr. Hellyer.

Mr. MACRAE: The initial work was done by you and your staff?

G/C KNOWLES: Yes.

Mr. MACRAE: My next question arises from page 5, section 2 of b. of your brief, which states as follows:

> —to obtain sufficient quantities and qualities of recruits in relation to geographic areas.

I think I see what is the relationship between quantity and geographical areas, but I am rather intrigued by the relationship between quality and geographic areas. Can you explain what is meant there?

G/C KNOWLES: Yes, sir. Our school systems vary across the country to a greater or lesser degree. Some school systems produce people of a somewhat higher educational standard than others. Some areas are areas of booming

economy; others are areas where the economy is a little depressed. The amount of time that a boy stays in school is dependant to some extent upon the local economy at the time and whether he is needed to go out and work, perhaps part time, to make money to assist the family. His capability for learning the trade requirements is in direct relation to how long he has stayed in school, or how far he has gone in school, and what is the quality when he comes off the top. Since there is a variation in the country, we do have a variation in geography, and hence we have a variation in quality.

Mr. MACRAE: Are you getting more recruits from Atlantic Canada at this time than from the rest of Canada in relation to its population?

G/C KNOWLES: No, sir, not at this time. We were getting a few more a little while back, but then the winter closed in very hard on the prairies and we started to get more from the prairies for a while. This is a reflection of climate and job opportunities.

Mr. MACRAE: My next question is for the minister.

On page 6 we see that, effective from April 1, Vickers and Benson will be the single advertising agency. Mr. Hellyer, is there an amount in the estimates for this?

Mr. HELLYER: Yes, there is.

Mr. MACRAE: Do you recall the amount?

Mr. HELLYER: It was $736,000.

Mr. MACRAE: In discussing the recruiting on page 7 of the brief you say, "to permit conduct of all selection tests by any service for any service". Earlier on you mentioned that in the army it is done mainly on the basis of a personal interview; that in the navy and air force you rely on various aptitude tests and that there is now some doubt as to their validity. What is to be the principle from now on, are you going to try and combine those two philosophies or are you going to rely more on one system than the other?

G/C KNOWLES: Our personnel recruitment people have been studying for some time the development of a common system. As far as those studies have progressed the common system indicates we will be taking some elements out of each of the three systems, modifying them so that they are compatible, and ending up with a system simpler to administer and more accurate than the one which the three services have had up to the present time. We are trying it as a first round of experiments, without putting it formally into practice but doing it on the R.O.T.P. Army selection program for this Easter period. There are about 40 young men going through it; each one will do the tests for the service to which he has applied, as has been done in the past. Each one will take two elements of the other tests, and from this small control group we will be able to find out if our administrative reasoning has been sound. If it is, we will expand the sample this coming summer. I believe we will get a very good and simple system which will combine the best of all three.

Mr. MACRAE: I have another question. On page 12, in dealing with costing you said, "There is a need to develop a finite method of costing". I take it you have always had that. Would it be done on an annual basis? Would you say that in 1962-63 it cost $75 for each recruit that was enlisted in the services? Have we had that?

G/C KNOWLES: We have had a degree of costing of that order. We are able to cost such things as the cost of accommodation, the cost of pay and allowances, the cost of travel and capital costs. This has all been done. What we have not done is a cost of the quality of the product we are buying. By this I mean to say we took a sample of 13,750 people, measured them for their learning ability, determined in the employment scale of the services today, how many could be employed. We found that if you set your requirements too high, then you are

starting to throw away too many people just below that scale and hence your costs go up. When I said finite costing, what I was looking for was a method of costing which will tell me how much it will cost me to recruit a man in the upper quarter of our intelligence strata, in the second, third and fourth quarters.

Mr. WINCH: May I ask a supplementary question? What is the cost of your recruiting service per recruit whom you sign up to join the services?

Mr. MACRAE: That was my basic question.

Mr. WINCH: But it was not answered.

Mr. LAMBERT: Surely that would give a false impression.

G/C KNOWLES: The answer would be $450 per recruit.

Mr. MACRAE: I have one more question. My last question was one which Mr. MacLean asked me to put to you. He had to leave so he asked me to ask you this question. It is very brief. It refers to pages 2 and 10 of your brief. Those are figures which Mr. MacLean could not quite reconcile, nor can I. In paragraph 6 on page 2, if you take a total of the recruiting units there would be 21, 47 and 17, which would be 85. Is that a valid figure up to this point? The navy had 21 units, the army had 47 and the air force had 17.

G/C. KNOWLES: Yes, sir.

Mr. MACRAE: On page 10 the requirement is for 15 Canadian armed forces recruiting centres and 19 subcentres, which would come to 34. This will result in a closure of 18 single service units, and reduce the others from 17 to 15, which will be two more, making 20. If you reduce them to 34, you must start with 54. Mr. MacLean was troubled because 54 and 85 are not quite reconcilable.

G/C KNOWLES: They are running three separate systems. For instance in Toronto and Ottawa there are three recruiting units, one army, one navy and one air force. They all live under one roof. There are 17 of these in the country.

Mr. MACRAE: Thank you, that answers my question.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): Mr. Chairman, I had a question which Mr. Deachman wished to ask. Unfortunately he could not stay. He was interested in asking the minister about the timing of the implementation of this program. I think that question was partly answered when Mr. MacRae was asking his questions. As I understand it, it will go into effect immediately. Is that correct?

G/C KNOWLES: It starts today.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): The personnel will have been taken on, and so on?

Mr. HELLYER: As Group Captain Knowles explained, there are stages. This is a new system which will evolve over a period of time.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): How long?

G/C KNOWLES: In October of this year we should have about 90 per cent of it in operation.

Mr. ASSELIN (*Notre-Dame-de-Grâce*): And when will it finally be in operation?

G/C KNOWLES: I would hope the final stage will be the development of the resolution of the proposal for basic training. When we get chaps from no matter which service they want to join, we teach them how to carry a rifle, how to march and how to take a bath. I would hope this would come about next summer.

Mr. LANIEL: On page 4 of your brief you speak of the principal aims of recruiting. You say, "to attract, contact, determine employment suitability, and enrol personnel in the numbers and qualities required". However, no-

where is there mention of the orientation of a recruit towards one service or another. Will this new set-up allow for this orientation of a recruit towards one service or another even though he might have made a previous selection on his own for different reasons?

G/C KNOWLES: This will take place in the basic training centre which we hope to establish next summer if at all possible. When a chap walks into the recruiting door, in most cases he will have made up his mind as to what colour uniform he wants to wear. He may join up with five or six others and determine his uniform choice. When he goes to the basic training centre, he will be given a uniform of his choice at that time, as we foresee it. He will then go through a battery of classification tests which will determine what job he is best suited to do, what sort of specialized training will be of most benefit to him and to the service concerned. If, during the period when he is doing this, he decides he would like to stay with Jack Smith who is going to the army while he is going to the air force, there will be provision made for him to shift over at that time.

Mr. LANIEL: Would that be influenced, also, by your quota as well as schooling, and so on?

G/C KNOWLES: To a degree.

Mr. LANIEL: This comes to the question of dropouts. If you want to recruit people, you must consider that after a while there will be a certain percentage of dropouts. Part of that percentage of dropouts will be because of the selection and also because of the fact that some people are recruited because they just want to make a try at army life. I do not want you to comment on item 22 where you say the possibilities are greater than ever before, but on the other hand I am wondering whether there is anything in the level of recruiting which would inform the recruit that the army is concerned also about his rehabilitation, or re-adaptation to civilian life after he comes out?

G/C KNOWLES: Yes, sir; that is done now.

Mr. LANIEL: What did you mean by the phrase "greater opportunity"; does that come from the integration of the armed forces and a better selection of personnel?

G/C KNOWLES: I believe the selection of personnel will improve under this system. The equipments we are getting are more complex and the training given is greater. So far as the opportunity of attaining positions of responsibility is concerned, I would like to say that last summer I was given the opportunity of becoming a director of recruiting for the air force; I now have a position of greater responsibility. I think this same principle holds true all the way down through as we combine.

Mr. LANIEL: Would there be any tendency to increase your minimum standards, or decrease them, because at one moment you spoke to Mr. MacRae of losing some personnel because of the high standard at such and such a level.

G/C KNOWLES: I think we probably will increase our intake as a result of a study of job specifications which I mentioned. We are getting a more definitive measure of requirement with relation to individual jobs, and as time goes on I think we will be able to issue quotas to the recruiting organization in terms of measurements of people and the jobs for which they are capable, or for which they show a promise. I mentioned that our measurements are still somewhat coarse; in the refining of these measurements we will be able to employ more people than we do now.

Mr. LANIEL: In respect of the functions you speak of, such as arrangements for band tours, tours to high schools, guidance, and all that, at present has there been very much effort made to reach that student level in an effort to try to interest these students in joining the services?

G/C KNOWLES: Yes, sir. As of today I would say we have given presentations in some 85 per cent of the high schools in the country. We have been to about 90 per cent of the universities. We have had well over 100 band tours. We have arranged for about 30 visits by high school guidance counsellors to the various elements of our military structure. In the next little while, there will be 40 school teachers and guidance counsellors visiting the navy and about 40 press and television people visiting Cold Lake on this sort of program.

Mr. LANIEL: Does this cover the complete area of services' enrolment as far up as R.O.T.P. and thus encourage the furtherance of their studies.

G/C KNOWLES: Our basic approach to the undergraduate high school student is to stay in school; but at the same time we let him know that if he decides to get out of school there are job opportunities available. We encourage him to stay in school and improve his value to himself and to ourselves. The approach taken to the R.O.T.P. is that here is an excellent career ahead of you. We say, this is the way you can get it, it involves your continuing your schooling for quite a period of time, and we will help you do it.

Mr. LANIEL: My last question will be addressed to the minister. On page 6, when speaking of the advertising agency, there is mention of a strong bilingual capability. Here I am wondering whether this will extend outside the area where you have a minimum percenage of, let us say, French or English speaking, or will they generalize from coast to coast? What I have in mind is not a matter of having bilingualism from coast to coast as a necessity, but rather to create an impression with the people of this country concerning the bilingual aspect of the army. At the same time I believe the army should be a good place in which to become bilingual. I think this should get to the people and should get to the people who are at the head of the different services. When I think of the military, I see it as part of the duty of the services to see that the army men or the servicemen receive the opportunity to learn the other language.

Mr. HELLYER: I do not quite understand your relation of this to the advertising agency.

Mr. LANIEL: Is that an indication of a new trend?

Mr. HELLYER: I think we are more aware of the advantages in providing opportunities to learn the two languages. For example, as you know, in the service colleges an increasing emphasis is being put on a two language capability. Commencing this September the English-speaking students of the Royal Military College will be taking one of their courses in the second language. So, I think the trend is there. Was your question related to making known across the country the opportunity which exists in the armed forces to learn a second language?

Mr. LANIEL: What I have in mind is that the minute you are in the service you are aware that you are not in a bilingual unit; there is not a state of mind in the people surrounding you that bilingualism is moving forward. This is more a point I wanted to make than a question.

Mr. HELLYER: I think you will appreciate that in the air force, as far as an operational language is concerned, of necessity this is a single language. This is not true in the army, as you are well aware. The emphasis is on increased opportunity for men and women in the armed forces to obtain a working knowledge in the second language and more facilities are being provided.

Mr. LANIEL: What I meant is it is bilingual to get you in and after that we will forget about it. Thank you.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I would like to know whether the new recruiting system is also going to provide the necessary candidates for our

Military Colleges. Do our Military Colleges have their own recruiting system or is this new system of recruitment going to provide them with the candidates they need to fill their ranks?

(*Text*)

G/C KNOWLES: The recruiting system we are developing here will provide all men, all officer candidates and all cadets that are required anywhere within the military forces.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): Does it seem to you that, at the present time, there is not enough room in our Military Colleges, if you compare it with applications you receive from young men who are interested. In my own personal experience, it seems that our Military Colleges receive many more applications than they have places available. Am I wrong?

(*Text*)

G/C KNOWLES: They receive far more applications than there is room available. However, the physical standards for military service are stringent and it is seldom that we completely fill the capacity of the colleges. When I say "completely fill", I am talking in terms of one or two that are left over. We do put a number through the universities who are potentially very, very good, but I do not believe that people are barred from military service through limitations in the size of our military schools.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I would like to put one further question. I noticed that in this new provision of your recruitment centre, in Ontario there are twelve recruiting centres while there are six in the Province of Quebec. I understand that there are a million more souls, but did you reach this decision as a result of experience in the number of recruits who come to you from these two provinces? Are you convinced you are going to be able to obtain the results you want with this number of recruiting centres in Quebec?

(*Text*)

G/C KNOWLES: Yes, I am fully convinced that we will get the number. Part of the organizational layout of a number of them develops from local geography, mountain ranges, rivers, communications and concentration of population and the number we have set on, I am quite convinced, will give us every bit as good recruiting as we have enjoyed in the past, and we have enjoyed most excellent recruiting in the past.

(*Translation*)

Mr. LESSARD (*Lac-Saint-Jean*): I note that in the case of Montreal, in particular, there is a large centre. The next, obviously, are Saint-Jean d'Iberville, Ottawa, Three Rivers. In the case of Montreal with about two million inhabitants and one single centre, I feel that that is not sufficient. Would it not have been possible to have secondary centres in Montreal districts?

(*Text*)

G/C KNOWLES: Montreal is in a rather favourable position. The communications radiating from Montreal are exceptionally good and the centre that we have established is the biggest one in Canada; it is the largest Canadian armed forces recruiting centre that we propose to establish. We believe that the one centre in Montreal city and its subunit will provide most excellent service.

The CHAIRMAN: That completes our list of questioners. It is now one o'clock.

Mr. WINCH: Before we adjourn may I say that in all probability this will be the last meeting of our committee at this session. As one member of the

committee, may I express my appreciation of the privilege, for the second time, of being a member of this committee.

As a result of our meetings at the last session I said at that time that in my estimation this was one of the finest committees of the House of Commons, and that all its members, irrespective of party, accepted very serious responsibility in dealing with most important matters.

I would like to say, Mr. Chairman, I feel that the committee at this session deserves some high marks. I wish to say how much I personally appreciate the courtesy and reasonableness of the Chairman in dealing with the problems of the members, and to say "thanks" to the minister for the time he has taken out to come before us on his own volition, as well as at our request, although not always to come up with all the answers. I appreciate the restriction on information.

It is my hope, having said this, that when the new session commences this same committee, with as nearly as possible the same personnel, may be reconvened in order that we may continue the remainder of our study of this most important matter from a non-political point of view.

The CHAIRMAN: Thank you, Mr. Winch. Except for your remarks about the Chairman, I think we can agree with what you said, and hope that maybe at the next session we may take up our burden once again. Thank you.

G/C KNOWLES: Thank you very much, gentlemen.

HOUSE OF COMMONS
CANADA

REPORTS

of the

SPECIAL COMMITTEE

of the

HOUSE OF COMMONS

on

Matters Relating To

DEFENCE

Presented by

MR. DAVID G. HAHN — *Chairman*

•

SESSION 1964-65

HOUSE OF COMMONS
CANADA

REPORTS

of the

SPECIAL COMMITTEE

of the

HOUSE OF COMMONS

on

Matters Relating To

DEFENCE

Presented by

MR. DAVID G. HAHN — *Chairman*

SESSION 1964-65

22055—1

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1965

CONTENTS

SUBJECT	PAGE
First Report to House	4
Second Report to House	4
Third Report to House	5
Fourth Report to House	6
Fifth Report to House	23

22055—1½

FIRST REPORT TO THE HOUSE

WEDNESDAY, May 20, 1964.

The Special Committee on Defence has the honour to present 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,

D. G. HAHN,
Chairman.

(*Note*,—Report concurred in on same day).

* * * * * * * * *

SECOND REPORT TO THE HOUSE

WEDNESDAY, June 10, 1964.

The Special Committee on Defence has the honour to present its

SECOND REPORT

Your Committee has considered Bill C-90, An Act to amend the National Defence Act, and has agreed to report it without amendment.

A copy of the Committee's Minutes of Proceedings and Evidence relating to this Bill (*Issues Nos. 1 to 6*) is appended.

Respectfully submitted,

DAVID G. HAHN,
Chairman.

* * * * * * * * *

THIRD REPORT TO THE HOUSE

WEDNESDAY, June 17, 1964

The Special Committee on Defence has the honour to present the following as its

THIRD REPORT

1. During the Committee's consideration of Bill C-90, evidence was heard respecting the impact of the proposed service reorganization on the manpower requirements of the Services and the Department. Information adduced was to the effect that the manpower requirements of the Services will drop by approximately 10,000 personnel over the next few years. The reduction in civilian strength may be considerably less, but no specific figures were available in this regard.

2. It was noted that the largest part of the reduction in strength would come from normal attrition. It was also recognized that the Services must attain a proper balance of age and skills. To achieve this objective, recruiting will have to be continued and some personnel will have to be involuntarily retired. It was estimated that the latter group might number 2,000 persons, in addition to approximately 500 Aircrew who have already been notified of their impending release.

3. Whilst your Committee generally approved the proposed retirement benefit set out and printed as Appendix «A» to Committee Proceedings No. 2, dated May 28, it further recommends:

(a) That recruiting be continued to ensure an adequate balance of skills for the maintenance of operational efficiency within the Services.

(b) That, in those ranks, skills and age groups where reductions become necessary, every effort be made to ascertain those persons who wish to retire. This will assist those persons, who wish to retire, to do so with the benefits to be provided, while at the same time reducing the number of involuntary retirements amongst those who wish to remain in the Services.

(c) That guidance or counselling be given, on request, to those being retired, so that those who wish to use their benefits for special training or education in civilian institutions will be given every help and encouragement;

(d) That the matter of displaced civilian employees now being studied by the Civil Service Commission and Treasury Board be quickly resolved, bearing in mind the specialized service rendered and the comparative benefits being provided to Service Personnel who are being involuntarily retired.

A copy of the Committee's Minutes of Proceedings and Evidence, relating to these matters, was tabled with the Committee's Second Report on June 10, 1964, and is recorded as *Appendix No. 3* to the Journals of the House.

Respectfully submitted,

DAVID G. HAHN,
Chairman.

FOURTH REPORT TO THE HOUSE

THURSDAY, October 1, 1964

The Special Committee on Defence has the honour to present its

FOURTH REPORT

CHAPTER 1—SPECIAL COMMITTEE ON DEFENCE

1. On May 8, 1964, the House of Commons appointed the Special Committee on Defence by adopting the following resolution:

Resolved,—That a Special Committee be appointed to continue the consideration of matters relating to Defence begun by the Special Committee at the past Session and to report from time to time its observations and opinions thereon;

That the Committee have power to send for persons, papers and records and to examine witnesses;

That it be empowered to adjourn from place to place;

That the minutes of proceedings and evidence taken by the Special Committee at the past Session be referred to the said Committee and made a part of the records thereof; and

That the Committee consist of 24 members to be designated by the House at a later date, and that Standing Order 67(1) be suspended in relation thereto.

2. On May 14, 1964, the House designated twenty-four members to serve on the Committee as follows:

Ordered,—That the Special Committee on Defence, appointed May 8, 1964, be composed of Messrs. Asselin (*Notre-Dame-de-Grâce*), Béchard, Brewin, Deachman, Fane, Granger, Groos, Hahn, Harkness, Lambert, Langlois, Laniel, Lessard (*Lac-Saint-Jean*), Lloyd, MacLean, (*Queens*), MacRae, Martineau, Matheson, McMillan, Nielsen, Pilon, Smith, Temple and Winch.

Subsequently, Messrs. MacInnis and McNulty were appointed and presently serve on the Committee.

A Steering Subcommittee comprised of Messrs. Hahn (Chairman), Lambert (Vice-Chairman), Langlois, Lessard (*Lac-Saint-Jean*), MacLean, Temple and Winch, was appointed to arrange and plan the work of the Committee.

3. Your Committee held 30 meetings to receive information and opinions on, and to consider matters relating to Defence. Included in this number is four days spent on a visit to Maritime Command, Atlantic, the viewing of a fleet exercise and a visit to SACLANT Headquarters at Norfolk, Virginia. In addition the Committee visited the Canadian Army at Camp Gagetown, New Brunswick, and the Royal Military College at Kingston, Ontario.

4. On May 12, the House of Commons referred to this Committee for consideration and report, Bill C-90, An Act to amend the National Defence Act. Consideration of this Bill was the first order of business for the Committee.

Witnesses heard from the Department of National Defence were: Honourable Paul T. Hellyer, Minister; Honourable Lucien Cardin, Associate Minister; Mr. Elgin B. Armstrong, Deputy Minister; Brigadier W. J. Lawson, Judge Advocate General; and Dr. Jack Hodgson, Assistant Deputy Minister of National Defence (Finance).

Evidence was also heard from the following persons from outside the public service: Brigadier Richard S. Malone, Winnipeg, Manitoba; Air Marshal W. A. Curtis and Major General W. H. S. Macklin, both of Toronto, Ontario.

In its Second Report to the House, dated June 10, 1964, the Committee reported Bill C-90 to the House, without amendment.

5. During consideration of Bill C-90, your Committee heard evidence respecting the impact of the proposed service reorganization on the manpower requirements of the Services. Particular attention was drawn to the problem of personnel who will be involuntarily retired. In this connection, your Committee made certain observations and recommendations in its Third Report to the House, dated June 17, 1964.

6. The Committee spent three days during the last week of July visiting our Maritime Forces on the east coast. One day was spent at SACLANT Headquarters at Norfolk, Virginia. Briefings were conducted by the following:

Rear Admiral J. V. Brock, Maritime Commander; Air Commodore F. S. Carpenter, Deputy Maritime Commander; Commodore E. N. Clarke, Commodore Superintendent Atlantic Coast; Commodore R. L. Hennessy, Commodore Personnel Atlantic; Lt. Cdr. W. T. Marchant; Lt. Cdr. S. S. R. Conway; Captain R. W. Timbrell; Cdr. W. S. Blandy; Captain G. C. Edwards; Lt. Cdr. S. H. Rowell; Lt. Cdr. D. H. Tate; Captain T. C. Pullen; S/L Robert McNair; Mr. W. B. Bailey; Mr. R. Dexter; Lt. Cdr. H. J. Bird; Lt. Cdr. W. A. Byatt; Lt. Cdr. R. F. Strouts; Commodore J. C. Pratt; Cdr. C. G. Pratt; Captain D. L. Macknight; Commander D. H. P. Ryan; Commander A. E. Fox; Commander B. C. Thillaye; Admiral H. P. Smith, U.S. Navy, Supreme Allied Commander Atlantic; Vice-Admiral Charles E. Weakley, U.S. Navy, Commander Anti-Submarine Warfare Force Atlantic; assisted by Vice-Admiral R. D. Hogle, Chief of Staff, SACLANT Headquarters; Cdr. J. B. Carling; Major J. D. Dillon; Cdr. S. Bruland; Cdr. J. J. Doak; Cdr. J. L. Davis; and Captain R. J. Davis.

7. During the Committee's consideration of the Civil Emergency Planning Programme, evidence was received from Honourable Charles M. Drury, Minister of Defence Production, and from Mr. Paul Faguy, Director of Emergency Measures Organization.

8. The operation of the Regular Officer Training Plan was reviewed by the Committee. During this review the Committee received evidence from the Associate Minister of National Defence, Honourable Lucien Cardin, and from the Deputy Minister of Nation Defence, Mr. Elgin B. Armstrong. Detailed information respecting the various plans was supplied by Commodore H. V. W. Groos, Director of ROTP; Colonel W. R. Sawyer, Vice-Commandant and Director of Studies of Royal Military College; and Commander G. Clark.

The Committee visited Royal Military College, Kingston, Ontario, and received briefings there from Air Commodore L. G. Birchall, Commandant of Royal Military College; Dr. G. F. G. Stanley, Head of the History Department; and, Colonel G. F. Stevenson, Chairman of Army Central Command Interview Board.

9. Your Committee considered the role and functions of the Reserve Forces. Evidence was heard on this subject from the Honourable Lucien Cardin, Associate Minister of National Defence, and from Col. C. P. MacPherson, Director of Militia and Cadets.

Lt. Col. W. R. Learmonth, Chairman of the Conference on Defence Associations and three other members of that body appeared before the Committee and gave evidence respecting Reserve Forces. The Committee also heard testimony from the following:

Brigadier E. R. Suttie, Chairman of the Commission on the Reorganization of the Canadian Army (Militia);

Commodore R. I. Hendy, Chairman of the Ministerial Committee on the Role and Organization of the Royal Canadian Navy; and Group Captain J. W. P. Draper, Chairman of the Ministerial Committee on the Royal Canadian Air Force Auxiliary.

10. The Committee is submitting this Report at this time so that its recommendations will be available to the House of Commons before the Government makes a final decision on certain policy matters that have been studied by the Committee.

11. The Committee has received a series of papers on Defence topics that were ordered last Session. It is the intention of the Committee to study these papers and other matters in the latter months of this Session.

12. It is the intention of the Committee to submit another interim report to cover its full sessional activities just before the end of this Session of Parliament.

CHAPTER II—THE SERVICES

NAVY

13. Your Committee was impressed with the efficiency of our Maritime Forces and with the calibre of the officers and men serving in these forces.

14. Your Committee observed demonstrations of the operation of the HSS-2 Helicopter from a Destroyer Escort. This significant Canadian development which includes the "Bear-Trap" landing system is most impressive. The Committee was pleased to learn of the widespread interest, in this operation, by other countries.

15. The operations of HMCS *Provider* were explained. This ship represents a significant development with its capability of high speed simultaneous replenishment of solid and liquid stores. There have been mechanical and contractual problems with this ship. In the opinion of the Committee, these do not detract from the over-all concept; they should, however, be investigated by the Committee when it studies "procurement practices".

16. During Anti-Aircraft exercises off Bermuda, several failures were experienced with the 3" 70 guns. It was noted that the capability of these weapons against supersonic aircraft was very limited. Considerable doubt was expressed as to the serviceability of this complex weapon.

17. The Committee concludes that, as presently constituted, our Navy and the Maritime Command of the R.C.A.F., constitute a highly developed, specialized Anti-Submarine Warfare (ASW) Force. The R.C.A.F., with its specialized aircraft, is a well trained, well equipped force for this purpose.

18. As older ships with other than ASW capabilities are retired, our Navy will effectively be limited to the specialist ASW role. It will not then be

efficiently equipped to ward off air attacks or fight surface actions. It is noted that at present the Navy has only very limited ability to transport troops and equipment.

19. In the event of a nuclear war, the operation of convoys is unlikely. Nevertheless, the ability to detect and keep under surveillance modern foreign submarine forces in time of peace is a definite deterrent and is therefore a valid task for Canada's Naval Forces.

20. A conventional war or major United Nations action could require convoys of men and material to support it. The use of submarines is not limited to major powers, and we can expect additional countries to acquire them. An ASW Navy is therefore necessary to carry out these roles.

21. The significance of a submarine threat gives rise to deep concern on the costs involved to provide an acceptable level of Anti-Submarine Warfare (ASW) capability, with the present type of equipment. As new and better foreign submarines, particularly nuclear powered and armed, become more general, intensive research and development of more effective ASW forces and tactics are essential and must be undertaken without delay. Your Committee believes that if the Canadian Hydro-Foil Programme is successful it may prove to be a partial answer to this problem.

22. Your Committee is in agreement that Canada must continue an ASW role in concert with her allies.

23. Your Committee welcomes an indication, in the "White Paper", of a trend in our forces to provide land and air forces that would be mobile and complementary to each other, thereby increasing Canada's capabilities in peace-keeping operations. Consideration should be given to broadening the Navy's limited role, so that it can complement the other two forces in this area.

24. A number of ships have been, or soon will be, retired from the fleet. Decisions must be taken on their replacements. The options are to add ships of the ASW type and/or to acquire ships that will provide for a wider variety of tasks. In the opinion of the Committee, Canada cannot afford the high cost of an over-all naval force, capable in all functions, but must continue to specialize.

The Committee supports the recently announced intention of modernizing a number of our ASW vessels. The next priority should be given to the acquisition of shipping to provide logistic support and to meet naval transport requirements of our ground forces. An intensive study should be made, to this end, in conjunction with the Department of Transport. The use of *Bonaventure* for this purpose is costly, less efficient, and removes this important ASW unit from its allocated task. Beyond this, further replacements should augment the ASW forces.

The Committee noted with concern the limited anti-aircraft capability of our existing fleet, and considers that this problem must be thoroughly examined to determine whether, within budget limitations, better anti-aircraft protection may be provided than currently exists.

25. Observing the action of other countries who are entering the nuclear propulsion field, your Committee feels that there could well be great advantage to Canadian industry and to Canadian defence if Canada did likewise. In view of the great costs involved, however, the Committee is of the opinion that at this time action should be limited to joint desirability and feasibility studies by the Department of National Defence, the Department of Industry, and

the Department of Transport and that the Canadian Government should encourage private industry which is interested in the field of nuclear propulsion, by lending support to pilot or experimental programmes studies.

26. Your Committee is aware that naval duties, involving long absences at sea, create particular family problems for naval personnel. While in Halifax, the Committee noted that these morale problems were aggravated by the grossly inadequate housing available to naval personnel in the Port of Halifax region. Your Committee received reports of lower cost and better housing accommodation on the Pacific coast which accentuates the morale and cost-of-living problems on the Atlantic coast.

ARMY

27. Committee members visited Camp Gagetown to observe the summer concentration exercises of the Army and demonstrations of new tactical formations. Briefings were given by Major General R. Rowley, General Officer Commanding, Field Force, Camp Gagetown; Colonel C. D. Simpson, Camp Commandant, Camp Gagetown; Brigadier Norman Wilson-Smith; Lt. Col. John Clarkson; and, Lt. Col. Gordon Sellars. The Committee was impressed with the good appearance and the morale of the forces at Camp Gagetown.

28. The Special Committee on Defence, in its interim report presented during the last session, raised the problem of the lack of tactical mobility of our army. Provision of approximately 480 armoured personnel carriers, in the near future, should ease this problem, but continued efforts must be made to increase airborne tactical mobility.

RECOMMENDATIONS

29. Your Committee recommends:

(*a*) that the Hydro-Foil Development Programme be continued in collaboration with our allies and subject to a continuing close scrutiny of the progress and of the economic implications of the programme;

(*b*) that an early decision be made on the ship replacement programme, giving priority to the acquisition of logistic support shipping for the Army;

(*c*) that consideration be given to the problem of anti-aircraft protection for our fleet;

(*d*) that Naval and Department of National Defence officials, together with officials from Central Mortgage and Housing Corporation, continue to meet with the officials of the Halifax-Dartmouth area to arrive at solutions to the Naval housing problem in that area; and

(*e*) that joint desirability and feasibility studies on nuclear propulsion, as referred to in paragraph 25, be carried out.

CHAPTER III—CIVIL EMERGENCY PLANNING

30. The prime task of Civil Emergency Planning is to plan now so that appropriate action could be taken in the event of a nuclear attack or major civil disaster. This planning should ensure—

(*a*) the continuity of civilian government at all levels;

(*b*) the identification and allocation of resources remaining after an attack so that they may be effectively used for the survival of the population and the maintenance of any required military action; and

(c) that the civilian population is informed and able to make use of any existing protective facilities.

31. In the event of an emergency, it is vital that information on all aspects of the situation be quickly gathered. This information must be rapidly transmitted to those responsible for taking action. A fundamental task therefore of Civil Emergency Planning is to ensure the availability of an effective communication system across the country in the event of an emergency.

32. In an emergency civilian government at all levels would remain responsible for its respective functions. The Emergency Measures Organization (EMO) structure would provide communications, specialist knowledge, and a co-ordinating function, to act in a staff capacity to the various civilian governments. It is noted that EMO organizations are now in operation in all provinces, and that 2,100 out of a total of 4,000 municipalities (approximately 80% of the population) are covered. Efforts should be continued to provide coverage for the remainder of our municipalities.

33. The responsibilities and the authorities of the various levels of government would, of necessity, change with the nature of the emergency. The situation could vary from a local civil disaster to a major nuclear attack involving large portions of the country. It is important that the responsibilities and the authorities of each level of government be defined under these varying conditions. There is an indication that this allocation of responsibility is vaguely defined. There has not been a meeting of the Federal-Provincial Conference on Emergency Measures since December, 1962, and no meeting is currently scheduled. There has been no national exercise for a number of years. The Committee is concerned that this lack of continuing liaison and exercise with the provinces has seriously impaired the validity of the planning. Gaps in levels of responsibility have not been effectively resolved.

34. No attempt is being made to provide blast protection for the population. The short warning time would make evacuation of major population centres a dubious proposition. The cost of an adequate blast shelter programme is so high as to be unjustified. The Committee concurs that the resources that would be required for blast protection of the population are better employed in military defence where they can contribute to the deterrent to war.

It is possible that an effective and economic Anti-ICBM system might be developed. This would require a re-appraisal of the decision not to provide civilian blast protection. It is considered unlikely, however, that the economics either of the Anti-Missile system or of a blast shelter programme will make such programmes possible in the near future.

35. Nuclear fallout could be a major hazard to undamaged parts of the country after a nuclear attack. Provision is being made to detect, and to forecast, such fallout. Reasonable warning time would generally be available in the event of fallout.

Programmes involving mortgage loans, bank loans, and information, have been provided to induce home owners to provide their own fallout protection. These have been failures. Much of the publicity falls on deaf ears. Most of the pamphlets wind up in the waste basket. The public is generally disinterested in times of relative peace. These facts must be recognized.

36. A survey of public buildings is being carried out in Alberta to determine their suitability as fallout shelters. This is being conducted as a pilot study. No facts are available as to the cost of such a survey nor as to the cost of modify-

ing existing buildings to meet shelter requirements. It is possible that the Alberta study will show that fallout protection can be provided at reasonable cost in existing public buildings.

37. The Federal Government has spent an average of 26.7 million dollars per annum on Civil Emergency Planning over the last six years. This has grown from a low of 4.1 million dollars in 1957-58 to a peak of nearly 70 million dollars in 1961-62. For the current fiscal year our expenditure is 19 million dollars. The United Kingdom will spend less per capita at 38.5 million dollars. The United States will spend more per capita at 358 million dollars.

Expenditures on the basic elements of a communication system, a warning system, a central planning function, field co-ordinating agencies, and limited fallout shelter research, would be relatively modest and are necessary to provide a basic security and survival capability. Vast additional expenditures could be made for blast and fallout shelters, massive public education programmes, and other useful activities. The Committee feels that in the scale of priorities, expenditures on Civil Emergency Planning should be limited to those funds required for the basic elements enumerated above.

38. There was a recent accidental triggering of the siren alarm system in Ottawa, Ontario. This false alarm brought out several weaknesses in EMO procedures and administration that must be rectified. A major weakness was that large numbers of people did not know that they should have turned on their radios for further information.

39. Your Committee therefore recommends:

(*a*) that a federal-provincial meeting on Emergency Planning be held before the year end. Future meetings should be held at least annually in order to ensure continuing liaison between the two levels of government. Joint planning must be developed, that recognizes clearly the responsibilities of the various governmental levels;

(*b*) that EMO national exercises be resumed and conducted on a regular basis;

(*c*) that expenditures of funds for the current home shelter programme be discontinued;

(*d*) that research be carried forward so that techniques of providing home protection quickly, with materials at hand, may be developed;

(*e*) that the study of public fallout shelters in Alberta be completed. An analysis should then be done, based on the data it reveals, as to the cost of providing public fallout shelters across the country and the percentage of population that may be so protected;

(*f*) that a decision be made concerning fallout protection. The public will not build shelters. It is financially impossible for the Federal Government to provide fallout shelters for the entire population. Therefore the government must decide, based on the costs revealed by the Alberta survey, whether or not it will provide protection for a portion of the population;

(*g*) that public information programmes be instituted to provide basic information. They should be on a periodic basis on television, radio and in the press; and

(*h*) that consideration be given to the regular testing of the alarm system in all communities across the country.

CHAPTER IV—REGULAR OFFICER TRAINING PLAN

40. The Services will require approximately 1,500 new officers per year. Evidence given indicates that, in order to maintain a reasonable ratio of university graduate officers, about 450 officers are required each year at this educational level. These figures are being reviewed, but until the study is complete they represent current requirements.

41. The Services must compete with industry and other career options for university graduates. Incentive educational programmes are the only way to meet this competition. The Committee agrees that there is a need for the Regular Officer Training Plan (ROTP) type programme. Evidence indicates that other methods of attracting university graduates into permanent commissions have not been successful.

42. The Department of National Defence has supplied two useful tables which show the attrition rate caused by academic failures at the Canadian Service Colleges (CANSERVCOLS) and the Universities. They also show the attrition rate after graduation, tabulated by Service College, by the University Section, by Academic Discipline, and by Services.

ROTP AND OFFICER PRODUCTION STATISTICS

(Based on Intake and Wastage During Past Five Years)

TABLE 1
11 Aug 64

(a) Category		(b) Prep Yr. Jr. Matric Entrants	(c) 1st Yr. Sr. Matric Entrants	(d) 2nd Yr.	(e) 3rd Yr.	(f) 4th Yr.	(g) Graduates	(h) Year in Service 1st	(h) Year in Service 2nd	(h) Year in Service 3rd	(j) Do not Opt Out after 3 yrs. (4th year of Service)
CMR	Repeaters	1	2	2	4	1					
	New entry	175	125	92	71	59					
	Total entry	176	127	94	75	60					
	Drop-outs	51	35	23	16	2					
	Passes	125	92	71	59	58	58	58	58	57	29
RMC	Repeaters	—	4	5	1	1					
	New entry	—	63	53	46	44					
	Total entry	—	67	58	47	45					
	Drop-outs	—	14	12	3	1					
	Passes	—	53	46	44	44	44	44	44	43	37
RR	Repeaters	—	1	—	6	1					
	New entry	—	129	88	82	72					
	Total entry	—	130	88	88	73					
	Drop-outs	—	42	6	16	3					
	Passes	—	88	82	72	70	70	70	70	69	51
Total Canservcols	Repeaters	1	7	7	11	3					
	New entry	175	317	233	199	175					
	Total entry	176	324	240	210	178					
	Drop-outs	51	91	41	35	6					
	Passes	125	233	199	175	172	172	172	172	169	117
University Section ROTP—Average Strength		71	228	199	182	151	151	149	147	145	78

Note 1—The figures noted in this section represent the average annual strength of the university section by academic year. The university section is administered by the individual Services. Much of the recruiting is done on the campus during the academic year and every effort is made to enroll students who have successfully completed one or more academic years. The Services endeavour to maintain their university quotas at full strength. Since students are enrolled in their 2nd, 3rd, 4th or 5th years, it is not practical to provide a chart showing failures and drop-outs, similar to that for the Canservcols.

Total ROTP Strength	247	552	439	392	329	323	321	319	314	195
Commissioned from Ranks— (a) Without Degrees	—	—	—	—	—	—	197	196	196	195

Note 2—An officer promoted from the ranks (without a degree) is usually well qualified in one particular area. Subsequent employment in commissioned rank is normally restricted to his particular corps or specialty. Such officers do NOT have the right to "opt" out; hence the figures shown in the last column (j) reflect only normal wastage.

(b) With Degrees	1	22	19	20	17	17	17	17	17	17

Note 3—The Services' efforts to select men from the ranks for university training and commissioning have been severely restricted by the very small number of men who have the required academic background and/or scholastic potential to gain admission to university.

TABLE 2

Numbers Exercising Release Option up to 31 Aug./63

Comparison by Academic Discipline and Aircrew vs Non-Flying List

Academic Discipline	Category	Eligible				Exercised Option				Percentage			
		Navy	Army	Air Force	Total	Navy	Army	Air Force	Total	Navy	Army	Air Force	Total
										%	%	%	%
ENGINEERING	Canservcol Aircrew	—	—	83	—	—	—	23	—	—	—	28	
	Non-Flying	—	—	59	—	—	—	18	—	—	—	31	
	Total	55	122	142	319	24	21	41	86	44	17	29	27
	University Aircrew	—	—	69	—	—	—	27	—	—	—	39	
	Non-Flying	—	—	177	—	—	—	94	—	—	—	53	
	Total	24	77	246	347	18	42	121	181	75	55	49	52
	Total, ROTP	79	199	388	666	42	63	162	267	53	32	42	40
ARTS, SCIENCE AND OTHERS	Canservcol Aircrew	—	—	69	—	—	—	11	—	—	—	16	—
	Non-Flying	—	—	25	—	—	—	6	—	—	—	24	
	Total	27	140	94	261	12	40	17	69	44	29	18	26
	University Aircrew	—	—	37	—	—	—	7	—	—	—	19	
	Non-Flying	—	—	48	—	—	—	18	—	—	—	38	—
	Total	21	217	85	323	7	96	25	128	33	44	29	40
	Total, ROTP	48	357	179	584	19	136	42	197	40	38	24	34
TOTAL	Canservcol Aircrew	—	—	152	—	—	—	34	—	—	—	22	
	Non-Flying	—	—	84	—	—	—	24	—	—	—	29	
	Total	82	262	236	580	36	61	58	155	44	23	25	27
	University Aircrew	—	—	106	—	—	—	34	—	—	—	32	
	Non-Flying	—	—	225	—	—	—	112	—	—	—	50	
	Total	45	294	331	670	25	138	146	309	56	47	44	46
	Total, ROTP	127	556	567	1,250	61	199	204	464	48	36	36	37

43. Your Committee feels that the results achieved at Royal Military College have been very good, being equal to or better than those of comparable institutions in the United States and Britain and compare most favourably with the results achieved in civilian Canadian universities. However, it notes a high rate of drop-out at both Collège Militaire Royal, and at Royal Roads, for which there are various reasons. At C.M.R., initial entry is at junior matriculation level, from all parts of Canada. At this level the drop-out rate is high everywhere. The bilingual nature of studies at C.M.R. also contributes to this higher rate of drop-out, but is only a reflection of the special requirements for bilingualism.

44. Your Committee examined selection procedures in detail, and while generally satisfied with the methods used, it urges more intensive selection of entrants in order to diminish, at both C.M.R. and Royal Roads, the initial rate of drop-out for reasons of academic failure or inability to accept military discipline.

Moreover, there has been insufficient experience with the 'complete degree plan' at R.M.C. since its inception in 1956 to properly evaluate the military career production potential of this plan. Several more years of experience will be necessary.

45. It is recognized that civilian universities have higher service attrition rates. It is considered normal that cadets who attend civilian universities are more likely to leave the service after their mandatory service period. The Committee is concerned about the lower retention rates of Naval Officers, particularly engineering graduates, who have studied at civilian universities.

46. Various cost data respecting the ROTP programme, were presented by witnesses. It is clear that an exact comparison of the costs of CANSERVCOLS and civilian universities was not possible. It is a matter of opinion as to whether CANSERVCOLS are cheaper than civilian universities, for the production of officers, but from the evidence adduced the Committee feels that the difference in cost either way is not significant. The intangible advantage of the CANSERVCOLS then become relatively more important.

47. Your Committee cannot agree with the Glassco Commission view that the academic staff at the CANSERVCOLS should be reduced as to their qualifications and their number. In fact your Committee urges the maintenance of the highest possible standards of this academic staff.

Your Committee noted, with concern, many of the antiquated facilities in use at R.M.C., and cannot agree that the best results are obtainable from laboratories and lecture rooms installed in converted boiler rooms, stables, haylofts, etc. This Committee also feels that the equipment scale is not adequate. While the Committee is pleased to note the recent announcement, concerning the new dormitory at R.M.C., it urges that the remaining deficiencies be remedied.

48. The Committee was generally impressed with the high academic standards, and the high standards of discipline and physical fitness that prevail at the CANSERVCOLS. There is little doubt in the Committee's mind that these educational institutions produce well trained, well motivated, young men as junior officers for our Services.

49. The Committee agrees with the decision to extend mandatory service to four years. Some concern is expressed about the effects of the Student Loan Programme on ROTP enrolment. It is agreed that while both the above factors may make recruiting more difficult, those cadets who are recruited will be more likely to remain in the Service.

50. The Committee also notes that while ROTP graduates who retire after their mandatory service period are a loss to the Service, they, as private citizens, are undoubtedly an asset to the country as a whole.

51. The Committee commends the introduction of the compulsory study and use of French in "non-language subjects" in the curriculum at R.M.C., with a view to developing general bilingualism to working levels in the armed services.

The Committee examined the question of raising C.M.R. to the status of a degree granting institution. It has concluded that, in order to do so, a much greater number of graduates from CANSERVCOLS, would have to be accepted.

RECOMMENDATIONS

52. The Committee therefore recommends:

(*a*) that the survey referred to in the evidence be completed so that accurate forecasts can be made of the number of officers who will be required with university degrees;

(*b*) that an early determination be made of the long-run proportion of ROTP cadets that are to be trained in CANSERVCOLS, as opposed to Civilian Universities. The Committee feels that the highest proportion possible should be trained in CANSERVCOLS;

(*c*) an immediate replacement of antiquated buildings at R.M.C., and that equipment requirements be met;

(*d*) a survey be made of the facilities of C.M.R., and Royal Roads to determine any deficiencies with a view to taking remedial action; and

(*e*) a more intensive selection of entrants in order to diminish, at both C.M.R. and Royal Roads, the initial rate of drop-out.

CHAPTER V—RESERVE FORCES

53. Prior to the rise of the threat of nuclear warfare in the 1950's, the basis of Canada's peacetime military strength lay in its reserve forces and small regular forces. The chief function of the latter was to supply a training cadre and framework for the reserves.

The threat of nuclear war eliminated the time for mobilization and the necessity arose for large "forces-in-being". Canada established regular forces of 120,000, and to these the reserves became secondary to the point where grave doubts existed as to any valid role for them. In the army, corps training was reduced and survival training, in case of a nuclear attack, was emphasized.

Nuclear warfare is deemed to be less likely because of the nuclear stalemate, and conversely the risk of conventional "brush-fire" war is relatively higher. The regular forces which form Canada's "forces-in-being" will continue but require the manpower support of our reserves. The essential role of the reserves will be to supply that support.

54. In time of crises our expanded forces would require more weapons, materiel and men. The men could be trained during the period of supply of weapons and materiel. To train them would be one of the principal tasks of the experienced officers and other qualified personnel of the reserves.

55. Considerable numbers of additional experienced, well trained personnel are available, from the "out-flow" of permanent force personnel, who are returning to civilian life. Such a pool of experienced military personnel, here-

tofore, has not existed. Unfortunately the potential of this group is greatly diminished because no regular record of their whereabouts, is kept. A form of supplementary reserve list must be kept as it would materially affect the reserve requirements.

56. Emergency Measures Organization plans are based on the use of reserve and regular forces. The survival role is easily learned and is not of itself sufficiently complex to preclude its being taught to all reserve troops in addition to other training. It would be a very costly proposition to provide Reserve Forces solely for survival. The Committee therefore agrees that Reserve Forces should not be maintained solely for survival, but that survival operations should be taught to all troops so that they can, if required, work in that role.

57. The cost of maintaining reserves prior to any reorganization was nearly 55 million dollars per year. Taking into account the low percentage of the defence budget available for equipment for the regular forces, and taking into account the diminished importance of reserve forces while relatively large regular forces are maintained, the Committee feels that every effort should be made to maintain efficient reserve units consistent with budgetary allocations but recognizing that moneys saved by the reduction of personnel and by unit consolidation may be wisely spent for better training and equipment. Cuts totalling 5¼ million dollars have been made in the R.C.N.R. and R.C.A.F. Auxiliary budgets. There is no indication of the total savings that may be possible in the militia budget.

58. The role of the Reserves is to provide trained personnel in an emergency. Evidence given by representatives of the three services indicated that many reservists, because of family, business, age, or physical fitness, would not be able to go on Active Service. This negates the main purpose of the Reserves. Consideration must be given to amending the Defence Act so that reservists are committed to limited call-outs. Standards of age and fitness must be such that most reservists are fit for active service. The suggestion was raised that compulsory call-out might affect enlistment in the Reserves, but there seems to be little use in maintaining large forces that are not available for service when needed.

59. The R.C.N.R. and militia obtain their officers largely from the University Naval Training Division (U.N.T.D.) and Canadian Officer Training Corps (C.O.T.C.) programmes. There is evidence that for a variety of reasons many U.N.T.D. and C.O.T.C. graduates fail to join active Reserve units on graduation. This is a wasteful situation and the Committee welcomes the steps that have been taken to provide this training only in those universities that are so located as to make enlistment after graduation likely. Care must be taken in the future to re-assess the location of U.N.T.D. and C.O.T.C. units so that, as reserve units change, they can be assured of an adequate supply of university trained officers.

There should be some obligation on the part of the U.N.T.D. and C.O.T.C. graduates to serve in the Reserves for a stipulated period of time.

60. The Suttie Commission and the Draper Committee presented arguments in favour of an officer at National Defence Headquarters to oversee the operation of their respective branches of the Reserve. The Hendy Committee indicated that the structure of the Commanding Officers' Naval Division (C.O.N.D.) is both unnecessarily costly and organizationally not desirable. There is obviously a need for proper supervision of reserve activities. Your Committee

believes that one senior officer should be appointed at Defence Headquarters, with the sole task of supervising all aspects of the operation of our reserve forces.

61. No steps should be taken to integrate the Reserves prior to Active Force integration. On the other hand, every effort must be made to locate units in common facilities, in order to produce the lowest possible costs of operation. Consideration should be given to savings that might be realized by placing some Active Force recruiting offices in the same quarters as Reserve units.

62. There is ample evidence that administrative procedures for the Reserves are antiquated, cumbersome, restrictive, petty and generally hamper efficient operation. Recommendations in the Hendy and Suttie Reports dealing with such procedures including attestation, pay, stores, accounting, use of military buildings by civilians, and other matters, must be given serious study and the conditions underlying these recommendations must be corrected.

63. There is a common complaint in all three branches of the Reserves about the quality of regular force personnel assigned to Reserve units. While undoubtedly some excellent regular force people are so assigned, the standard must be universally high.

R.C.N.R.

64. There are four major tasks assigned to the R.C.N.R. These consist of provision of personnel for specified functions in time of emergency, the provision of a mobilization base, survival operations, and maintenance of a naval presence in peace time. The Hendy Committee accepted these roles, and this Committee concurs in their validity.

65. The Hendy Committee was concerned about the strength of the R.C.N.R. They reported that while the proposed cut from 4,000 to 2,400 all ranks would meet mobilization plans, these plans did not take into account manning government ships of the Department of Transport and R.C.M.P., nor did they take into account the Reserve fleet. The Hendy Committee, however, did not consider the possible pool of former regular navy personnel who might be available for these purposes. Considering the budgetary limitations that are necessary, this Committee accepts the reduced strength.

It was suggested by the Hendy Committee that savings proposed by them could result in an increased strength of the R.C.N.R. within the budgetary limitations. The Committee concurs that this is desirable if the cost savings are attainable.

66. Evidence indicates an average annual turnover in the R.C.N.R. of 30 percent. In addition it was brought out that a large percentage of R.C.N.R. personnel are under age for Active Service. Your Committee agrees with the Hendy recommendation calling for an increase in the minimum age of the R.C.N.R. There is also agreement that training must be improved to reduce the turnover.

67. The Hendy Report made a number of valid recommendations for the improvement of the administrative efficiency of the R.C.N.R. These should be implemented.

68. The evidence indicates that cost limitations forced the closing down of the R.C.N.R. Air Divisions. The Committee agrees that the cost of providing operational aircraft for the R.C.N.R. is not warranted. It therefore agrees that

the R.C.N.R. Air Divisions should not be reactivated. However, the Committee suggests that arrangements might be made to enable R.C.N.R. personnel to maintain their capability by flying with the existing R.C.N. shore based squadrons.

MILITIA

69. The Government has assigned five main tasks to the militia. These include providing reinforcement of field forces, the formation of logistic and special units that are not provided in peace time, the provision of a training force to support the field force, the manning of certain security guard stations in an emergency, and the survival role. The Committee is of the opinion that the foregoing are the major valid roles for a militia establishment.

70. There was considerable discussion in the Committee concerning the numbers required to fulfill these roles. The Government has indicated a requirement of 30,000 effective militiamen as follows:

(*a*) Reinforcement of Field Forces	7,000-8,000	—officers and men
Special Units for NATO commitments	1,000	—officers and men
(*b*) Training Force to support the Field Force	18,000	—officers and men
(*c*) Internal Security	2,500	—officers and men
(*d*) National Survival Installations	1,500	—officers and men
(approximately)	30,000	—officers and men

Your Committee cannot confirm or refute this estimate except to note that the potential requirement for internal security appears to be seriously underestimated. Your Committee also recognizes the fact that those requirements will change in the future, and that regular periodic reviews should be made.

71. Evidence given on the current status of the militia indicated an unsatisfactory situation which demands early corrective action. The average annual turnover is over fifty percent. There are indications that because of age, physical fitness, and minimum of attendance at parades, the average efficiency of the militia is fifty percent. The average ratio of other ranks to officers is only six to one. These are average figures, and include headquarters. While there are some excellent units in the militia, whose record is much better than this average, there are others which are correspondingly much worse.

The Committee recognizes that sentiment and tradition are involved in the maintenance of the militia, but because of the importance of the militia, and an expenditure of about 38 million dollars per year, a low level of efficiency cannot be tolerated.

72. The Government has announced that the present strength of the militia is to be cut, for budgetary reasons, from approximately 45,000 all ranks to approximately 30,000. To achieve the requirement of 30,000 referred to in paragraph 70, this would mean an approximately one hundred percent efficiency rate. Your Committee considers this to be unrealistic and would agree with the contention of the Conference of Defence Associations, that in order to achieve the 30,000 effectives, the militia enrolment, even taking into account an increased efficiency, would have to be considerably higher. It must therefore be recognized that, after the militia is cut to 30,000 all ranks, it will be unable to fulfill its proposed roles.

73. It is evident that there will have to be a reduction in the number of militia units. This reduction should be governed principally by unit efficiency performance, geographical distribution, relationship to existing regular forces, and degree of competition for potential militia personnel.

74. The Suttie Commission produced a number of recommendations. Those dealing with administration, provision of adequate equipment, training, age, fitness requirements, and public relations, are of prime importance. Implementation of these could do a great deal to reduce turnover and bring the militia to the required level of efficiency.

75. Cost savings should result from the reduction in strength and improvements in efficiency of the militia. The Suttie Commission indicated that in order to make the militia effective, some of these savings must be spent on equipment and training. The Committee agrees that this must be done. Little will be gained by cutting costs if the resulting militia is not more effective than at present.

76. Your Committee recognizes that the Department of National Defence has the sole responsibility for effecting changes in the reserve forces. Your Committee further suggests that the Conference of Defence Associations be encouraged to continue in an active advisory capacity to the Minister of National Defence.

R.C.A.F. AUXILIARY

77. The Draper Committee has recommended army air support as a specific role for the Air Force Auxiliary. The aircraft available to the Auxiliary have only a limited capability for an army air support role. The Auxiliary is therefore not able to provide full support for the army over a variety of tasks.

78. The cost of equipping the Auxiliary with up-to-date service aircraft, either for airlift or for tactical support, would be very high. The Committee believes that the priority for this type of equipment must rest with the regular force.

79. The major task therefore of the Auxiliary should be to maintain the flying skills, attained at great cost, of regular force aircrew who have retired from service, but whose age and physical fitness would still qualify them for service. This will ensure the availability of these skills in time of emergency.

80. Secondary tasks for the Auxiliary are its survival role for EMO, its search and rescue operations and its participation, with the army, in training exercises.

81. The Draper Committee suggested that economies of operation could allow more units to fly within the budgetary limitations. No concrete cost figures were given to support this contention. If this suggestion is valid, it would be logical to implement it. Further, consideration might be given to maintaining flying skills by allowing reservists to train with existing R.C.A.F. units, where suitable facilities and equipment exist.

RECOMMENDATIONS

82. Your Committee therefore recommends:

(*a*) that a supplementary reserve list be established for Regular and Reserve Force Officers and senior non-commissioned personnel who leave the forces while still young enough to be of service in an emergency. It is suggested that personnel be retained on such a list for a maximum period of ten years;

(*b*) that the National Defence Act be amended to provide for the call-out of reserves with provision for protection of employment;

(*c*) that fitness standards and age limits for Reserve personnel be prescribed so as to be more closely related to Regular Service requirements;

(*d*) that C.O.T.C. and U.N.T.D. programmes carry with them an obligation, on entry, that graduates actively serve in a Reserve unit for three years after graduation, where this is possible.

(*e*) that a senior officer be appointed at National Defence Headquarters, whose sole function will be the supervision of the operations of the Reserve Forces;

(*f*) that the administrative procedures of the Reserve be reviewed and simplified;

(*g*) that only personnel of high calibre be assigned, from the regular forces, to Reserve units;

(*h*) that the recommendations of the Hendy Committee dealing with training, administration, and age limits, be implemented;

(*i*) that the cost savings indicated by the Hendy Committee be checked. If these savings can be achieved, the strength of the R.C.N.R. be increased;

(*j*) that the Naval Reserve Air Squadrons not be put back into operation, but that the Department of National Defence investigate the feasibility of permitting Naval Reserve Air personnel, in Halifax and Esquimalt, to train with the Regular Force Naval Air Squadrons;

(*k*) that the number of units in the militia be established in accordance with factors outlined in Paragraph 73 in order to provide a more realistic organization;

(*l*) that those recommendations of the Suttie Commission, referred to in Paragraph 74, be implemented as quickly as possible;

(*m*) that sufficient funds be provided to equip and train the militia properly; and

(*n*) that a detailed cost study be conducted to ascertain the number of R.C.A.F. Auxiliary flying wings that can be provided within the budget available. The maximum number possible should be kept in operation.

83. In order to follow up the fifth chapter, further time is required to study the function and cost of the cadet programmes.

CHAPTER VI—GENERAL

84. A number of topics for further consideration were referred to in the Interim Report of the Special Committee on Defence at the end of the 1963 session. As some of these still remain to be considered, your Committee intends to study them at future meetings.

A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 1 to 27*) is appended.

Respectfully submitted,

DAVID G. HAHN,
Chairman.

* * * * * * * * * *

FIFTH REPORT TO THE HOUSE

THURSDAY, April 1, 1965.

The Special Committee on Defence has the honour to present its

FIFTH REPORT

Your Committee was appointed, by Order of the House of Commons, on May 8, 1964.

Since that time, your Committee has considered many matters relating to Defence, has received evidence thereon from numerous witnesses, and has made a number of progress reports.

Your Committee will not complete its tasks during the present session of Parliament. Under these circumstances this Committee recommends that it be reconstituted at the beginning of the next session of Parliament, and that, as far as possible, the present members of this Committee be appointed thereto.

Your Committee further recommends that the Minutes of Proceedings and Evidence of this Committee be referred, by the House, to the Committee when it is established during the next session.

A copy of this Committee's Minutes of Proceedings and Evidence (*Issues Nos. 1 to 27*) is appended.

Respectfully submitted,

DAVID G. HAHN,
Chairman.

HOUSE OF COMMONS
CANADA

SPECIAL STUDIES

prepared for the

SPECIAL COMMITTEE

of the

HOUSE OF COMMONS

on

Matters Relating to

DEFENCE

SUPPLEMENT 1964-65

HOUSE OF COMMONS
CANADA

SPECIAL STUDIES

prepared for the

SPECIAL COMMITTEE

of the

HOUSE OF COMMONS

on

Matters Relating to

DEFENCE

SUPPLEMENT 1964-65

22439—1

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1965

CONTENTS

NOTE—*These Special Studies were prepared, at the request of the Special Committee on Defence, 1963, for the information of the members of succeeding Defence Committees and other interested persons.*

		PAGE
1.	Canadian Defence Policies since 1867	5
2.	Defence Policies related to Foreign Policies	25
3.	The Defence Policies of N.A.T.O. Members and some other Nations	35
4.	Canada's Obligations to the United Nations and International Operations	51
5.	An International Police Force	65
6.	A Comparison of Defence Expenditures in Canada and certain other Countries	87
7.	Defence Expenditure and its Influence on the Canadian Economy	95
8.	The Economic Consequences of Disarmament	109
9.	Disarmament and Arms Control	131
10.	Armament and Modern Weapons	153
11.	Conventional and Nuclear Armaments	171

22439—1½

CANADIAN DEFENCE POLICIES SINCE 1867

By: JAMES EAYRS

From Confederation to the Great War

In the sense that necessity is the mother of invention, defence may be counted among the fathers of Confederation. The urgent need to protect the Provinces of British North America from hostile military invasion by the United States, and the belief that this might be better accomplished through their federal union, were uppermost in the minds of Macdonald, Cartier, Galt and the other statesmen who conceived and carried through the project of the Dominion of Canada.

The defence of the Dominion was at the outset in the hands of the Imperial Government at Westminster, and in those of the more than 15,000 officers and men of the British Army garrisoned in Canada. To-day's observer, accustomed as he is to the spectacle of newly independent nations attempting with varying degrees of success to rid themselves of the military presence of their former rulers, might conclude that the objective of the Canadian Government in the immediate post-Confederation years was to expel the British Army from its territory. He would be wrong. It was the British Government, stretched then as now by its far-flung commitments on the continent of Europe and the perimeter of Empire, which wanted to bring its troops back home; the Canadian Government just as determinedly wanted them to stay. "It will be a century," Macdonald wrote in 1869, "before we are strong enough to walk alone." Be that as it might be, the British Government had no intention of waiting for a century, or even a twentieth of a century. By the end of 1871 British garrisons remained only at Halifax and Esquimalt; these were withdrawn in 1905.

Canadian defence was now in the hands of the Canadian Militia. The Militia, however, continued to be in the command of a British officer. In 1874 the post of General Officer Commanding was created, to be occupied by an officer "holding the rank of Colonel, or superior rank thereto in Her Majesty's Regular Army". Though the Canadian Government could in theory exercise a controlling part in his selection, in practice it had to be content with whoever the War Office decided to sent out. The rationale of the procedure was that it would bring a fresh eye to the strategic problems of defending Canada from the United States and, more importantly, would keep defence out of the arena of domestic politics. The rationale of the system led ultimately to its downfall. Two General Officers Commanding—Major-General E. T. H. Hutton (1898-1900) and Major-General the Earl of Dundonald (1902-1904)—were removed from their posts by the Laurier Government for taking their military duties too seriously. Thereafter military affairs were vested in a Militia Council, composed of the Minister of Militia and Defence, and the Deputy Minister, together with the incumbent of the newly created post of Chief of the General Staff, and his leading Staff Officers. The principle of civilian supremacy had been vindicated, albeit at the expense of military efficiency.

During this period (1867-1914), the Canadian Government resorted to the use or threat of military force on four occasions. Two—the despatch of a volunteer militia force of not quite 1,000 men to the Red River in 1870, and the nearly 8,000 members of the expedition sent into the North-West in 1885—were to put down rebellions against the established civil power. Another—the

Yukon Field Force of some 200 volunteers despatched in 1898—was to show the flag to prevent American incursions from Alaska. The remaining venture was the provision of troops for Imperial service in South Africa in 1899-1900. The British cause against the Boers was not one with which Laurier at first found himself in sympathy; he no more wished to despatch Canadian troops to Cape Town than Macdonald, fifteen years earlier, wanted to send them to the Nile "to get Gladstone & Co. out of the hole". But the pressure from English-speaking Canada to do something in aid of Empire was too intense. With his Cabinet divided and the country no less so, Laurier's policy was designed above all else to avoid further division. His compromise was to authorize a volunteer force, no greater than 1,000 men, and to pay its transportation costs to and from South Africa. This force having been despatched without incident, a second contingent was sent later, as well as the private army raised by and named after Lord Strathcona, the High Commissioner in London.

In 1898, the first of a series of navy laws passed by the German Reichstag inaugurated that *Flottenpolitik*, or naval rivalry, between Germany and Great Britain which was ended only by the Battle of Jutland. To the Dominions the Admiralty turned for aid, with varying results. Australia and New Zealand, deeming the British cause to be their own, responded by subscribing cash for dreadnoughts for the Royal Navy. The Canadian Government, its public divided as during the Boer War, was compelled to equivocate. Laurier's position was that, contrary to what he believed to be the biased information put before the British public by the military, there was no emergency to warrant so drastic a departure from the principles of responsible government. If there were naval preparations to be made, they would take the form of a Canadian Navy, not of Canadian contributions to a Grand Imperial Fleet. A Naval Bill embodying this policy was placed before Parliament in November 1909, and passed, over the bitter opposition of Borden's Conservatives, the following year. Before any of its provisions could be implemented, the Laurier Government was defeated in the General Election of 1911. Borden promptly laid down a new naval policy, based on the principle of an emergency contribution. He asked Parliament to approve an appropriation of $35,000,000, to provide the Royal Navy with three additional dreadnoughts which the First Lord of the Admiralty—Winston Churchill—had assured him were vital to the security of the Empire. The Canadian Senate, with its Liberal majority, refused to pass the Bill. The declaration of war in August 1914 found Canada with hardly any Navy of its own, and having made no contribution to imperial naval defence.

The Great War

World war was unforeseen in Canada, as most everywhere else. It being, however, the duty of military planners to think about the unthinkable, some attention had been given to the problem of general mobilization and the despatch of a Canadian Expeditionary Force for service overseas in the event of a European conflict in which Britain was involved. Unfortunately these plans were neglected, or overridden, by Borden's Minister of Militia, Sir Sam Hughes, and it was as much in spite of his zealous and frenzied improvisations as because of them that the first Canadian contingent of 33,000 men (and 7,000 horses) arrived at Plymouth Hoe in the middle of October. They were followed, during the next four years, by nearly 400,000 more. Over 60,000 were killed; among the survivors there must have been some, mutilated in body or mind, who envied the dead.

Had such prodigious sacrifice been foreseen, a more careful canvassing of the *pros* and *cons* of Canadian belligerency might have conceivably taken place, the doctrine of the indivisibility of the Crown notwithstanding. In fact, there was no canvassing at all. Both parties and both races—Canadians and *canadiens*

—accepted without question that British belligerency was a sufficient *casus belli* for the Dominion. "To-day we realize that Great Britain is at war", Laurier declared on 4 August, "and that Canada is at war also".

There was no hesitation, either, in placing Canadian troops under British —or Anglo-French—strategic direction. But as the blood-letting in Europe got under way, it became evident that this confidence had been tragically misplaced. When the senior Canadian officer overseas protested against Canadians being thrown into the line for the attack on Givenchy without adequate planning and so soon after the ordeal at Ypres, he was, as he wrote, "rapped over the knuckles for doing so". A memorandum of the Department of Justice, dated January 1916, gave as its opinion that Canadians serving in the Expeditionary Force overseas were as much the responsibility of the Dominion Government as Canadians serving in the militia at home, and provided the basis for the creation later that year of a Ministry of Overseas Military Forces from Canada in the United Kingdom. But in the last analysis the fate of Canadians in the line depended upon officers of sufficient prestige and seniority imposing their will upon the High Command. Arthur Currie did his best.

It was easier, indeed, to exert influence upon grand strategy. Lloyd George was himself engaged in a running battle with his generals, and welcomed Dominion Premiers like Borden as his allies. From his strong, if anomalous, postion as a member of the Imperial War Cabinet, the Canadian Prime Minister was able to shape Allied policy for the overall conduct of the war and, to even greater effect, for the outlines of the approaching peace.

No decision of the Canadian war effort had more far-reaching effects than Sir Robert Borden's pledge of 1 January 1916 to double the authorized strength of the men in uniform. This promise to place 500,000 Canadians under arms, made solely on the Prime Minister's initiative and apparently with little consideration, led straight to the conscription crisis of 1917. In May of that year Borden returned from Europe convinced, as he told the House of Commons, "that the voluntary system will not yield further substantial results". The Military Service Bill broke party lines in its passage through Parliament, French-speaking Conservatives voting against it, English-speaking Liberals voting in favour. Some of the latter Borden took into a new coalition Government which, with the aid of unprecedented (and, many argued, unjustifiable) electoral manipulation, was returned to power in the General Election of 1917. The Archbishop of Quebec wrote to Borden in a vain attempt to dissuade him from imposing conscription in the Province: to do so would precipitate "racial and religious war". His warning was both timely and accurate. The ensuing disorders might not have been so violent nor so widespread had the conscript system there been conducted with tact and sensibility. As it was they cast a long and sombre shadow on the military affairs of the Dominion for years to come.

From the Great War to the Great Depression

In 1919 Canadians turned away from Europe, leaving behind their dead. However misguided it might appear to those of a later generation drawn as their fathers had been into "the vortex of militarism", isolationism in Canada was a natural response to the four-year ordeal on the Western front. The Great War remade the map, but left unchanged the scale and the projection. The world was still wide. It had been made safe not, to be sure, for democracy—that ambition, one could tell even in 1919, had not been fulfilled—but at any rate for Canadians. These fortunate few inhabited, in the words of their delegate to the League of Nations, "a fire-proof house, far from inflammable materials".

In such a world, in such a house, military preparations were bound to fall into disfavour and defence policy dwindle into inattention. Whence came

the threat for which such preparations were needed? Where was the enemy against which defence policy should be made? "There is no world menace", declared the leader of the Opposition during a debate on the militia estimates in 1920. "The Minister says that this expenditure is needed for the defence of Canada—defence against whom? There is no answer; there is no answer to be made". The Minister's advisers in fact had an answer: they assumed that the United States was the enemy, and it figured as such in their strategic planning. But they did not dare, or care, to divulge this assumption to the politicians.

Neither Conservatives nor Liberals—nor, for that matter, most of the Progressives—wanted to do away with the armed forces altogether. It was desired that they be made efficient and economic, not necessarily in that order. In the climate of those times the Army—voluntary militia and permanent force—was bound to fare the worst, and did. The amount voted for its upkeep by successive Governments throughout the 1920's grew less and less. Hardly any new equipment was procured, the training of reserves became a mockery. What did Canada need an army for, other than render occasional assistance in aid of the civil power? And there were those who doubted it was needed even for that. "I say to this Government", cried a Progressive M.P. in attacking a proposal to amend the Militia Act to authorize an increase in the strength of the Permanent Force from 5,000 to 10,000 men, "trust the people! The heart of the Canadian people is as sound as our No. 1 Hard Manitoba wheat".

The Navy, at first, fared a little better. Canada entered the war, as noted, with no navy to speak of, and ended it with not much more. In 1919 the Borden Government invited Lord Jellicoe to advise it on a long-range naval policy, but even the most modest of his proposals was thought to be too expensive. When the Minister of the Naval Service, sure of his ground, put a compromise programme of $5 million before his party, the caucus howled him down. In the event the Government settled for two destroyers and a cruiser, commissioned in the R.C.N. in December 1920. Even this modest fleet was thought excessive by the incoming Liberal Administration a year later, and one of Mackenzie King's first acts of national policy was to tell the Navy it had to get by on $1.5 million annually. This was not enough to permit any kind of sea-going force, and the Navy was in fact reduced to a shore establishment for the next decade. Only the Navy League objected.

In November 1918 Canada had no air force, but she had airmen—the official figure of nearly 23,000 is far short of those Canadians who served in the Royal Flying Corps and the Royal Naval Air Service. Canada's airmen had more things working for them as a permanent post-war force than did the two established services. The R.C.N. was handicapped by its inconspicuous part in the war effort, by the high capital costs of a sea-going fleet, by the threat to Canadian autonomy posed by strategic doctrines favoured by the Admiralty, above all, by the divisive effects of naval policy upon public opinion. The Army's future was placed in doubt by the determination of most of those who served to turn their backs upon the ordeal from which they had just emerged and to have as little to do as possible with military life in future. But for those who fought in, and survived, the war in the air, aviation opened up glittering prospects of a new and exciting post-war career. Far more than the other professions of arms, military aviation seemed clearly adaptable to peacetime service, above all in Canada where exploring, prospecting, fire-fighting, transporting goods and passengers, were only the most obvious uses to which a nations air power might be put when not in combat. An Air Board, designed to formulate and then to execute the Dominion's aviation policy, was constituted in June 1919; in February 1920 it recommended the creation of a Canadian Air Force, whose members would combine training for wartime flying with "useful civil duties". With the authorization, in 1923, of the prefix "Royal", the R.C.A.F. came into being. But the glamour attending the birth

of the junior service did not cause it to escape the malnutrition from which all branches of Canadian military life continued to suffer during the 1920's.

The decision taken in 1922 to replace the two government departments previously concerned with defence (Militia and Defence, and Naval Service) by a single Ministry of National Defence met with everyone's approval. But the efficiency of administration expected of the new Department was delayed by internal rivalry, principally that between the former Chief of the General Staff, who under the new organization became Chief of Staff, Department of National Defence, and the Director of the Naval Service. The latter officer, Commodore Hose (now Rear Admiral, ret.), did not take kindly to the concept of military hegemony in naval matters, and worked tirelessly to frustrate it, with the result that in May 1927 an Order-in-Council abolished the post of Chief of Staff, Department of National Defence, restoring that of Chief of the General Staff; a further Order-in-Council of the following year changed the title of the Director of the Naval Service to that of Chief of Naval Staff emphasizing that the government's principal military and naval advisors were equal in status. The R.C.A.F. remained under military jurisdiction until 1938, when it acquired autonomy and a Chief of the Air Staff.

Apart from employing small detachments of troops in aid of the civil power, the Government made no use of its armed forces in military operations from the time of the Armistice to the outbreak of the Second World War. On only one occasion was it called upon to do so; this was in 1922, when the British Government (really Lloyd George and Winston Churchill) issued their celebrated appeal to the Dominions for troops to help hold the line against Mustapha Kemal at Chanak. Though the leader of the Opposition, Arthur Meighen, thought that Canada's response to this appeal should have been "Ready, aye ready; we stand by you", the Liberal Government (and its 65 Progressive supporters) were neither ready nor willing.

Canadians, it has been observed, are an unmilitary people. That being the case, it is fitting that the most important assignment carried out by the Canadian military during the years between the two World Wars was of an unmilitary nature. The Department of National Defence created and administered throughout the Depression the system of work relief camps to which able-bodied, single, homeless, unemployed men might at their own request be admitted and cared for, while engaged in useful labour. The scheme was largely the inspiration of the then Chief of the General Staff, Major General (now General, ret.) A. G. L. McNaughton, to which it owed what success it enjoyed. One misconception concerning the camp system persists to this day, and deserves to be dispelled. It is said that the camps, being run by the Department of National Defence, were operated on strict military lines, and that military discipline was imposed upon the inmates. That is untrue. In fact the Department, conscious of unfavourable publicity, bent over backwards to avoid creating a military atmosphere. But the camps became a symbol of all that was thought hateful of the Bennett Government, and were very bitterly attacked. The image of the Canadian military, which was not all it might have been, suffered further as a result of its association in what was intended to be a humanitarian enterprise. In his campaign preceding the General Election of 1935, Mackenzie King promised to abolish the camps if returned to power; he was, and he did.

The Rise of the Dictators and the Road to War

With very few exceptions—notably J. W. Dafoe of Winnipeg—Canadians whether in public or private life failed to recognize Fascist Italy and Nazi Germany for what they were before it was too late. Totalitarianism was thought to be merely an aggravation of that *malaise* from which Europe traditionally suffered; there was little if any suspicion that it might be a distinctively twen-

tieth-century phenomenon arising from the tensions and insecurities of twentieth-century man. The fascist apparition was no new menace for which the old responses would no longer suffice, but a rebirth of the intrigues, the rivalries, the nationalisms of prewar European diplomacy. Thus it required no special explanation, created no new problems, needed no exceptional precautions.

To this misinterpretation was joined a profound distrust of the one method which might, in retrospect, have deterred the dictatorships from their more reckless aggressions. Collective security—the pooling by governments of their capacity to wage armed and economic warfare—was anathema to every Canadian administration of the inter-war period, but it was particularly distasteful to the administrations over which Mackenzie King presided. He was equally suspicious of the institution through which collective security might have been exercised. He referred to it as "an international war office", and never lost his conviction that, as he remarked to Churchill in May 1944, if there had been no League of Nations there would have been no war among the nations.

Given these attitudes, it was inevitable that the Canadian Government reacted coolly to the attempt to organize economic sanctions against Mussolini when his troops invaded Ethiopia. "No interest in Ethiopia, of any nature whatever, is worth the life of a single Canadian citizen". So spoke Ernest Lapointe from a platform in Quebec City in September 1935, with Mackenzie King sitting approvingly at his side. When, six weeks later, the Canadian representative at Geneva on his own initiative proposed the extension of sanctions to oil (the commodity on which Mussolini's legions most urgently depended), his Government, outraged, repudiated his action. Had it not done so, the Prime Minister told the House of Commons early in 1936, "the whole of Europe might have been aflame".

In the summer of 1937, Mackenzie King visited Hitler in Germany. It was not a wholly useful confrontation. It was true that the Canadian Prime Minister did not let the opportunity pass of stressing in Berlin what he had felt unable to state in London, namely, that in the event of "a war of aggression, nothing in the world would keep the Canadian people from being at the side of Britain". Yet so great were the Führer's powers of mesmerizing impressionable visitors that the Canadian Prime Minister returned from Nazi Germany more than ever convinced that a war caused by its aggression was unlikely. "Of this I am certain", he reported to the Canadian people, "that neither the governments nor the peoples of any of the countries I have visited desire war, or view the possibility of war between each other, as other than likely to end in self-destruction, and the destruction of European civilization itself." That the destruction of European civilization was precisely the object of the man he had so recently talked with in the Reichskanzlei was a thought unlikely to have crossed the mind of the Canadian Prime Minister; for, as was remarked of him in a different connection, "Mr. King never quite got it into his head during his economic studies at Toronto and Harvard that our civilization is dominated by carnivorous animals."

Upon these assumptions and with these assessments, the Government shaped its external and defence policies along the road that was to lead to war. In external affairs the policy was appeasement, and support for appeasement. (The word had not, in those days, taken on its contemporary invidious significance.) In defence, the policy was cautious rearmament. It might be thought remarkable that given the climate of Canadian opinion, and the peculiar intelligence of the outside world with which external policies were fashioned, any sort of rearmament was embarked upon. Perhaps it was. Yet it should be remembered that as a consequence of the neglect of the 1920s and the further depletion of the depression years, the defence establishment had been allowed to deteriorate to the point of virtual decrepitude. General McNaughton's final act as Chief of the General Staff was to compose a lengthy memorandum

solemnly warning the Prime Minister that "the situation . . . with respect to equipment and ammunition is one that can be viewed only with the gravest concern". The Mackenzie King Government, which inherited McNaughton's warning from the preceding Bennett administration, was disposed to agree. Total expenditure on defence rose from $22,305,299 in 1934-35 to $27,378,541 in 1935-36, and to $34,799,192 in 1938-39. Equipment and training were improved accordingly.

But what was done fell far short of what might have been done and of what (it is possible to argue in retrospect) ought to have been done. The Prime Minister's continuing suspicions of "Downing Street domination" beset and bedevilled defence preparations involving co-operation with the United Kingdom. Attempts by British officials to plan for wartime defence production and supply in advance of the outbreak of war were rebuffed, as was the Air Ministry's proposal in 1938 for training R.A.F. pilots and aircrew in Canada.

The Second World War

In contrast to the automatic declaration of belligerency twenty-five years earlier, Canada entered the Second World War a week after the declaration of war by the United Kingdom. The delay was useful in allowing the Prime Minister to keep his repeated promise that "Parliament would decide" whether Canada would go to war or not, in underlining the Dominion's right to neutrality (not that there was much neutralist sentiment), and not least in allowing certain materials of war to be hustled across the border from the United States before the formal state of belligerency could invoke the restrictions of the Neutrality Acts.

A further contrast was that from the outset of the Second World War there loomed insistently and obsessively the question of conscription. Mackenzie King's first major policy statement of the war had been to assure Parliament and the nation that "the present Government believe that conscription of men for overseas service will not be a necessary or an effective step. No such measure will be introduced by the present Administration". In April 1942 the Government took the unusual step of asking the electorate, by means of a national plebiscite, to release it from this commitment; the affirmative response provided the mandate, but, as Mackenzie King noted in his diary, "the returns from Quebec were quite depressing" in that French Canada had voted strongly against the question put to it. The Prime Minister concluded "that to keep Canada united, we would have to do all in our power [to keep] from reaching the point where necessity for conscription for overseas would arise".

This consideration, more than any other, caused the Government to scrutinize more carefully, perhaps, than any of the Allies, the military and political implications of those operations in which Canadian troops were asked to participate. Unlike the First World War, in which the Canadians had been ordered into action against the better judgment of senior Canadian officers, there developed in the Second a settled procedure of political consultation before units of the Canadian Army might be committed to military operations. The War Office (or the appropriate British or Allied authority) was to consult with the General Officer Commanding the Canadian Army overseas; this officer might use his own discretion in minor projects of a temporary nature, but if he was in any doubt at all he was expected to consult with the Canadian Government at Ottawa. This procedure came into conflict with the need for the utmost secrecy concerning the military plans involved, but it prevailed notwithstanding.

In the event it proved impossible for the Government to refrain from conscripting men for service overseas. An order-in-council providing for the

immediate drafting of 16,000 N.R.M.A. men was approved on 23 November 1944; of these, some 12,000 were sent overseas, some 10,000 reached Europe, some 2,500 saw action. The ordeal out of which this decision emerged saw the resignation of two Cabinet Ministers (Ralston because he thought the proposal did not go far enough, Power because he felt it went too far) and the bringing of pressure to bear on the Government by the Army High Command. These dramatic events were to have their effect upon the relations of civilian and military public servants long after the German surrender on 5 May 1945.

The Imperial War Cabinet, which had provided the Dominions with a voice in the higher direction of war during the Great War, was not revived during the Second World War. That it remained dormant, despite the occasional efforts of the Australians and others to bring it to life, was largely the result of the refusal of the Canadian Prime Minister to participate. Mackenzie King was convinced, as he remarked in both Ottawa and London in 1941, that the existing system of consultation, based mainly on the cables which flowed in increasing number between the Prime Ministers of the British Commonwealth, was preferable to any wartime gathering of Prime Ministers in London where they would lose touch with their Cabinet colleagues and their publics (and where, he might have added, they would have been too much exposed to the expertise of the British bureaucracy). Another reason for his not wanting to become a member of an Imperial War Cabinet was that he felt it much more important to remain in North America for close consultation with the President of the United States. His friendship with Roosevelt was instrumental in bringing about that historic confrontation at Ogdensburg, N.Y., from which the Permanent Joint Board on Defence was born, and the no less significant Hyde Park Agreement of April 1941 which had the effect of wiping out the Canada-U.S. border for purposes of defence production.

But after the United States itself entered the war, and Churchill and Roosevelt began to forge their own special relationship, the favoured position of Canada in the councils of the wartime Allies not unnaturally deteriorated. Inevitable as this deterioration appears in retrospect, the Canadian Prime Minister did not take kindly to it; his diary and his correspondence are filled with expressions of his annoyance at Canada's exclusion from this meeting or that conference, or the failure of more dominant figures to consult as fully as he felt they ought to have done. Much of Canada's diplomatic energy—perhaps too much—was at this time (1943-45) diverted into endeavours to attain what its Government regarded to be appropriate recognition for its war effort and, even more important, appropriate representation on the various institutions which had come into being to conduct wartime strategy and plan for the post-war future.

In the course of the war, the Dominion's own institutional machinery underwent significant modifications. The centralization of authority under a single Minister of National Defence responsible for all three Services quickly proved under the pressures of war too great to be borne by any one man, especially after the complex arrangements involved in the British Commonwealth Air Training Plan were added to the load. New portfolios—a Minister of National Defence for Air, a Minister of National Defence for Naval Services, and an Associate Minister of National Defence—were accordingly created in 1940, together with the new Department of Munitions and Supply presided over throughout the war by C. D. Howe. These Ministers, together with the Prime Minister and the Minister of Finance, comprised (occasionally with others) the personnel of the War Committee of the Cabinet, an inner grouping of key figures which became pretty much the effective policy-making and administering body of the Canadian war effort. Not the least important development of the wartime machinery of government was the introduction of certain procedures

(such as the taking and circulating of Cabinet minutes) designed to make cabinet business more expeditious.

Wars are seldom beneficial to legislatures, and during the Second World War the influence of the Canadian Parliament upon policy dwindled to an all-time low. A certain waning of its influence was doubtless inescapable, but the prestige of Parliament suffered unnecessarily because of the Government's addiction to orders-in-council. In the United Kingdom, Churchill was criticized for treating Westminster too cavalierly, and devised secret sessions partly in order to offset this criticism. The device of a secret meeting of the House of Commons was employed once in Ottawa (on 24 February 1942); it was not, in the Prime Minister's judgment, an unqualified success. "There seemed," he wrote afterwards, "to be a general acceptance of the view that it was well not to unduly arouse the fears of the public by having a further Secret Session". Public sessions continued to leave much to be desired. A member of the War Committee of the Cabinet, C. G. Power, recalled in later years that "members learned of decisions from their seats in the House, in many instances long after action had been taken. If they objected, they were told that there was a war on".

Planning the Post-War future

Mackenzie King did little to encourage public discussion of what kind of policies and institutions were needed to keep the peace and promote the prosperity of the post-war world. "The more public discussion is diverted to questions about what is going to be the attitude of this country and that country at the peace table and in the post-war period", he remarked in the House of Commons in March 1943, "the less the country will be impressed with the fact that this war itself is not yet won". His own thinking on the subject underwent important, though possibly not fundamental, changes. He remained (as noted above) sceptical of collective security, at least of the League of Nations variety, and hostile to the notion that force would be needed to restrain the ambitions of future aggressors. But he conceded that "where a mad man is rushing around a community with a shot-gun or a sword the first step is to relieve him of the weapons he carries". His advisers were prepared to go a little further. Mr. Lester Pearson, then (1944) Minister-Counsellor of the Canadian Embassy at Washington, who as a young diplomat at Geneva had witnessed with dismay the Government's sabotaging of collective security in 1935, was a more staunch defender of the method than his Prime Minister: "That collective system which was spurned in Peace", he remarked in a speech to the Canadian Club of Toronto, "has proven to be our salvation in war".

The Canadian Government gave its blessing—it was hardly in a position to do otherwise—to that system of post-war international organization worked out by the Great Powers at Dumbarton Oaks in the fall of 1944, with its Security Council on which those Powers would enjoy a commanding influence safeguarded by the veto. But it was by no means ready to acquiesce in what Mackenzie King described in Parliament (4 August 1944) as "the simple division of the world between great powers and the rest". Its own conception was well set out by the Prime Minister in these words:

> The great powers are called by that name simply because they possess great power. The other states of the world possess power—and, therefore, the capacity to use it for the maintenance of peace—in varying degrees ranging from almost zero in the case of the smallest and weakest states up to a military potential not very far behind that of the great powers.

> In determining what states should be represented on the (Security Council with the great powers, it is, I believe, necessary to apply the functional idea. Those countries which have most to contribute to the maintenance of the peace of the world should be most frequently selected. The military contribution actually made during this war by the members of the United Nations provides one good working basis for a selective principle of choice.

This important statement provided the rationale for two key Canadian concepts often reiterated during the post-war period: the functional principle of United Nations activity (leading, at San Francisco, to the inclusion as integral parts of the United Nations system such organs as the Trusteeship Council and the Economic and Social Council), and of Canadian representation on such organs; and the notion that Canada, while not a Great Power, was most certainly not a small power, and might therefore be properly referred to as a Middle Power, with the prerogatives and privileges of Middle Powerdom. Elaborated with considerable force and subtlety by Canadian representatives, these principles made their mark upon the Charter, and secured for Canada a more important role (e.g., as a member of the U.N. Atomic Energy Commission) than the Big Three had ever envisaged on its behalf.

From UN to NATO

The commendable thing about the functionalist approach was that it linked power to performance, status to stature: a nation unprepared to make the effort could not expect to remain a member in good standing of the international establishment. But by this criterion the very originator of functionalism seemed headed, during the immediate post-war years, for an outsider's role. For all the talk, during the war itself, of Canada's part in what Mackenzie King called "the new world order", it now seemed as if the nation were returning to the discredited isolationism of the 1930s. Thus the Canadian Government declined to take part in the military occupation of Germany. Such abnegation of responsibility could hardly help the Government's claims upon Middle Power privileges, as its High Commissioner in London noted in January 1946. "Addison (Secretary of State for Dominion Affairs) raised the question of our membership in the two principal councils in the United Nations Organization. I stated what I believe to be the Canadian point of view but I could not help thinking that our position would be very much stronger if at the same time we were not planning to limit our commitments and, indeed, avoid our obligations in connection with such problems as the occupation of Germany. We are now planning to withdraw our forces this year which is a source of very great embarrassment to the U.K.". Within the next two years, Canada refused to serve on United Nations commissions in Kashmir and Palestine (Mr. Justice I. C. Rand was a member of the Palestine Commission but as an individual not acting on governmental instructions); membership on the U.N. Temporary Commission on Korea was accepted only at the urgent persuasion of President Truman, and then with great reluctance and misgivings.

These withdrawals from reality signified not so much the state of mind of the Canadian people as the increasingly idiosyncratic conduct of their affairs by their aging (and ailing) Prime Minister. Mackenzie King's colleagues and advisers did all they could to keep the damage to a minimum. Nor were they unsuccessful. From them came the proposal, suggested publicly by an official of the Department of External Affairs as early as August 1947, that Canada might join with other nations in "creating new international political institutions to maintain peace", later elaborated in the suggestion that the two North American nations might join with the members of the newly created

Western European Union in some sort of trans-Atlantic security pact. From these beginnings the North Atlantic Treaty Organization emerged two years later.

Canada's military commitments to NATO, though on a far lesser scale (even allowing for discrepancies in population and resources) than those of the United States, were no less whole-hearted. Canadians had more reason than many of the Western democracies to understand how very slim had become the hope that international politics might in future witness that unity of the great powers assumed in the Charter of the United Nations. Disclosure late in 1945 of Soviet espionage in the Canadian capital revealed, at least to members of the Government, the reckless perfidy of Marshal Stalin: if public disillusionment did not come until the extinction of liberal institutions in Czechoslovakia in February 1948, it came then with sobering clarity. "The Soviet Union", remarked the Minister of National Defence a few months after the Czech tragedy, "has flouted war-won friendships, obstinately obstructed every move to arrive at understanding, and promoted chaos and disorder and the darkness of the iron curtain . . . It has produced an attitude in Canada towards defence which is quite different from any that we ever had before in peacetime". With full public backing the Canadian Government made its contribution to the military build-up in Western Europe (though opinion wavered in places when the distasteful prospect of rearming West Germany loomed before it in 1954).

Misgiving was not confined to the left wing when, in that same year, the U.S. Secretary of State enunciated what came to be known as the doctrine of "massive retaliation". The notion that the great deterrent to Soviet thrusts into Western Europe would not in future consist of NATO's conventionally armed troops with their screen of fighter aircraft and their supporting navies but rather of the Strategic Air Command of the United States, ready at a moment's notice to drop its continent-searing weapons upon a hundred or more of the enemy's centres of population and industry, did not sit well with many of Washington's allies. Of these, the Canadian Government was among the first to disclose its alarm and apprehension. In a series of published statements and speeches (and doubtless in many confidential despatches which were not published), the Secretary of State for External Affairs, Mr. Lester Pearson, pointed out that massive retaliation, so far from deterring conventional assault, was more likely to encourage it: neither conscience nor common sense was likely to countenance the certain death of a hundred or more million innocents, at least half of whom lived in the countries under attack, as a reprisal against the foray of a Soviet conventionally armed division. Unless the West was to remain paralysed by the awesomeness of its own retaliatory power, a new strategy had to be devised, a strategy fitting punishment to crime, a strategy providing the proper proportions of force. "Except in the event of a reciprocal spasm of mutual annihilation", Mr. Pearson wrote in a book published in 1955, "the free world's force should be used only for limited political objectives, of which the chief will be to deter aggression; or if it breaks out, to localize it, defeat it, and prepare the way for a peace settlement. This is something different from the doctrine of massive retaliation".

So it was. But there remained a great gulf fixed between the objectives urged by NATO's military planners and the actual number of armed divisions that the member governments were ready to put at their disposal. The Alliance yielded to the temptation to rely on nuclear fire-power to redress the balance between its own forces and those of the Soviet Union (placed by the conventional wisdom of the day at 175 divisions). Conforming to this doctrine, the Canadian Government accepted in 1958 a nuclear role for the R.C.A.F. air division in Western Europe. Reassuring statements about "tactical nuclear

warfare", "strike-reconnaissance" or "battlefield interdiction" did not conceal from the sceptical that the discredited strategy of massive retaliation had been continued in all but name, nor that Canada had become a party to its continuation.

Though the Government had taken on a nuclear role, it did not consent to take on nuclear weapons. The reasons for its refusal are complex, not to say controversial: they have to do with the divided state of Canadian public opinion; to the presence within the Cabinet (in the person of Mr. Howard Green) of an influential and persuasive advocate of delay on the grounds that too hasty acceptance of nuclear weapons might prejudice the prospects of disarmament; not least to the then Prime Minister's difficulty, evident in more than atomic affairs, in coming down decisively on one side of a fence or the other. While Conservative Ministers wrestled with their constituencies, their consciences and one another, the Liberals (and New Democrats) stood more or less firmly for atomic abnegation. But in January 1963 there took place a remarkable reversal of opposition policy. Mr. Pearson, in a carefully prepared statement, announced his party's conversion to a nuclear strategy. Canada, he declared, should acquire tactical defensive nuclear warheads for those of its weapons systems requiring them for full efficiency. He claimed that Canada, under the Diefenbaker Government, had already committeed itself to a nuclear role: "As a Canadian, I am ashamed if we accept commitments and then refuse to discharge them". Mr. Diefenbaker displayed no shame. "This is not time", he told Parliament on 25 January, "for hardened decisions that cannot be altered". But he was unable to carry his Minister of National Defence, and other members of the Cabinet, any further along the road of procrastination. Amidst a wave of ministerial resignations unprecedented in Canadian political life, the Government was twice defeated on want of confidence motions in the House of Commons. Dissolution came on 6 February.

It would be a rash political scientist indeed who, even today, would venture to state with certainty what effect the nuclear issue had on the outcome of the campaign. With a minority government and less than half of the popular vote (and that less than half by no means a pro-nuclear vote), the new Prime Minister could hardly claim a mandate to usher Canadians over the nuclear threshold. Nevertheless, that is what he had pledged himself to do, and nobody, not even the New Democratic Party, was ready to stop him. Accordingly Mr. Pearson's Government entered into the necessary negotiations with the United States, and by early 1964, after six years of uncertainty and delay, the Bomarc missiles at North Bay and La Macaza were finally equipped with their atomic warheads, as were the R.C.A.F. squadrons based in West Germany. Those based in France, however, had to await approval by the French Government before acquiring nuclear capability; or, failing that, be transferred to a more indulgent jurisdiction than that of General de Gaulle.

War and Peace on the Periphery

That the defence perimeter of the nations calling themselves "the Free World" was by no means confined to Western Europe became evident in June 1950, with the North Korean attack upon the Republic of Korea. Resolutions authorizing the creation of a United Nations command to resist this aggression, and to mobilize the necessary military resources, passed the Security Council only on account of the fortuitous absence of the Soviet representative. The Canadian Government responded by offering, on 12 July, three R.C.N. destroyers, and long-range air transport assistance by the R.C.A.F. It decided, at that stage, not to send troops. But the following month, when R.O.K. and United States forces had been pressed back to the Pusan bridgehead, and

rumours of resort to the atomic bomb had begun to agitate the capitals, the Canadian Government announced its decision to form a specially recruited brigade, the so-called Canadian Army Special Force, to serve in Korea if the possibility of useful service still existed. There was little opposition to this move in Parliament or in the country, the Conservative critics confining their criticism to the fact that it had been necessary to resort to special enlistment in order to raise the requisite number of troops. An advance party of 350 arrived in Korea after the Chinese intervention had created what the U.N. Commander rightly described as "an entirely new war".

By the time it ended in the truce signed in July 1953, 10,587 Canadians had enlisted in the special volunteer force; of these, 3,134 were from the province of Quebec, a proportion slightly higher than that of the population of Quebec to the population of the whole country, while the proportion of French-speaking Canadians in the special force was almost exactly that of French-speaking Canadians to the total population. If, therefore, Canada continued to share with Iceland the doubtful distinction of being the only member of the North Atlantic Alliance not to have introduced compulsory military service, it reflected not so much the unwillingness of any sector of the Canadian community to sacrifice for freedom as the unwillingness of their Government to risk opening the old wounds of the conscription issue.

A year after the truce in Korea, Canada was called upon to undertake another, though different kind of, "police action" in the Far East. This was in Indo-China, where in the aftermath of the collapse of French power before the communist-led forces of the Vietminh, Canada, together with India and Poland, was asked to accept membership on three International Commissions—one each for Vietnam, Laos and Cambodia—created by the Geneva Conference to supervise the working of the armistice agreement. The Canadian Government had not sought these responsibilities; indeed, word of the invitation to participate seems to have come to it as a complete surprise. But, having been asked, the Canadian Government accepted, under no illusions, as its statement of acceptance made clear, "about the magnitude and complexity of the task". Providing personnel, military and diplomatic, for the Truce Commissions placed the Departments of National Defence and External Affairs under considerable strain. A group of army officers were flown in from Korea, and 70 more left immediately from defence headquarters at Ottawa. At any given time during the next few years, the number of Canadians serving with the Indo-China truce commissions was rarely less than 150.

The term "police action", indiscriminately applied to the very different kinds of operations in Korea and Indo-China, obscures more than it makes clear. Police action in Korea was war in the conventional sense: an army in the field sought to impose military defeat upon an armed adversary. Police action in Indo-China was the action of a corps of observers, confined by their mandate (and by their equipment) to investigation and report. The kind of police action in which Canada became involved following the Anglo-French invasion at Suez in November 1956 was something else again. It is easier, perhaps, to state what it was not than what it was. It was not a Korean-type military force. It was not intended to fight the Anglo-French invaders or any other. It was not equipped to fight. It was intended, rather, to exert a pacifying, tranquillizing influence upon the situation into which it was injected, and so help restore peace, order and good government. In this it was successful, but only because the other militarily superior forces in the area were prepared to allow it to be. In the similar operation mounted four years later in the Congo, the United Nations policemen found local authority divided, the situation chaotic, their own mandate confused and their safety imperilled.

Canada's experience in UNEF and UNOC, which brought the country considerable kudos at comparatively little cost, has encouraged strategists

both in and out of arm-chairs to argue that a higher priority among Canadian defence options ought to be given to peace-keeping under United Nations auspices; a small but not uninfluential body of opinion styling itself "positive neutralist" has indeed urged that Canada renounce its old-fashioned military alliances the better to be able to participate in the tasks of para-military police action among that increasingly large number of nations which regard such alliances with suspicion. The present Government has declined to go so far. But it evidently looks with favour upon the idea that Canada might become peace-keeper to the nations, an international policeman on a regular beat. Such an idea is not unworthy, but those who urge it as a policy do well to reflect that in the eyes of those who live in the precinct Canada is not especially well equipped for the job. Gandhi wore a loin-cloth, not a grey flannel suit; his complexion was brown, not white; and it remains at least an open question whether the doctrines of the Mahatma have any relevance in a world in which governments continue to jostle and fight for power. A recent statement of the positive neutralist position argues that while "there still is, and there will be for a long time yet, a contest between East and West, between Communist and Western values", that contest will from now on "be decided not by cold war but by which values win, or lose, the support of the new and uncommitted nations". This is a plausible case, easily argued; but it cannot yet be asserted, as its author asserts it, as a fact of life. Would that it were.

Defending the Continent

Reflections of a very different order are induced by turning to the preparations made or contemplated by successive Canadian Governments to help defend the continent from nuclear attack by the U.S.S.R. Soon after August 1949, when the Soviet Union successfully detonated an atomic bomb, it became evident that its government satisfied all too well the designation of "enemy": it was malevolently disposed towards the West and possessed, henceforward, the means to express its ill-will in a devastating surprise attack. In August 1951, negotiations between Canada and the United States were consummated in an agreement under which the American Government undertook to pay two-thirds of the costs of construction, equipment and maintenance of a chain of radar installations—the so-called Pinetree Line—reaching from Vancouver Island into the Peace River district, down through the northern states of the American prairie, up again into Ontario and Quebec and ending at the Atlantic Coast of Newfoundland. Two other radar chains—the Mid-Canada line and the Distant Early Warning system—were built further north, the former at Canada's expense, the latter (three times more costly) at that of the United States. Their existence brought United States service personnel into the Canadian northlands on an unprecedented scale. Coming and going at will, occasionally imposing its jurisdiction upon Canadians in their own country, the American presence was not well received by Canadian public opinion. Criticism of the early warning system tended to centre on this aspect of sovereignty, neglecting the more fundamental questions of whether its enormous cost was worth incurring in the era of the intercontinental missile (which it could neither detect nor intercept), or better expended upon forces designed to deal with brush-fires rather than with the apocalypse.

A similar preoccupation with sovereignty rather than with survival seemed to attend Canadian reactions to the creation in 1958 of the North American Air Defence Command (NORAD). The command of NORAD, charged with the defence of North America against bomber attack, was assigned to a U.S. officer. But his deputy was a Canadian, and while the American commanders came and went, the deputy, in the person of Air Marshal Roy Slemon, R.C.A.F., stayed at the job from the outset, acquiring in the process a store of expertise and experience assuring him of the respect and confidence of senior American

officers. His prestige seemed undiminished even after the Canadian Government refused, at the time of the Cuban crisis of October 1962, to place the R.C.A.F. component of NORAD's defences in a condition of emergency alert.

No aspect of national strategy in the age of the hydrogen bomb and the long range missile has caused more anguished perplexity than what is known, too euphemistically perhaps, as "civil defence". No government concerned, as it ought to be, with safeguarding its citizens in every possible eventuality could properly neglect the appalling prospect that deterrence might not work. Some preparation, therefore, for surviving a nuclear attack should accordingly be made, the more confidently in the expectation that an impressive civil defence programme might itself increase the effectiveness of the deterrent, offering to any would-be aggressor evidence of the nation's determination to survive and so, hopefully, helping to stay his hand.

But it was not, of course, anything like as straightforward as that. Could it not be argued that civil defence, so far from deterring an aggressor, would only cause him to increase his scale of attack? Might he not misread the signals, mistaking a strategy of deterrence for a strategy of pre-emption? Again, granted that something should be done, how much should be done? An all-out civil defence effort might only intensify the arms race. And even if it purchased survival, how much was survival worth in any case. "Are we to flee like haunted creatures", George Kennan demanded rhetorically in a famous series of lectures, "from one defensive device to another, each more costly and humiliating than the one before?... If I thought that this was the best the future held for us, I should be tempted to join those who say ... 'let us at least walk like men, with our heads up, so long as we are permitted to walk at all'." What did it profit a nation, any more than a man, if, in saving itself, it lost its soul?

Confronted by these questions, some at least as much theological as technological in their nature, the Canadian government, like other governments, attempted to steer a middle and, it hoped, a reasonable course. It did not abandon civil defence; equally, it did not take it seriously as an integral part of the national security policy.

Cabinet ministers and key federal civil servants were to take refuge in a heavily protected bunker whose location, a carefully guarded secret, was commonly known to be at Carp, Ontario, some 25 miles due west of the capital. The Canadian army was made responsible for rescue work and revival of areas brought under nuclear attack, and training of personnel, both permanent force and reserve, was altered accordingly. But the average citizen was left to fend for himself, armed (if he so desired) with a goverment loan and a pamphlet from the Queen's Printer, "Your Basement Fallout Shelter".

Producing for Defence

Having by the remarkable arrangement of the Hyde Park Agreement (see above) become an integral part of the continental arsenal of democracy, Canadians looked forward to more of the same when it became apparent, by 1947 or 1948, that instead of peace a Cold War of infinite duration had settled upon the world. This expectation may have been naive, but it was intense. More than any other NATO country, Canada had pressed for the inclusion in the North Atlantic Treaty of Article II which enjoins the members to "seek to eliminate conflict in their international economic policies" and to "encourage economic collaboration between any or all of them". It seemed only fair, it was indeed only logical, that nations standing together in defence of freedom (or any rate of Western Europe), pooling their armour, their manpower and their wits in a unique peace-time coalition force-in-being, should extend their co-operation to the production of defence equipment.

The Korean War created an impetus for Canada and the United States to pledge themselves to remove "as far as possible" those "barriers which impede the flow between [them] of goods essential for the common defence effort", and to develop "a co-ordinated programme of requirements, production and procurement". This agreement of 26 October 1950 was agreement in principle only. The Korean War was not a total war. The centripetal forces which had drawn the members of the Grand Alliance into their wartime unity faltered in the 'fifties'. After the death of Stalin (March 1953), men of good will and high intelligence might all the more legitimately come to quite different conclusions about the strategy and tactics of Soviet policy: lacking agreement on the nature of the challenge, how could they be expected to agree on their response? The sense of urgency which compelled the NATO nations to allocate up to half of their revenues for defence could not bring them to direct their expenditure according to the principle of comparative advantage. Moreover, in this alliance of equals, some were more equal than others. For the United States, almost every weapons system might be comparatively advantageous to produce at home; for, say, Iceland, almost none. The countries in between floundered uncertainly between the competing considerations of keeping up the strength of their defence community, and keeping up with the Joneses.

Canada, a country inbetween, did its best to produce as many of its own weapons systems as it could. There were small failures, and bigger ones. The biggest of them all was the CF-105 programme. No reader of this paper will need to be reminded of the fate of the "Arrow", that superb piece of machinery intended to become the primary fighter-interceptor of North American air defence but which was actually consigned to the wrecker's torch after only two prototypes had flown (at a cost to the tax-payer of perhaps $400 millions). What went wrong? Until recently the tax-payer had never been told (though he could guess). But in October 1963, the retired general who had been the Government's chief military adviser at the time disclosed how things had gotten out of hand. The Arrow programme began as an airframe programme only: into the airframe, built in Canada, was to be fitted an American or British engine, an American weapons system (Sparrow II) and an American electronic and communications system. In the expectation but without any guarantee that these vital components would be available when needed, the work on the CF-105 was put in hand. A year or so later, when a Canadian firm was developing out of its own funds an engine that seemed a promising unit for the Arrow, the Canadian Government, after (in General Foulkes' words) "a great deal of discussion and heart searching", decided to develop not only the airframe but the engine as well. Meanwhile the Sparrow II was dropped by the U.S. Navy, and the Canadian Government took it over. Finally, the American communication and electronic systems on which the Government had counted were also abandoned; when these, too, were incorporated into the Canadian programme, the tax-payer was saddled with the entire cost of the aircraft. Due to a further miscalculation (involving the number of reserve pilots who could be trained to handle so sophisticated a machine), the original requirement of 400 Arrows for the R.C.A.F. was cut back to something like 100, the unit cost soaring accordingly. Only then was it discovered that neither the United States nor the United Kingdom nor any other NATO country wanted to buy the Arrow for its own airforce.

Had the Soviet Union itself come through with an offer, the Canadian Government might have been tempted to accept. But there was no offer of any kind. The Diefenbaker Government, inheriting the mess, decided to cut and run.

In October 1963, the Minister of National Defence, reflecting on this false start among others, remarked that there were certain lessons to be learned. "One of them is that first of all you have no guarantee that anyone else is going to buy a finished product. Secondly, if you have a good idea and you

are going to develop it, develop it with speed and go all out to make sure it is the first and the best... What we must not do, and what has been done in this country once or twice, is to extend the design and development time so much that you lag behind the efforts of others who come in later and...overtake you and pass you". This was commendably succinct, but Mr. Hellyer might have put it more briefly: "Think".

The Arrow débacle forced upon Canadians an agonizing reappraisal of their role in defence production for the West. If, as their spokesmen now conceded, major weapons systems had become too costly for independent Canadian development, it was all the more important that Canadian industry be able to compete for contracts in the United States on terms that would not discriminate against it just because it was Canadian (and foreign). This was recognized in Washington as well as in Ottawa, and early in 1960 there was born the so-called Defence Production Sharing Programme, well described as "a Cold War version of the 1941 Hyde Park Agreement". A number of important benefits followed; waivers, in Canada's favour, of "Buy American" rules which otherwise would have imposed handicaps of from 6% to 12% on Canadian firms bidding for contracts in competition with American rivals; certain defence items exempted from duty; security clearances forthcoming more readily than might otherwise have been the case. Since the Programme went into effect, more than 300 Canadian firms have done more that $605 millions of defence business in the United States, much of which (it is fair to suppose) they would not have gained without it.

Adjusting to Disarmament

Canadians, who prospered during World War II, have not been doing too badly during the Cold War. Yet to the extent that their prosperity derives from defence production, it is a false prosperity resting on infirm foundations. It is dependent in the first place on the goodwill of our ally and neighbour, which may not always be forthcoming. It is no easy matter for any government, however friendly, to take a highminded line when confronted with balance of payments difficulties and the protests of depressed regions voiced by powerful politicians. But prosperity is doubly deceptive to the extent that it depends upon the continuation of an arms race, especially the prosperity of a country which, like Canada, has laid and continues to lay such emphasis upon the need for general and complete disarmament. It would be well for both Canada and the United States to devote the same resourcefulness with which they have contrived to share defence production to the coming problem of how to disengage the national economies from defence production as painlessly and constructively as possible. The Canadian Government, for all the talk at Geneva and elsewhere about the urgent need for disarmament, lags well behind the United States in the quality and quantity of hard thinking on the subject; such, at least, is the only conclusion one can form after pondering their respective replies to a United Nations inquiry of 1962 into the social and economic consequences of disarmament. Asked by the U.N. to comment "on the problem for Canada of predicting the choice of uses for resources released by disarmament", the Canadian Government would say only that it was not able to "predict in advance... Under the Canadian democratic system, the Canadian Parliament alone can decide the redistribution of these resources. It is not possible to prejudge what they would decide". This not very helpful response came oddly from a country which, only a few years before, had undertaken, in the Royal Commission on Canada's Economic Prospects, fortune-telling on a national scale. Was it a reflexive return to the old formula "Parliament will decide", employed by Mackenzie King as a delaying action when some hard decision came before him? Or was it that the economic consequences

of disarmament for Canada, which even with the stimulus of Cold War has to acknowledge the highest rate of hard-core unemployment of any free enterprise economy in the world, pose problems so difficult and intractable that it is easier not to think about them at all? One inclines to the latter explanation, especially after listening to such *cris de cœur* as the following, uttered by the Member for Queens when rumours reached him that peace was about to break out in Prince Edward Island: "If the R.C.A.F. station at Summerside were to be cut back this would have a profound effect on the economy not only of that area but of the whole Province... It is perhaps the second most important industry of that Province... I would hope that the Minister would use his best arguments... to convince his colleagues that to cut back this station would be a very serious mistake not only from the defence point of view but because it would have a very detrimental effect on the economy of that area and on the employment situation there". How to adjust to peace is going to prove at least as difficult for Canada as how to produce for war.

Organizing for Deterrence

The complexities of strategy and policy in the nuclear age compelled senior military officers in Canada, as in all Western countries, to exercise judgment in areas lying far beyond their traditional competence. "They have become", two American scholars have noted, "increasingly concerned with international affairs, that is to say, with the premises of military policy, with the purposes for which and the terms on which military forces will be deployed". But despite the new importance of the military establishment in the making of national policy, the traditional Canadian ideal of civilian supremacy has not been impaired. On the contrary, firm civilian control has appeared all the more urgent when even the most distant para-military skirmish runs the risk of thermonuclear catastrophe.

The principle of civilian supremacy has been firmly built into the institutions by which post-war defence policy is made. The Cabinet, the ultimate forum of decision, restored in 1953 the wartime device of an Associate Minister of National Defence (a portfolio which had been allowed to lapse with the coming of peace) when Mr. Ralph Campney was appointed to the post. The division of labour between this Minister, and the Minister of National Defence, has been along functional lines, the Associate Minister attending mainly to administrative matters throughout the entire defence establishment, leaving his senior colleague freer to grapple with increasingly intractable problems of policy. The personnel and tradition of the Defence Committee of the Cabinet are such as to ensure that the dominant voice is that of the civilian. The principal military advisers of the government are members of the Chiefs of Staff Committee which is not, contrary to what its name might imply, a wholly military group, for it includes the chairman of the Defence Research Board, a civilian. It includes as well (since 1951) its permanent chairman. The occupant of this important post (General Foulkes was the first incumbent, succeeded in 1959 by Air Marshal F. R. Miller, formerly Deputy Minister of the Department of National Defence) is clearly intended to infuse the Committee with a supra-service and even a civilian point of view. Additional civilian chaperonage is provided by the regular attendance at meetings of the Under Secretary of State for External Affairs and the Deputy Minister of National Defence, when other than purely military matters are under discussion—as, indeed, they usually are. The presence of these influential non-military figures in the Chiefs of Staff Committee (and indeed in the two key committees that serve it, the Joint Intelligence Committee and the Joint Planning Committee) has drawn from a former Chief of the General Staff the grave criticism that it is "'packed' to protect the government against the receipt of unpalatable advice". To the Royal Commission on Government Organization, however, reporting in January 1963, the organization of the top echelons of the

military establishment seemed if anything to be lacking in civilian influence, and it recommended, in addition to strengthening the position and authority of the Chairman of the Chiefs of Staff Committee, the posting of promising civilian officers to military staff duties.

In addition to diluting the military mind by infusions of civilian personnel, the principle of civilian supremacy has also been aided by service training designed to steep the military mind in civilian modes of thought. The R.C.A.F. has been the leader in this field, training the majority of its Flight Lieutenants at its Staff School in Toronto, and a more privileged few at the Air Force College (to which a few Army and Navy officers are also admitted). At the zenith of this educational pyramid is the National Defence College which since 1948 has offered a series of annual courses for what its handbook for participants describes as "the training of senior officers of the Armed Services and civil departments of government in the principles of higher governmental administration and staff work, both in peace and war."

It is of some interest that the first commandant of the National Defence College became after his retirement from active service the most outspoken critic of the fusionist approach displayed in its curriculum. "On the subject of defence", General Guy Simonds has written, "the problem is not one of attempting to devise ways and means of enabling the military to encroach upon political prerogatives, but of getting politicians to face the unpleasant duty of making realistic decisions". Arrangements for exposing the Canadian military to political affairs have been considerably more advanced than arrangements for exposing Canadian politicians to military affairs. The R.C.A.F. tried without spectacular success to bring interested politicians down to NORAD Headquarters at Colorado Springs (and so within the range of its briefing officers); a former Secretary of State for External Affairs remarked in the House of Commons that he had never taken advantage of this opportunity, and never would—for fear, one can only suppose, that what he might see and learn on the mission would weaken his faith in the imminence of universal disarmament.

A potentially more valuable device for bringing politicians face to face with defence dilemmas is a committee of the House of Commons, modelled on the lines of the House of Commons Standing Committee on External Affairs which since its inception in 1946 has done a great deal to improve the knowledge and understanding of its members (and those of the attentive public in the country at large) in matters of foreign policy. The range of witnesses brought before the Special Committee on Defence created in 1963 considerably exceeded that of those appearing before the Special Committee on Defence Expenditures of 1960, as did the scope and intensity of their interrogation. Much useful information, some of it never before disclosed, was placed on public record, and the quality of future defence debates in Parliament can only be improved as a result. It may not be inappropriate to conclude a paper commissioned by, and addressed to, its members with a suggestion for improving its deliberations. The military and diplomatic components of national security policy are, and ought to be, indissolubly combined, in formulation and execution, as well as in study and analysis. Accordingly both the Standing Committee on External Affairs and the Special Committee on Defence should be dissolved, and replaced by a single Standing Committee on National Security Policy.

University of Toronto
20 January 1964

DEFENCE POLICIES RELATED TO FOREIGN POLICY

By: PEYTON V. LYON

Since national security must be the primary objective of foreign policy, it follows that a close relationship inevitably exists between a nation's defence policy and the conduct of its external affairs. The precise nature of this relationship, however, can vary a good deal depending upon the aspirations and resources of the individual countries, and also the threats to which they are subjected. In this paper we shall be solely concerned with the defence-foreign policy relationship in the Canadian context.

Why does Canada maintain armed forces? The answer is not, in any direct sense, "the defence of Canada". Even if it were now considered advisable, we should find it futile to start defending "the longest undefended border in the world". On the other hand, any attack on Canada by a third power would be considered an attack on the United States, with all that that implies. No other country can be quite so confident that the Americans, in their own inerests, would go all out to defend it. This would hold true even if the Americans ceased to have friendly feelings towards Canada, or if we refused to contribute to the joint defence of the continent.

Less comforting is the corollary: even if we tried to remain neutral, Canada is virtually certain to be mauled in any assault upon the United States. It is, therefore, in our most vital interest that the United States not only be invulnerable, but appear invulnerable. If the United States were in danger of attack, and Canada were able to make a significant contribution to its defence, anything less than our maximum effort would be folly.

But is this the situation? In the light of official American estimates, the possibility of a direct assault on the United States in the foreseeable future must be considered slight. Even a doubling of Canada's defence forces, moreover, would not significantly alter the global balance of power. If Canada were to abolish its armed forces, and this were to raise doubts about American security, the United States would be obliged to take up the slack, and would probably do so with relative ease. We might find it necessary to permit the Americans greater use of Canadian airspace, and soil for military bases. It is less easy to imagine the circumstances in which Canadian armed forces would be essential to continental security.

Unilateral disarmament by Canada, of course, might be imitated by other allies, thus resulting in a more serious weakening of western defences. Considering, however, the differences between Canada's circumstances and those of the European allies, our example would seem unlikely to start a chain reaction; the possibility is not sufficiently great that it should be decivise in determining Canada's policy. A somewhat greater likelihood is that our allies, especially the United States, would become less considerate of Canada's economic interest when setting their commercial policies. This could hurt, but the total cost would seem unlikely to amount to the 1.5 billion dollars which we spend on defence.

Without military forces, Canada would be less able to contribute to the peace-keeping activities of the United Nations. However, even if we assume that the United Nations, under present circumstances, is vital to Canada's security, it does not follow that our forces are absolutely vital to the success of the U.N. operations. Quite probably other sources could be found. In any

case, it seems likely that Canada could fulfill its United Nations obligations with a much reduced military establishment. A similar comment might be made about the other functions, such as rescue, coastal patrol, and the maintenance of domestic order, which are performed by the armed forces; these services could be provided by forces much smaller, and less expensive, than those now in being.

If we confine our attention to the direct threats to Canadian security, it would thus seem irrational to maintain a substantial military establishment. Why do we do it? Why not take advantage of Canada's uniquely fortunate circumstances?

The reasons, I believe, are twofold: we retain large scale armed forces to preserve our self-respect and to purchase influence in world affairs. We recognize that there are threats to Canada's security, and we reject the notion that we should be entirely parastic on other countries for our defence. We also know that the key decisions which could determine our survival are now made outside of Canada—in centers such as Washington, Moscow, New York, Paris and Peking. We want to be able to influence those decisions, and cannot do so effectively unless we are paying, in the form of armed force, our membership fees in a number of international organizations.

Concern for self-respect determines that Canada should shoulder a reasonable share of the defence burdens, but it has little to say about the form which our contribution should take. Therefore, the overriding factor in determining the content of Canada's military policy can, and should, be the resolve to purchase influence. There is no other country for which this consideration is more compelling.

The possession of influence flatters the national ego. It is also advantageous to wield influence with other countries when they are formulating policies which might affect our prosperity. In the nuclear age, however, a more substantial reason for seeking influence is to be able to participate in the decisions bearing on peace and war. Above all, influence is to be sought because Canada has a useful international role to play. The security of other countries, as well as our own, is likely to be greater if the voice of Canada is effective in world councils.

What is the characteristic Canadian aproach which gives substance to this claim? It is to be more cautious about the use of force, and more adventuresome in diplomatic manoeuvre, than most other nations. Our representatives often find themselves asking more impetuous governments if it is necessary, or wise, to rush into critical areas with military might when other means might serve their purpose better. They frequently question whether established policies are still relevant to the needs of a fast changing world. They urge constantly that the West go as far in negotiation with the Communist powers as is consistent with reasonable safety. They encourage other countries, especially our allies in Europe, to assist in building up the authority of the United Nations, man's great hope for the future.

This approach is not, I believe, to be explained by references to the uniqueness of the Canadian character. Rather it is Canada's general situation which gives rise to attitudes which enable us to counter usefully some of the more dangerous propensities of other nations. For example, the knowledge that Canadian views are rarely if ever decisive accounts for much of the difference between our approach and that of our neighbours to the South. Since we do not bear the primary responsibility for the defence of the West, we know that our errors or hesitations are unlikely to be fatal. We are able to take a more detached view than peoples who know they are in the front line of the global struggle, and our spokesmen can be more daring in raising new ideas. The Americans, even if so disposed, could not be as flexible in their thinking without shaking the confidence of their allies. Since we are not so directly

engaged in the Cold War, and have no colonial interests, we can be more tolerant of criticisms of the West and readier to explore the views of non-western governments.

Where is it most important that the Canadian voice be influential? The answer depends partly upon the ability of other nations, or international organizations, to make decisions bearing on Canada's interests, and partly upon the nature of Canada's diplomatic assets, and the opportunities which these give us to be influential. While it might be useful to wield influence in Moscow and Peking, Canada, acting on its own, is unlikely to be very successful. Influence in neutral capitals might be somewhat easier to come by but their policies are rarely of prime importance to Canada. It is principally in the NATO capitals that we find a coincidence of both factors—an opportunity to gain influence over decisions many of which vitally affect Canada's security and prosperity.

Whenever cold war tension relaxes, there is an understandable tendency to place less emphasis upon military alliances. This is not necessarily wise. Softer Soviet policies could be merely tactical, designed to gain an advantage by persuading the West to drop its guard, or encourage dissent in western ranks. It may require considerable effort to keep NATO intact during such periods. If, on the contrary, the Soviet Union were seeking a genuine accommodation, the greatest impediment could be the clashes of interest, and suspicions, within the NATO alliance. NATO was designed to provide an integrated, effective and economical defence. It has acquired a political role, and it is now important in achieving the degree of western unity which is essential to fruitful negotiations with the Communist powers. The sort of influence which Canada exerts within NATO may well be more necessary during a period of growing detente than when Communist policies are blatantly belligerent.

There is almost always a need within NATO for members which, like Canada, promote diplomatic flexibility. The curse of any alliance is the tendency to adopt unimaginative, unrealistic positions and to resist adaptation. If one contemplates the difficulties of getting agreement to a new policy by all the branches of any one government, especially the cumbrous American model, and then the task of selling it to the fifteen sovereign members of NATO, often with divergent interests and attitudes, it can be readily appreciated that policies are often obsolete even before they are enunciated. By making allowance for the fears and inhibitions of fifteen allies, agreement tends to be at the lowest level of imagination, leaving little scope for negotiation with outside governments. The battling of policy obsolescence and rigidity is a tremendously important task if NATO is to be a help rather than a hindrance to peace and freedom.

Canada needs to maximise its influence with its leading allies not because they are always, or nearly always, right. It is precisely because they can be wrong, with unfortunate consequences for Canada as well as themselves, that it is important to strengthen our position within the alliance. The more one tends to be disturbed by their policies, the more one should seize every opportunity to influence those policies for the better.

This is not to argue that the characteristically Canadian approach is always the most advantageous. Sometimes the general interest is better served by a swift application of force, as during the Cuban crisis of 1962, or a decision to stand pat on a well-established diplomatic position. Nevertheless, bearing in mind the tendency of alliances to become excessively rigid, and to rely too heavily on military might rather than imaginative diplomacy, there can be little doubt about the overall utility of the Canadian contribution to NATO deliberations. Even when our views are not in the end adopted, policy decisions are likely to be sounder if our approach has been sympathetically considered during their formulation.

Military Power can back up a nation's diplomacy in a variety of ways. Intimidation is one, but, even if Canada wished to intimidate other countries, it is unlikely that we could, on our own, muster the requisite power. A second way might be to threaten to withdraw our support unless the other alliance members agree to play the game our way. This can only be effective if one's contribution in men, weapons or real estate is essential. While Canada's contribution to NATO is not without significance, it scarcely suffices to emulate with success the diplomacy of President de Gaulle.

For a nation of moderate means, the soundest course is to seek influence through gaining the goodwill, respect, and confidence of its allies. Canada can only do this by proving itself to be a loyal, co-operative partner, prepared to observe the club rules and to bear its share of the cost, risk and unpopularity of agreed policies. A nation can remain a member of NATO, of course, even if it makes no military contribution. Iceland is a case in point. It is also true that influence within the alliance can vary with factors other than military contribution. The importance of intelligent, persuasive diplomacy, for example, should not be overlooked. Nevertheless, there is a world of difference between having the right to speak, and the ability to obtain a sympathetic hearing. Unless a member is making a contribution which the others consider to be reasonable, its influence in the long run is bound to suffer.

This consideration is especially important if one recalls the sort of influence which Canada seeks to wield. NATO decisions represent a heavy investment in diplomatic sweat and tears. Once agreement is reached, there is an understandable disposition to resent the first delegation to raise unsettling questions, or to suggest a fresh appraisal. The boat-rocker, however necessary, is seldom popular. Unless Canada bears a fair share of the alliance burdens, there is little prospect that we could play our diplomatic role with success.

A specific issue might help to illustrate this general point. No feature of Canada's foreign policy enjoys greater popular support than its emphasis upon disarmament. Sometimes the fear is expressed that membership in NATO impedes this endeavour, but the precise opposite is the case. After 1945 Canada was the only middle power invited to serve on the commission for nuclear disarmament; we were invited because we had helped to develop the first atomic bomb. We are currently participating in the 17-power disarmament talks in Geneva as one of the 4 powers designated by NATO. Long before meeting the Russians, the western allies will have been hammering away at joint proposals, and they often confer privately during the negotiations to amend their position. It is within this group that Canada is able to make its best contribution. Because Canada is not a great military power, the Russians are unlikely to be interested in our views if they think we are speaking only for ourselves. Similarly, the 8 neutrals represented in Geneva value their contacts with us largely because they believe that, although we are not completely tied to the other western participants, we are influential with them. We would thus be far less effective in the disarmament field if we lost the confidence of the major NATO powers; we can only retain this if we show we are serious about helping to meet the military challenge to the West. It is not stretching things too far to say that Canada needs to arm in order to be influential in promoting disarmament.

If it is granted that the chief purpose of Canada's defence establishment is to purchase influence in western policy making, what are the implications for the composition of our military forces? The first criterion must be that they meet the needs and expectations of the countries whose goodwill and confidence we seek to gain; we must give great weight to the wishes of our allies when making commitments and, of course, keep whatever commitments we do undertake unless there is agreement that they should be altered. There is no point in making a substantial military effort which disappoints, or even antagonizes, the very countries we aim to influence. Naturally we should like our contribution

to be distinctively Canadian, and to form an efficient part of an alliance which is itself following the soundest of all possible policies. If our primary aim, however, is to buy influence, we might well find that this can be best accomplished by making a military contribution which, in our judgment, is not the best we could do.

It is true generally, of course, that allies make their greatest contribution when they do not insist upon following policies which they individually consider best, regardless of the views of the others; a viable defence can hardly be built upon fifteen different strategies; a second best strategy, which all are prepared to support, might well be preferable to one which is closer to the ideal but fails to win general acceptance. This consideration is especially persuasive for a secondary power intent upon maximizing its influence within the alliance.

It is not suggested, however, that we should meekly go along with inefficient plans for the alliance as a whole, and the Canadian forces in particular. We have, after all, a real interest in NATO's policies being as sound and effective as possible. This not only enhances Canada's security but it is easier to maintain popular support for a strategy which makes sense form every point of view. Indeed, one of the best reasons for seeking influence in NATO is to help make NATO's strategy more effective than it has been thus far. This is not merely a matter of seeking the best means to deter war and aggression; the prospects for successful negotiations with the Soviet Union, especially on disarmament, could be considerably affected for good or ill by the military posture adopted by the West.

Canada needs two military policies. The first would be the ideal policy which we believe NATO as a whole should adopt; we should be devoting more independent thought to military doctrine, and prepared to use up a good deal of our diplomatic credit within NATO in order to promote our views on alliance strategy.

Our second policy should determine the precise nature of Canada's military activity, taking into full account the plans which NATO has in fact adopted, and the performance of the other allies. Let us maintain a clear distinction between the policies we are advocating for adoption by NATO, and the actual contribution we make in order to fulfill our obligations and gain the goodwill and confidence of the alliance.

National contributions are never determined, of course, without full consultation between NATO and the countries directly concerned. Even if it were a supranational body, which it is not, NATO would be unwise to dictate to its members. Individual countries should be encouraged, so far as is feasible, to undertake tasks which they themselves are keen to perform, and believe they can do well. The odds are that they will perform such tasks with their maximum efficiency. This generally means assigning each ally primary responsibility for the defence of its own soil, and adjacent waters.

On the other hand, attention must be paid to the greater need for NATO forces in some areas than in others, and the existence of some chores which no ally is eager to take on. Even a modest Canadian contribution in Europe adds to the morale of the alliance and purchases a disproportionate amount of diplomatic influence. Similarly, even though we cannot be forced to take on unpopular tasks, a willingness to do so might be the best way to accomplish our primary purpose in belonging to the alliance.

The gains to be achieved by a sensible division of labour within the alliance are obvious. Although the nations with world-wide responsibilities may feel they need to maintain balanced forces, there is no necessity for most of the members to perform part of every role. This is especially true with respect to nuclear weapons. Since there may now be sound reasons to withdraw these from the front line troops, and to concentrate control as much as

possible, it would seem reasonable for countries like Canada to leave nuclears to the major powers—as few of these as possible—and to concentrate upon supplying conventional forces, which are now NATO's greatest need. The alliance might welcome an indication by us that in future we would like to specialize in this way. On the other hand, present commitments should be fulfilled, and new developments might well make it desirable for Canada to retain nuclear armament in the future. In any case, it is important that we not seem to be shirking, or to be seeking a role which might make it appear that we are somehow purer than the countries which are fulfilling a nuclear role in the interests of the entire alliance. There could be no surer formula to diminish our influence with them.

It is possible that Canada will soon be confronted by a somewhat more difficult problem with respect to nuclear arms. So far we have been concerned only with tactical weapons held under joint control arrangements with the United States. Quite properly we have refrained from seeking membership in the "nuclear club", even though Canada is one of the relatively few powers which has been in a position to manufacture, if it wished, its own nuclear deterrent. We have refrained because the increased dangers resulting from proliferation would outweigh any gain in deterrent value. NATO members are now considering the creation of another strategic deterrent, the so-called Multilateral Force (MLF). It is not clear that this is required on purely military grounds, but it may prove necessary in order to check the proliferation of independent national control.

If the MLF does come into being, it is probable that only those members which contribute directly to it will be given a voice in the determination of the rules governing its deployment and use. There would then be a club within the club composed of nations with a much greater part in the most vital decisions which NATO might ever be called upon to take. The questions which Canadians might be required to answer are not: Do you like nuclear weapons? or even: Do you approve of the MLF? Rather it would be: Assuming that the MLF is a fact, do you want to leave its control entirely to those nations which are eager to possess this awesome responsibility? Is the NATO deterrent likely to be employed more, or less, wisely if Canada refuses to participate? Would Canada improve, or hinder, its ability to promote disarmament if it foregoes influence which it could have in the making of NATO's nuclear policy?[1]

We have been considering the manner in which Canada's military exertions enhance its foreign policy by maximazing influence within NATO. There are observers who contend that such considerations are based on illusion, and that the major nations never heed their lesser allies, especially when they are stable and well mannered. The super-powers, it is argued, may go through the motions of consultation, and even accept advice on secondary issues, in order to humor their minor partners; they do not allow themselves, however, to be influenced in matters of real consequence. This is not an easy argument to contest. Influence is inherently difficult to quantify, and it is usually impossible to say with assurance whose representations have been decisive whenever an international decision is taken. Much of the relevant information is classified, but, even when this is not the case, and we have reason to believe that the Canadian voice has been influential, it is generally wise to be reticent lest we make it more difficult for the other government, or governments, to heed our advice in the future.

---

[1] Superficially similar arguments are being invoked, improperly in my opinion, to justify the continuance of Britain's independent nuclear role. The question for Canada would be different in that it is not proposed that the participants in the MLF be given the right to employ the deterrent on their own; initially each member would possess a veto; later decisions might be taken by majority vote.

Despite these and other complications, there appears to be a consensus among those with first hand experience in international affairs that Canada has been able to exert an influence in western policy formation which is both significant and useful. It would be easy to exaggerate this influence, and the frustrations and disappointments have been many. In world affairs, even within the western club, the rewards do not always go to the deserving. What can scarcely be contested, however, is that our influence over NATO policies has been greater than if we had remained on the outside, and also that it has borne some relation to the degree of our military contribution.[1]

Influence with the United States is especially important to anyone concerned either with the promotion of direct Canadian interests, or our more general interest in a secure and prosperous world. Fortunately, Canada's activity in NATO is consistent with maximizing our influence in Washington. Indeed, the Americans prefer to have us contribute to the defence of Europe rather than concentrate entirely upon North America. For our part, it is often desirable, when attempting to influence American policies, to concert our efforts with those of other like-minded members, especially Britain and the Scandinavians. Joint membership in NATO makes this easier. Some authorities go so far as to recommend that even more of our relations with the Americans be conducted through NATO channels, and that NORAD, for example, should be fully integrated into the larger alliance.[2]

Critics of Canada's current policies often contend that we have become too closely identified with both NATO and the United States. They advocate that Canada's major role should be within the United Nations, and hold that membership in one of the cold war blocs stands in the way of our most effective contribution. It is my belief that the peace of the world, for some time to come, is going to depend primarily upon the relations between the super-powers, and that Canada's best opportunity to influence the course of world events is through remaining a respected member of NATO. Nevertheless the desire to increase our support for the United Nations is based upon more than sentiment. The United Nations, although disappointing in many ways, is moderating the behaviour of the super-powers and helping to stabilize the balance of terror by being able to fill power vacua which might otherwise become new sources of cold-war conflict.

For Canadians, a key question is whether we can reconcile augmented support for the United Nations with our commitments to NATO. The answer is probably yes. Canada has already been able to contribute more than most countries to the United Nations without defaulting on its NATO obligations. This has enhanced our general standing in New York and strengthened our voice in determining UN policies in such trouble spots as Suez and The Congo. It is not certain that a Canadian offer of much larger military forces would be taken up by the United Nations. If, however, we do decide to place more substantial forces at the disposal of the United Nations, without increasing our overall defence budget, a reduction in our contribution to NATO might prove inescapable.

The possibility should not be excluded that the NATO allies would agree to such a shift in emphasis by Canada. Most of them recognize that their interests are served by the UN peacekeeping operations, and that it is desirable to have forces from NATO members participating in them and thereby exercising some control. They also appreciate that, for a variety of reasons, the

---

[1] In 1961, for example, after Canada announced a modest increase in its forces in Europe, there was a marked increase for a time in the receptivity of the other allies to Canadian views. For a fuller treatment of Canada's influence, see my book *The Policy Question* McClelland and Stewart, 1963, especially pp 67-9.

[2] The contrary case has been stated persuasively by Dr. R. J. Sutherland. See "Canada's Long Term Strategic Situation", *International Journal*, Summer, 1962, pp 207-8.

forces of some NATO members are more acceptable than others for service under the UN flag. NATO might accept the proposition that such countries should be given some credit in alliance accounting for their military contributions to the United Nations.[1] In the next reassignment of roles within NATO, moreover, Canada might be encouraged to increase the mobility of its forces and reduce their dependence upon tactical nuclear weapons. This would make it easier to combine an offer of increased assistance to the United Nations with the maintenance of our commitments to NATO.

Canada would be confronted by a genuine dilemma only if it transpires that a request from the United Nations could not be met without reducing our NATO contribution to a degree which would prejudice our standing with our allies. We should then want to know if the United Nations was in a position to make good use of an increased Canadian contribution, and also if there would be a gain in Canadian influence in New York comparable to the loss in NATO. If we decided to meet the new UN requirement, we should take pains to dispel any impression that Canada in doing so was trying to improve its image at the expense of its NATO partners. The worst of policies would be to remain officially a member of the alliance but to act as if we were independent of it; we would not escape the odium (if such it is) of belonging to one of the cold-war blocs but, by antagonizing its members, we would sacrifice our influence over their policies.

Would Canada's standing in the United Nations be enhanced if we ceased to belong to NATO and NORAD? Most probably not. Our greatest influence within the United Nations was during a period when Canada was also a prominent and enthusiastic member of NATO. Since then there have been changes in both organizations, but the effects of these have tended to cancel out. The addition of a large number of new members, for example, mostly unaligned countries from Africa and Asia, has made it more difficult for Canada to be influential in the United Nations; the newscomers turn most naturally for guidance to the more experienced members from their own continents, and they have combined to increase the pressure to accelerate decolonization. Members who fail to support their increasingly extreme resolutions are becoming isolated. Canada's associations in NATO with several colonial powers has been a modest handicap, but one that is declining; only Portugal now refuses to grant independence to its colonies and most of the NATO allies have been strongly critical of her attitude. Britain's continuing responsibilities in Africa present a greater difficulty, but Canada's reluctance to support extreme resolutions critical of British policies would be much the same even if both countries were not partners in NATO.

Canada's membership in NATO, therefore, is not a serious embarrassment in its relations with the Afro-Asians, who now comprise about half the membership of the United Nations. Indeed, it is probably an asset. Many of the unaligned nations regard Canada as more understanding of their position than most of the other western allies. To the extent that they do consider us sympathetic, they want us to protect our influence in Washington and the other NATO capitals. They value our good offices more than our advice, and are in no pressing need of further recruits to the unaligned camp. If Canada broke its connection with NATO, or ceased to be regarded as a member in good standing, the unaligned governments would probably have less interest in cultivating our friendship.

Canada's "inoffensiveness" is certainly a diplomatic asset. Nevertheless, we should err if we thought that we could make ourselves more widely acceptable by cutting our armed forces. Quite the contrary. For one thing,

---

[1] This would be especially reasonable if, as in the case of Cyprus, the UN action were helping to keep the peace within NATO itself.

this would make us less able to carry a share in the burdens of peacekeeping, or to help countries like Ghana train their own forces. Any feasible increase in Canada's military capability, indeed, would make us more valued as a member of both the United Nations and NATO, without creating apprehension or ruining our reputation as reasonable and pacific people.[1]

What of the attractive possibility that Canada's military expenditure might be converted into economic assistance to the underdeveloped nations? Such a conversion would not be easy, at least in the short run, and we might then be less able to give these countries the sort of assistance which they most need; order must precede economic development, as has been demonstrated in the Congo. Furthermore, even if one believes that influence among the underdeveloped countries is of primary importance to Canada, which is questionable, it must be noted that the giving of economic aid has not proven to be an efficient means of gaining influence. Canada, I believe, should increase its programme of economic assistance; if this were achieved by reducing the armed forces, however, our overall diplomatic effectiveness would suffer.

Some Canadians appear to view foreign and defence policies as though they were competing alternatives. This is a serious error; although there can be differences of opinion between soldiers and diplomats, in practice they strengthen one another greatly in promoting the interests of the Canadian people. Another error is to believe that armed forces are wasted unless engaged, or likely to be engaged, in fighting; this was never true but, under nuclear conditions, it has become the reverse of the truth; deterrent forces will have failed in their essential purpose if they do not deter war as well as aggression. Canada's military establishment can best help to make major war less likely by buying influence in those centers where the vital decisions affecting peace and war are made. Many Canadians might prefer their representatives to be active in the United Nations rather than the western military alliance. The conclusion of this paper is that we can continue to be useful in both, and that influence in one strengthens our position in the other. In the unlikely event that a choice has to be made, however, it is probable that for some time to come Canada can best contribute to the world's security, which is inseparable from its own, by retaining influence at the center of power in the western alliance.

---

[1] This would probably not hold true if we were to acquire an independent nuclear deterrent, but there is no evidence to support the fears, which were widespread a year ago, that our diplomatic effectiveness would suffer if we accepted tactical nuclear weapons under joint control arrangements.

THE DEFENCE POLICIES OF NATO MEMBERS AND SOME OTHER NATIONS

By: JAMES I. JACKSON

Introduction

Background

The Special Committee on Defence of the House of Commons is concerned with Canadian defence policy. Defence policy cannot however be studied in isolation, but must be seen primarily in relation to foreign policy, and also as influenced by costs, the state of the economy, public opinion, and weapons technology. A study in this broader context can be illuminated further by consideration of such general subjects as arms control, and the relationship between foreign and defence policies, or by comparisons of policy choices today with past policies and with the policies of other nations. The committee has therefore called for a number of papers covering such topics, among which is one on the defence policies of NATO members and some other nations.

Aim

The aim of this paper is to provide information on the defence policies of NATO members and some other nations.

Scope of the Study

The Committee has asked for an objective summary of principal features, emphasizing the plan and direction rather than the detail of policy. While the paper attempts to meet this requirement, it should be approached with an overriding reservation. A defence policy is strictly speaking a statement, but policy statements vary greatly in cogency and clarity. When clear policy statements are available, the author has tried to reproduce them accurately. When they are less than clear, he has attempted a fair interpretation. He has not attempted to evaluate any policy in the light of current military thinking, nor has he reported judgements on the effectiveness of the forces described.

The Committee has asked for information on NATO countries, some Communist countries, and "countries like Australia, Japan, one or more Latin American countries, and any other whose problems might have—relevance—" to Canada. There is however no evidence to suggest that the Communist satellite countries have defence policies of their own, and thus their study would be unrewarding. Furthermore, the military role in Latin American countries is such as to make their defence policies only marginally of interest. Finally, because both the United States and the Soviet Union are nuclear Super Powers with vastly complicated military and defence commitments, their adequate treatment in this paper would leave little room for material on other powers whose policies are more specifically pertinent to the Canadian problem. In the interests of space, therefore, the United States, the Soviet Union, the Communist satellites, and the South American nations have not been included in the paper.

Arrangement

The arrangement of content is mainly geographical. The first section covers the Secondary Nuclear Powers: Great Britain and France. A second section

22439—3½

groups together the non-nuclear European powers: West Germany, Belgium, the Netherlands, Luxemburg, and Portugal. The third section deals with the Scandinavian nations: Norway, Sweden, Denmark, and Iceland. The fourth section covers the south European nations: Italy, Greece, Turkey, and Yugoslavia. The fifth section includes two Pacific nations: Japan and Australia. A table attached as an appendix gives a comparison of populations, force sizes, and defence expenditures of the nations discussed.

The Secondary Nuclear Powers

General

Although they are quite overshadowed militarily by the nuclear Super Powers, Britain and France possess the national strength and weaponry to be considered in a special category as secondary nuclear powers. Each is possessed of global interests or responsibilities, and each is attempting to maintain (in Britain's case) or build (in France's) military establishments responsive to a full variety of military challenges.

Britain

Britain's defence arrangements involve her in alliances, agreements, and guarantees across the globe. In Europe her main though not sole commitment is to NATO; in the Middle East and Far East she has obligations to colonies and protectorates as well as membership in CENTO, SEATO, and ANZAM.

After the Korean War and into the mid-Fifties, her defence burden and the consequent demands on manpower and industrial resources became increasingly difficult to support. Defence expenditure mounted to some 10% of GNP, and 7% of the population was either in the services or supporting them. The upkeep of overseas forces was making unacceptable inroads on the balance of payments. A radical change of direction became necessary, and the new defence policy, announced in the White Paper of April 1957, has been the basis of British Defence policy ever since.

The White Paper identified two major roles for armed forces: to deter and resist aggression in concert with allies; and to defend British colonies and protectorates against local attack, including undertaking limited operations in emergencies. The impossibility of protecting UK from nuclear attack was recognized, and thus the aim of military planning was seen as being to prevent war rather than to prepare for it, in consequence of which the priority task was that of developing deterrent weapons.

This reasoning placed emphasis on the building of nuclear weapons and delivery systems under independent, British control. The use of the V-bomber force with atomic and later thermonuclear warheads was projected, together with the extension of weapons-carrier development into the era of the ballistic missile. As part of the strategic air system, a protective fighter and missile force was called for.

The White Paper also identified a need for conventional forces. These were first necessary to meet Britain's commitments in Europe, but the Paper argued for a numerical decrease of NATO contribution which would be made up by increased fire power. For the global deployment of conventional forces, the new defence posture was based on strategically placed garrison points in the Mediterranean, the Middle East, and the Far East, upon which were based land/air systems, and sea/air systems composed of small-carrier groups. This global land/air and sea/air system was to be supported by a main central strategic reserve in the United Kingdom capable of rapid movement by strategic air transport to troubled areas.

The new policy was intended to cut down a total military strength which stood at 690,000 in 1957 to 375,000 by the end of 1962, and eliminate conscription.

Since 1957 various important influences have had their effect on this defence policy. There was the abandonment of attempts to develop a ballistic missile, the acceptance of Skybolt to extend the life of the V-bomber force, the cancellation of Skybolt, and decision to substitute nuclear submarines armed with Polaris missiles. But such a series of developments has left unaltered the principle of maintaining an independent nuclear deterrent. In the same way British overseas responsibilities have been greatly altered by events, including the fact that a number of colonies have gained independence. By 1962 the need for many overseas detachments had diminished, and reliance could not be placed on many smaller countries to provide bases. Although it became necessary as a consequence to find ways of keeping men and heavy equipment deployed at sea, and of increasing the air and sea portability of the strategic reserve, the general principle of overseas deployment was not altered.

This is not to say that the policy has been in every way accepted. Total defence expenditures have been reduced to about 7% of GNP. However the manpower strength of the services (as a result of the international situation rather than of defects in policy) was 445,900 in 1962 rather than the projected 375,000 and was around 433,000 in 1963-64. More significantly, however, there is considerable doubt in some quarters whether Britain can fulfil her overseas commitments with the number of men she has available, especially as with the abandonment of National Service, the number of reservists liable to recall is gradually running down. This doubt, accentuated by involvement in such recent simultaneous crises as Cyprus and Malaysia, has led to renewed questioning of the value of the independent deterrent.

These questions, together with the precarious position of the government in power, lead to a consideration of the Labour position. Labour rejects neutralism for Britain, but does not believe she can continue as an independent nuclear power. The Labour stand emphasizes the need for conventional forces in NATO, and for British involvement in overseas areas where the British presence still exists, and stresses the need for mobility to make up for the loss of overseas bases. Labour supports the view that nuclear weapons should be confined to USSR and USA, and has proposed that a nuclear-free zone be created in West Germany, which should not either directly or indirectly become a nuclear power. A Labour Government would be prepared to study any proposal for greater participation by both Britain and other NATO nations in nuclear policy, but would not be too enthusiastic about the idea unless it were the only way of diverting West Germany's nuclear ambitions.

France

The main thrust of French foreign policy is toward establishing France as a great power equal in every respect to other great powers. By her definition of great power status, France must have full capability to defend herself from aggression, must be independent of the effects of preferential or discriminatory treatment by the super powers, and must be a strong global influence able to extend economic and military assistance wherever she may deem her interests and responsibilities to lie.

Possessed of economic health, political stability, and forceful leadership, and with the troubles of Indo-China and Algeria behind her, France is now stronger than at any time during the century. She has started to translate the premises of her nationalism into such action as her opposition of U.S. domination in Europe, her refusal to allow foreign-controlled nuclear weapons on her

territory, her neutralization plan for South East Asia, and her consideration of extending economic aid to Latin America and South East Asia.

Changes in her military establishment reflect this renewed emergence into world affairs. As the result of a complete reappraisal of defence matters, France is now building three major forces. The first of these is a nuclear strategic system made up of a strike component and an air defence component, to be built up between 1963 and 1965 with French atomic warheads, strike aircraft, and American tankers, and then to be succeeded by thermonuclear warheads and a submarine-launched ballistic-missile force. This is to be a second-strike force targeted on cities.

The second force is an intervention force, a sea/land/air system for nuclear or conventional operations in or outside Europe against aggression toward France or her allies. This system will be the source of France's NATO contribution. The land component will be six divisions, one of which will be airborne and designed for overseas deployment. The air component will be tactical, fighter-reconnaissance and transport air forces to be organized in two tactical, air corps and a transport formation. The sea component will feature a high degree of mobility. It will be based on aircraft carriers, and include nearly all French naval forces except coast and defence vessels and the missile submarines. Its roles will include transporting land forces and assisting them in amphibious operations. Beginning in 1970, the intervention forces should have French tactical atomic weapons.

The third force will be the territorial defence force. Although it will have some air and naval strength, it will be mainly a land system, with a projected strength of ten brigades by 1967, designed to defend French territory.

The planned strength of the French military establishment, which is supported by conscription, is 668,000 by 1970. The new policy will result in an increase in defence expenditure from about $4 billion in 1963 to $4.6 billion in 1969, but this rise will be a constant 7.4% of GNP and 22% of the national budget. The study and manufacture of nuclear weapons and delivery systems will be 13% of military expenditure, rising to 25% by 1970.

The European Powers

General

The four other nations of Central Europe vary greatly in size and recent history, but they share prosperity and abundantly healthy economic growth. Germany is the largest country of this group; Belgium, the Netherlands, and Luxemburg are the smaller members. Most of the armed forces of all these NATO nations are under the NATO field command Allied Forces Central Europe.

The fifth power studied in this section is an Atlantic rather than Central European power; the Republic of Portugal. She may seem further removed because of the vivid contrast made by her poverty with the affluence of West Germany and the Benelux nations. The juxtaposition is nonetheless perhaps instructive, for in Portugal we find a nation whose economic base is quite different from the nations just studied, and whose reactions to the threat of losing overseas territories are markedly different from the reactions of two other powers—Belgium and the Netherlands—who have recently faced a similar problem.

The Federal Republic of Germany

The Federal Republic of Germany, economically strong and politically stable, stands at the edge of the iron curtain and athwart the chief avenue of a Soviet advance into Europe. Concerned with her economic development and

unburdened by responsibilities to the United Nations, the focus of German defence policy is on the Soviet threat generally and its specific bearing on Berlin.

The Federal Republic has in consequence developed its defence policy solely to oppose the Soviet threat, recognizing this as a task that can only be done in concert with allies. NATO serves West Germany not only by increasing her security as a regional defence agreement; the fact that it permitted German rearmament while keeping her forces under Allied rather than national control overcame a strong domestic reluctance to rearm. In the treaties of Paris permitting her rearmament, she renounced strategic nuclear forces of her own.

Within the context of the alliance, Germany has shown herself able to identify her own national interests. She opposed the NATO strategy of withdrawal because it would abandon the nation to the USSR. She has opposed any disengagement that would bring about the neutralization of any part of Germany. She has supported US proposals for a multilateral nuclear force.

Considerations of geography and logistics, when added to Germany's determination to defend her territory, dictate a need to deploy along a forward line as heavy a concentration of technically advanced weapons as the conditions of nuclear war will allow. Thus the emphasis in the Federal Defence Force (Bundeswehr) is on well-equipped land forces and supporting tactical air forces. Objectives of the German build-up, which was started in 1956 and accelerated by the expected Berlin crisis of 1961, call for a sizeable contribution to the NATO land/air system comprising an army of over 200,000 in 12 divisions (including armoured, mountain, and airborne divisions), a tactical air force of 100,000 men in 28 wings, and nuclear weapons under US control. There will also be a territorial defence force of some 200,000. The sea/air system will perform an auxiliary function, again defensive in purpose, of protecting the coasts and the access to the Baltic, using small ships and some air.

The military establishment is supported by conscription, and attempts have been made both in selection procedures and other personnel policies to prevent a rebirth of militarism. Expenditures in developing the Bundeswehr have been heavy; in 1962 they were at almost one-third of the total the largest item in the budget, and are expected to increase as aircraft and missiles are acquired. Foreign grants have also been made, and most armaments have been purchased abroad. West Germany is joined with Belgium, Italy, the Netherlands, and the United States in producing the F104 for all NATO nations. She has a cost sharing agreement with Britain on further development of the Hawker P1127.

Belgium

Lacking overseas commitments, Belgium has limited her defence policy to that required to preserve national security through the collective protection of NATO. Although a charter member of NATO, and the most highly industrialized and densely populated country in Europe, her support of the alliance is qualified by a skepticism over its effectiveness that reflects Scandinavian attitudes. Her feelings have not been improved by the role played by the United States and the UN in the Katanga and the Congo. Belgium appears satisfied with the present scale of military effort in Europe, and with the protection afforded by the U.S. deterrent; the Belgian Senate has prohibited government participation in discussions on a multinational NATO nuclear force.

The Belgian army of 85,000 is assigned to or earmarked for NATO, as are the six tactical squadrons and Nike missile units of her air force, and all her navy. The navy reflects its purely European responsibilities in being made up solely of small escort and minesweeping vessels. Active NATO-assigned units are deployed in Germany, and a territorial defence reserve is in existence.

The forces are supported by voluntary enlistment and a conscription period of 12 months which would probably be politically impossible to extend. Military expenditure is about 3.4% of GNP.

A military and technical agreement signed by Belgium and the Netherlands in 1948 provides for standardization of equipment, coordination of training methods, and co-operation between staffs of military colleges.

Netherlands

Holland's defence policy must recognize both the defence of her home territory and her remaining responsibilities overseas. Holland's military experience in two wars has left her with a correct rather than cordial attitude toward West Germany, and has made her one of the staunchest supporters of NATO in Europe.

Although a distinction is made between NATO forces and national forces, all the 98,000-man army (including reserves) is either assigned to or earmarked for NATO, as are five of the air force's nine squadrons deployed in 2nd Tactical Air Force. The air and land forces contain Honest John, Nike, and within the near future Hawk missile units.

Holland's overseas commitments have diminished since the early Sixties. The transfer of power in Indonesia was accomplished with typical rationality, and without a significant role being played by force. Some attempts were made to reinforce garrisons by air, but these were thwarted by the refusal of landing rights. The difference between Dutch and Belgian policies and responsibilities can be seen in the fact that a Dutch naval base is maintained in the Caribbean, and that the navy contains an aircraft carrier and two cruisers as well as the normal sea/air escort and anti-submarine components. There is also a small number of marines in the navy.

Total military forces are 141,000, supported by conscription with a period of service of 20-24 months. Expenditure on national defence is around 5.0% of GNP.

Luxemburg

The Treaty of London in 1867 imposed unarmed neutrality on Luxemburg which was not abandoned until military service was made obligatory in 1944. Today Luxemburg contributes an infantry brigade available to NATO on mobilization, supporting it with a short conscription period of 9 months and a defence expenditure which is 1.6% of GNP.

As the smallest nation in the United Nations, Luxemburg sent a small "armed and eager" platoon to Korean in 1951.

Portugal

Portugal presents the case of a poverty-ridden small European power using its military forces to retain a threatened overseas empire upon which it is almost completely dependent.

Her dependence on her empire, and the threat to it, are the governing factors in Portugese defence policy. She is a member of NATO, to which she has contributed facilities in the Azores and a maritime squadron, though not without dissatisfaction, some of it over command arrangement in Portuguese waters. Her ardour for the alliance, never particularly strong, has been cooled even more by the failure of her treaty partners to support her in her colonial toubles. Portugal is also linked to Spain by the Iberian Pact of 1939, and the provisions that this treaty makes for mutual assistance to preserve the internal security of the signatories may become more important as the domestic discontent with government policy grows.

These matters aside, the main thrust of Portuguese military policy today is toward retaining her restless territories of Angola, Mozambique, and Guinea. Her total armed forces of 61,000 have increased so that they now number 102,000, of which 14,000 are African troops, and approximately 80,000 are deployed overseas together with naval and air units.

The armed forces are for the most part poorly equipped, but the colonial operations have increased defence expenditure from an average of 4.5% of GNP to 8.9%. The military are politically influential, but Salazar is not a military dictator and remains somewhat distant toward the military.

It should not be assumed that the tranquillity that has characterized the Portuguese political scene can be maintained indefinitely in the face of its colonial campaign. There is opposition to the policy of military action as the best way to solve the problem, and doubts as to whether military action can control the situation until the somewhat unconvincing reforms purportedly underway have effect. The colonies and Portugal have formed a closed economic system, but even this favourable circumstance has provided the lowest standard of living in Europe, a per capita income of $250 annually, and an annual economic growth rate of between three and four percent. The situation in Portugal should not be considered stable.

The Scandinavian Powers

General

On Europe's northern flank we can conveniently group together the four Scandinavian powers of Norway, Sweden, Denmark, and Iceland. These countries that have historically remained remote from Europe, and that are bound together by strong ties of mutual sympathy. This aloofness and these ties still remain, but the defence policy of each nation makes up an interesting study in different reactions to the challenges of the post-war period.

Norway

World War II ended Norway's neutrality, and she became a firm supporter of the UN. This commitment to the UN, together with her vulnerability in the East-West conflict, led her to a defence policy based on maintaining harmony between the USSR and the West, and to attempt to become an international mediator.

By 1948 it became clear that the UN could not provide security, and that benevolent mediation was ineffectual. Looking for protection in regional security, Norway had three choices: to join Sweden and Denmark in a neutral Scandinavian alliance, to join them in a pro-Western Scandinavian alliance, or to join NATO. Sweden insisted on a neutral alliance. Norway believed a neutral alliance could not give security, and was reluctant to accept the heavy arms expenditure of such neutralism. Negotiations broke down, and Norway joined NATO. However Norway's relationship with NATO remains strongly qualified. She has limited economic and population resources, lacks confidence in NATO's ability to protect her, and is aware in her relationships with the USSR of Finland's precarious position. The strong ties with other Scandinavian countries which this latter factor emphasizes are manifest in the Nordic Council.

Norway's strategic value is great. She lies close to the shortest air routes between North America and the USSR, and between the avenues of Soviet naval debouchment from the Baltic and the Arctic harbours. Her coastline offers numerous bases for operations into the Atlantic.

Norway's military policy recognizes her inability to meet invasion, but assumes that if attacked her strategic value will bring help from more powerful allies; her forces are designed to gain time for help to arrive. Influenced by the German coup of 1940, the military establishment embodies a high degree of

readiness in both regular and home guard forces, the ability to carry on isolated local resistance, exploitation of the physical characteristics of the country, and well-developed communications to offset dispersal. For land defence the small 5000-man army is organized in land defence districts. The sea/air system comprises escort vessels, submarines, and anti-submarine air units. The air system includes several squadrons of fighters, and some conventionally-armed Nike. Service is universal and compulsory.

Norwegian forces are earmarked for NATO in emergency rather than permanently assigned, and Norway does not allow NATO forces or nuclear weapons to be based on her territory, although she provides an important segment of NATO radar surveillance. Her military development since 1951 has been some 40% dependent on foreign financial support, although some of this has been infrastructure funds. Norway is joined with Britain, Denmark, Turkey, and the United States in a joint-production agreement for the Bullpup air-to-surface missile.

In war, Norwegian forces will come with those of Denmark under AFNORTH for the defence of Norway, Denmark, Schleswig-Holstein, and the Baltic Approaches. In this area, the deployment of a German division in Schleswig-Holstein has allowed Norway to attend to the defence of her northern border with the Soviet Union.

Norway has supported the UN by providing military forces for the UNEF in Gaza, and Norwegian military personnel were at the disposal of the UN in the Congo from the start of the operation. Norway has joined Denmark and Sweden in establishing special units earmarked and trained for UN use.

Sweden

If Norway presents the picture of a somewhat reluctant member of an alliance, Sweden is the epitome of the resolute neutral. Aided by a technically advanced economy, a location that offers an enemy no great strategic rewards, and a markedly determined national spirit, she maintains her policy of armed isolationism into the mid-Sixties. Fundamental to this policy is impartiality toward all aligned powers, great, medium, or small, in consequence of which Sweden grants no access to foreign forces, produces as much of her own weaponry as possible, and makes no presumptions about outside help in her defensive planning.

The only departure from this isolationism evident in Swedish policy is her support of the United Nations, and her continuing membership with Norway and Denmark in the Nordic Council. Sweden has deployed troops for United Nations use, but the Nordic Council has confined itself mainly to non-military matters since Norway and Denmark reluctantly rejected the idea of a Scandinavian alliance, and joined NATO.

For Sweden, the policy of determined neutralism makes for a simplicity of military objectives. Influenced by the Finnish winter war, Sweden believes that even a small country can use force successfully against a powerful aggressor. The aim of Swedish forces is to keep the country out of war by showing such resolution and capacity that any aggressor will consider the price of conquest too high.

In support of this aim, Sweden maintains land/air, sea/air, and air defence systems, of which the latter two are held at a high degree of readiness. The sea/air system is made up of surface and submarine vessels, the largest being cruisers, and mine fields and coastal batteries. Aircraft can be called into naval surface action from the air force, which operates fighter, reconnaissance, and ground attack components for air defence, sea/air, and land/air roles. An increasing amount of protection is given both air and naval forces by dispersal and rock shelters.

The army is a citizen army trained through compulsory service for rapid mobilization around local depots. The army is equipped for mobility over rough terrain, and substantial fire power is provided by armour, artillery, and missiles. The army is backed by local defence and home guard units, and military preparedness also extends to civil defence. Civil defence measures include those for evacuating 2,800,000 people from cities, and rock shelters for 100,000.

Nearly all military equipment is Swedish made, though the more complicated parts are now imported. High standards of equipment are maintained, and this policy leads to the need for a defence research establishment, and a reported allocation of some 65% of defence expenditure to new equipment (as compared—by Swedish figures—to 10%-20% in Norway). Sweden has considered developing her own tactical nuclear weapons. Annual defence expenditure is about 5% of GNP.

Denmark

Denmark would have supported a Scandinavian defence alliance sympathetic to the West, but when faced with a choice between sharing Sweden's isolation or joining NATO with Norway, she chose the latter. Danish support of NATO is however by no means unanimous; her defence policy is balanced precariously between advocates of complete neutrality, and those willing to pay at least a minimum price for good standing in NATO.

The reasons for this attitude are partly historical, and are also shared to a great extent with Norway: both realize their only hope is in collective security, but both have limited means, a natural sympathy for neutrality, a desire not to provoke the USSR, an outlook toward Scandinavia rather than Europe, and a skepticism about NATO's ability to provide an effective defence. In concert with Norway, Denmark bans all foreign forces and nuclear warheads, reflecting her support with Norway of a northern nuclear-free zone as a step toward nuclear disarmament. However the anti-nuclear doctrine applies only to continental Denmark; the US base at Thule in Danish Greenland is a vital link in NATO strategy.

Denmark is vulnerable strategically, for she lacks any barrier to separate her from the north European plain. Her strategic importance derives from her position beside the exit to the Baltic, and from the fact that she provides an invasion route to Norway and Sweden.

The Danish contribution to NATO is earmarked for emergency use rather than permanently assigned. It is mainly a land/air system based on an infantry division and a tactical air component containing the normal fighter-bomber and reconnaissance elements. The navy is a modest surface and submarine force, backed by some fortifications, designed for coastal defence. The air system contains a small interceptor element.

Denmark has been in receipt of US arms since 1950, and most of her equipment is of foreign origin. Conscription is in effect, and defence expenditure is about 3.5% of GNP.

Iceland

Iceland is worthy of mention in this survey if for no other reason than to illustrate a nation which has a defence policy without a military policy. Iceland's defence policy is to accept the collective security afforded by NATO, in return for which she permits US forces to be stationed on her strategically valuable territory. She has no armed forces, though she musters eight armed fishery-protection vessels.

The Southern European Powers

General

Among the southern European NATO powers, Italy, Greece, and Turkey, there do not exist the sentimental ties of Scandinavia nor a sharing of the powerful threat facing Central Europe. The Alps bar Italy from the central front, distance removes her from the extreme southern flank, and she has no practical or sentimental ties with either Greece or Turkey. Greece and Turkey, on the other hand, long-standing foes, share a poverty that Italy has not experienced for over a decade, and are face to face with the iron curtain. Finally, unlike the general situation in the regions already discussed, and unlike Italy, Greece and Turkey recall Portugal in having military establishments which are important forces in domestic politics.

The last nation to be discussed in this group is Yugoslavia. Although not a member of NATO, she is not a member of the Warsaw Pact, and thus pursues an independent policy worthy of this study's attention.

Italy

Strategically, Italy has been described as the most protected of the continental European powers. However her admission to NATO in 1949, two years after a harsh peace treaty, was welcomed as a return to diplomatic grace even if most of her political parties were otherwise unfavourably inclined. Italy's defence policy continues to be based on a firm allegiance to NATO, which includes acceptance of allied forces and in 1960-63 the placing of nuclear-armed Jupiter IRBMs on Italian soil. Italy's support of disarmament was evinced in her prompt signature of the atomic test ban treaty, but she has reserved judgement on the question of a multilateral nuclear force until a definite decision is reached outside Italy. Italy is generally considered as lacking the desire and the resources to build her own nuclear force.

Most of Italy's forces are assigned to NATO, and are controlled by AFSOUTH. AFSOUTH has headquarters in Naples and is responsible for the defence of the Mediterranean NATO area, including Greece and Turkey. Italy's land/air system has some ten infantry and three armoured divisions, Alpini brigades, and tactical and reconnaissance air. Italian land forces are considered flexible and lightly armed, suitable for mountain fighting. These attributes, plus Italy's location and the fact that her army is potentially larger than the Turkish, could lead to her forces being used in an emergency to support the other national forces in AFSOUTH. The air system is defensive only; a modest number of interceptors supplemented by Nike missiles. The sea/air system is made up of surface escort, maritime air, and submarine elements. The largest ships are cruisers.

U.S. military aid, beginning in 1947, totals some $2,000,000,000, but Italian industry is producing a considerable amount of military equipment either under licence or of Italian development. An Italian aircraft, for instance, was successful in the NATO light weight fighter competition. Military expenditure is about 4.0% of GNP, and conscription is in force.

From 1952 to 1962, a surge of economic growth doubled Italy's national income, tripled her industrial productivity, and quadrupled her exports. In 1962-63 a rapid rise in wages and serious crop failures resulted in inflation and a massive increase in imports. Italy is prosperous and has substantial currency reserves, but her economic problems strongly affect her chronically unstable political situation. The Moro-Nenni coalition has pledged continued support of Italy's established foreign policy, but the key parliamentary position occupied by the communist minority has led some observers to speculate that Italy may tend to a neutralist stand, although within NATO. One consequence of this might

be an advocacy of the disarmament and neutralization of West Germany. Italy's political situation is precarious, and changes in policy should not be unexpected.

Greece

In the defence of Europe, Greece along with Turkey lies on the right flank. The sea lanes from the Black Sea to the Mediterranean pass through the Greek islands; and the sea lanes from Europe to the Middle East pass her southern coast. The communist nations of Albania, Yugoslavia, and Bulgaria stand at her northern frontier. For Europe, Greece is strategically both valuable, and exposed.

Greece's relations with her neighbours are not tranquil. She has differences of varying severity about frontiers and minority groups with Albania, Yugoslavia, Bulgaria, and Turkey. These differences are not altogether mitigated by the fact that Greece and Turkey are allied in NATO, and that Yugoslavia, Turkey, and Greece are signatories of the Balkan Pact of 1954.

Greek forces are adapted to the defence of rugged frontiers and an island-studded inland sea. The land/air system contains 120,000 ground troops in 11 infantry and an armoured division, and a tactical air component of fighter-bomber and reconnaissance elements. The area most suitable for armour is around Salonika; elsewhere it is mainly infrantry country, and Greek infantry weapons and tactics are adapted to rugged terrain and the guerilla methods proved in the communist rebellion of 1946-49. The sea system includes surface escort and a few submarine vessels and some landing craft, but apparently no air element. The air system is small and is confined to modest air defence and transport roles. Greek forces are immediatly available to AFSOUTH for defence of the Mediterranean NATO area, and the extent of Greece's support of NATO was indicated by her offer, which as it turned out did not have to be accepted, to base nuclear-armed IRBMs on her soil.

Greek forces are supported by conscription, the normal term of service being a long 24 months. Most if not all equipment is of foreign manufacture. Military expenditure has been relatively high, but should go below 5% of GNP in 1963-64.

Any consideration of Greece must recognize her economic and political situation. By 1963 US aid totalled some $3.5 billion and this stimulus, reflected in an annual economic growth rate of some 6%, has been strengthened by Greek associate membership in the EEC. However Greece is not prosperous; the Greek economy is under-industrialized and constantly vulnerable to an imbalance between industrial imports and agricultural exports. Politically, there is strong evidence of repression in the Greek political system, a repression that appears to be aided by the army. A continuing disregard of fundamental problems, reflected in such indicators as the low per capita income of $350 per annum, may eventually undermine the stability of Greek policy, though more immediately critical may be her relations with Turkey.

Turkey

Turkey has a strong sense of national identity, which kept her independent and neutral through World War II and still strongly influences her actions. She is also traditionally hostile to Russia. She is also traditionally important in European defence because she along with Greece controls the routes to the Black Sea; she stands at the gates to the Middle East; and she forms a salient stretching far along the southern Soviet flank. However she is also strategically vulnerable; she is the only country beside Norway having a common border with the USSR; her whole northern coast is exposed to invasion; she could be outflanked by a move through northern Iran into the Iraq plains; and she might be difficult to reinforce if attacked.

Turkey's defence policy includes membership in the UN, the Balkan Treaty with Greece and Yugoslavia signed during a time of Stalinist Soviet pressure, the Baghdad Pact through which CENTO provides some dubious security to her southern borders, and NATO. She is not diplomatically active: although she was productive in promoting CENTO, she has not followed through to any position of leadership.

Turkey maintains an impressive number of men under arms; about 500,000, with a mobilization potential of 2,000,000. Her sea system contains defensive surface and submarine vessels, but lacks air elements. The land/air system is predominant, made up of a 400,000-man army and a tactical air component. The ground force has only one armoured division, but much of the country is infantry country. The air system is made up of defensive fiighters and some Nike.

The military establishment is supported be conscription, with periods ranging from two to three years. Turkey is dependent on foreign sources for nearly all her armaments: in the army all weapons from machine guns up are US-made; most naval vessels are from US Mutual Aid. Turkey allows other NATO forces on her territory; she was a base for US nuclear-armed Jupiter IRBMs, and still contains the important US radar used to monitor USSR missile firings. Both Turkey and Italy accepted Jupiter missiles under a "double veto" system that gave the US and the host nation control over firings. Supporting her UN obligations, Turkey still maintains a small detachment of troops in Korea.

Turkey's delicate internal situation should be remembered in any consideration of her defence policy. Turkey is poor; she suffers from the impact of a rapid population increase on a sluggish economy, and needs to control a large chronic trade deficit. Educational and other domestic reforms are urgently needed, but are help up by a continuing political stalemate. The army is a force in Turkish politics, but not as a participant; its traditional role is as a "Guardian of the Revolution", intent on establishing a political and government system. The Turkish army has however shown signs of abandoning its neutrality to ensure that reforms are delayed no longer by the political stalemate.

Yugoslavia

Although Yugoslavia is far more secure than during the days of Stalinist threats and belligerence, she occupies a somewhat precarious position between East and West. Her relations with Albania are not warm, and there are points of disagreement regarding her border with Greece. Strategically, she offers the Soviet long-sought ports into the Mediterranean.

Her defence policy can in the main be described as armed neutrality. Some tentative overtures with NATO were broken off in 1953; the Balkan Alliance of 1954 with Greece and Turkey seems to have fallen inactive, and a unilateral guarantee by Britain does not appear to count heavily in her policy calculations. However unlike Sweden, Yugoslavia has not had the economic base for completely self-sufficient neutrality, and has relied heavily on British and especially US military and economic assistance.

Apart from light naval units—mainly escorts and minesweepers—the main Yugoslav force is a land/air system of some 30 divisions and 500 US-made tactical aircraft. Conscription is in force, and there are about 1,000,000 reservists for the army.

Yugoslavia received over $700,000,000 in military aid from America between 1950 and 1959, but the economic blockade imposed by the Soviet in 1948 encouraged the development of an armament industry, and a Yugoslavian training aircraft has been developed. There are some signs that Soviet combat aircraft be acquired in the near future. Defence expenditure is reportedly some 15% of the "national income".

The Pacific Ocean Powers

General

In this final section of the paper, we turn from Europe to consider two powers on the other side of the globe. Those two nations, Australia and Japan, present a multiplicity of contrasts. In Australia, a few Europeans populate a vast continent, and debate their involvement in Asian affairs. In Japan, a bursting Asian population presses at the shores of a small island chain, and is eager for greater participation in the world. Each however finds hostile forces uncomfortably near, and each is many miles from powerful allies.

Australia

The Chinese threat to India, the Malaysia-Indonesian conflict, and the war in South Vietnam are dominant and by no means distant features on the Australian strategic horizon. More directly, Indonesia has announced support for any liberation movement that may arise in the Australian areas of New Guinea, and Indonesia with Soviet aid has become a major military power in an unstable South East Asia.

In these circumstances, Australia appears to be making an effort to participate more positively in Asian diplomatic affairs than she has done in the past. At the same time, she holds membership in SEATO, ANZUS, and (with Britain and New Zealand) in ANZAM, but the security these alliances afford is at present a little unclear. By 1960, Britain's desire to relinquish military duties in the area seemed obvious, and the United States had shown a decided lack of sympathy for Australia's concern over an Indonesian New Guinea. However the isolation these developments portended has been offset, to some extent by Britain's continuing commitment in Malaya, but more so by recent US action in pledging the defence of East New Guinea and erecting a radio station in Australia as part of the Polaris deterrent system.

While there may still be some validity in Australia's time-honoured assumption that help from Britain or the US would always be forthcoming in the clinch, she must be aware that Britain is military over-extended, and that even the US may be too involved elsewhere to lend support in an emergency.

Prior to 1963, Australian military policy was to maintain flexible, conventionally armed forces for forward deployment anywhere in the South East Asian area of Australia's strategic interest. The distances in this area call for forces with mobility and ready availability, while the political situation lent value to a capacity to work either alone or with allies.

Australian forces have been cold or limited war forces. The sea/air system has destroyers and a carrier as its largest ships supported by helicopters and maritime air and submarines for maintaining sea communications. It can also provide troops with an extra measure of strategic mobility. The army, manned by voluntary service, has been organized for mobility and immediate effectiveness. With air force fighter and tactical transport components, the army is the basis of a land/air system adapted to tropical operations of modest size, lacking in armour but with equipment designed for air transportability. The air force provides some strategic airlift, as well as fighter and bomber-reconnaissance elements.

In fulfilment of its various treaty commitments, Australia maintains bomber and fighter air, and a battalion of land forces, in Malaya; and a fighter air contingent in Thailand.

Australian defence expenditure since 1959 has been about $480,000,000 per annum, a little more than 3% of GNP. However in mid-63, accompanying a statement that Australia would defend Papua and Eastern New Guinea, a new defence program was announced which would raise expenditures to some $670,000,000 by FY1966. The main features of this program were the acquisition of new submarines, guided missile destroyers, and more fighters, and thus the program seemed to be consistent with existing military policy, and to represent a strengthening of forces in the face of a militant Indonesia. However later in 1963 Australia announced the purchase of 24 American-built F111A aircraft for delivery in 1966, with provision for the acquisition of two squadrons of B47 aircraft if needed before that date. Although official statements are lacking, and the purchase has been explained as simply a replacement of the present obsolete Canberra force, the action could be a quite revolutionary move toward a positive strategic deterrence. Australia is prosperous, but her industrial base is so sparse that she can be considered economically under-developed. She has had difficulties with inflation and balance of payments. Whether she can afford a military establishment incorporating both strategic deterrent and limited war forces as well will be interesting to discover.

Japan

If Australia has sometimes cast about insecurely for the American presence, Japan has experienced something of the opposite predicament. Under a benevolent but rather watchful American eye, Japan has climbed from the devastation and humiliation of 1945 to almost full recovery. With her economy healthy and her political situation stable, she is waiting impatiently to move onto the stage of world affairs. Increasingly motivated by a strong and rising nationalism, sensing keenly the need for a national destiny, she has been called "...a nation of enormous vitality, aching for a position of world leadership."

The US-Japan Security Treaty is basic to Japan's defence policy, and the US is still a strong influence on Japanese affairs generally. American naval and air bases remain, but US ground troops were withdrawn in 1957, after which Japan was permitted to begin re-building her own defence forces. There are still important points of difference with the US and the USSR, but for the present Japan shows no fervent desire to resolve these differences, least of all by force, and seems more concerned with promoting her economic position in Asia and further abroad.

Japan's military posture is in consequence purely defensive, and has three basic objectives: to support the UNO and promote international co-operation; to build forces within national capabilities to the extent necessary for self-defence; and to cope with aggression by action within the terms of the US-Japan Security Treaty.

These objectives lead to a land/air system based on some 13 light and mobile divisions scheduled to grow to some 180,000 plus a reserve by 1966. The land/air system contains tanks and artillery and a small tactical air component, but the air system is predominantly an air-defensive force of interceptors and missiles. The sea/air system has reconnaissance air, surface components, and some submarines, and is designed for escort and harbour defence duties reflecting Japan's vital dependence on imports.

Defence expenditure is about $675,000,000 for 1963. There is manufacture of US equipment under licence, but this is accompanied by some national research and development, and a move toward the production of Japanese equipment. Military service is voluntary.

TABLE 1. COMPARISONS OF POPULATIONS, FORCE SIZES, AND DEFENCE EXPENDITURES

NOTE: These figures are intended to be descriptive only, and should not be accepted as definitive.

Secondary Nuclear Powers	Population	Forces	Defence Expenditure	GNP
Britain	54M	433,000	$5.1B	7%
France	48M	630,000	$4.0B	7.4%
European Powers				
West Germany	55M	404,000	4.6B	6%
Belgium	9.25M	110,000	$444M	3.4%
Netherlands	12M	141,000	$68M	5.0%
Luxemburg	320,000	5,500	$7M	1.6%
Portugal	9.2M	102,000	$176M	8.9%
Scandinavian Powers				
Norway	3.7M	36,000	$197M	4.2%
Sweden	7.6M	80,000	$594M	5%
Denmark	4.7M	49,000	$225M	3.5%
Southern European Powers				
Italy	50.2M	470,000	$1.5M	4.0%
Greece	8.5M	120,000	$167M	5%
Turkey	29.5M	452,000	$235M	5.0%
Yugoslavia	19M	300,000	$830M	—
Pacific Powers				
Australia	11M	50,700	$533M	3.3%
Japan	95.2M	243,000	$675M	—

CANADA'S OBLIGATIONS TO THE UNITED NATIONS AND INTERNATIONAL OPERATIONS

By

Department of Secretary of State for External Affairs

Part I—*Canadian Obligations under the U.N. Charter*

Canada has always been interested in keeping the peace; no laborious study is required to determine Canadian disappointment at the failure of the League of Nations in 1938 nor to determine the singular spirit of unanimity which pervaded the Canadian Houses of Parliament seven years later in the discussions prior to the San Francisco Conference which laid down the principles under which the United Nations Organization was founded. A resolution was passed almost unanimously (202 to 5 (Independent members from Quebec) in the House of Commons with leaders of the four major parties voting assent) that proposed in part:

> That this house endorses the acceptance by the Government of Canada of the invitation to send representatives to the (San Francisco) conference.
>
> That this house recognizes that the establishment of an effective international organization for the maintenance of international peace and security is of vital importance to Canada, and indeed to the future well being of mankind; and that it is in the interest of Canada that Canada should become a member of such an organization.
>
> That the charter establishing the international organization should, before ratification be submitted to Parliament for approval.[1]

Mr. Martin in commenting upon the proposal before the House had this to say:

> One need spend little time in impressing on the country and on themselves the need for order among the nations, the need of some organization by which we shall perhaps not stop war but through which we shall certainly guarantee the peace more effectively than we have in the past... the League (of Nations) failed... because... you cannot have responsibility without power. There is no point in having a perfect paper organization which, when it comes to securing the peace and enjoying peace, simply will not work... (these principles should (*inter alia*) underlie the world security organization...).
>
> The world security organization must be fully equipped with necessary military force to meet its objective.
>
> To bring this about there must be the closest political and military co-operation between the... major powers and other peace loving states (which) should play their part in the structure in a manner proportionate to their ability to contribute.[2]

Mr. Graydon added:

> No nation (other than Canada) is more wedded to peace... an international organization must be created to maintain world peace and Canada must give full support to such an action.[3]

---

[1]Hansard, p. 21, 1st Session 1945.
[2]Hansard, p. 41, 1st Session 1945.
[3]Ibid, p. —, 1st Session.

22439—4½

And Hon. Louis St. Laurent:

> ...we have to provide an organization with teeth in it, and the teeth have to be provided by an undertaking to be made by each signatory that he will contribute forces prepared to fight if needs be... A country cannot be a full member of this organization without being prepared to call upon its human and national resources to contribute to the common pool.[1]

Shortly after the successful conclusion of the San Francisco conference the House agreed to the motion of Mr. St. Laurent that Parliament approve the agreement establishing the United Nations and the statute of the International Court of Justice. Subsequently Canada's instrument of ratification of the United Nation Charter, following approval of Parliament, was deposited in Washington. Canada became an original member of the United Nations on November 9, 1945.

Under the Charter the Security council was given primary responsibility for the maintenance of international peace and security. In this field the Council had two broad types of powers. Chapter VI entrusted the functions of promoting pacific settlement to the Security Council while under Chapter VII the Council had enforcement powers, including the ability to take decisions binding on all members. The concept of collective security in Chapter VII was predicated on Great Power agreement and the overwhelming superiority of armed force derived from the forces of the permanent members whose Chiefs of Staff were to constitute the Military Staff Committee.

Unlike the Covenant of the League of Nations, the United Nations Charter made provision in Chapter VII (Article 43 and following) for the establishment of international military forces and for United Nations action to maintain or restore international peace and security. The idea was that military units should be placed at the disposal of the Security Council through special agreements negotiated with member states. This permanent United Nations army was to be used for such military operations as the Security Council deemed necessary to maintain international peace and to carry out its decisions. It was envisaged that on occasion this might extend to direct military action against an aggressor nation.

It was thought that these enforcement powers would come into play only after the various peaceful means of settlement outlined in Chapter VI had been exhausted. The Council could then call upon members to join in the application of non-military measures or sanctions (Article 41). If this proved insufficient, then as a last resort the Council could undertake forcible action.

The actual use of enforcement measures was regarded as a remote contingency at San Francisco, since the mere willingness of the Great Powers to use force would, it was thought, act to restrain any likely combination of smaller or middle powers. Moreover, Chapter VII had to be read along with the chapter on voting procedure in the Security Council. Under this procedure, any one of the five Great Powers could veto the application of enforcement arrangements. Thus, in practice, the United Nations could not use force against a Great Power or indeed against any other state if one of the Great Powers employed its veto.

While these weaknesses were foreseen and understood in 1945, it was widely believed that Chapter VII provided the outlines of a complete scheme of enforcement which could be built upon and which, ultimately, would give the United Nations the right and the power to restrain any aggressor state.

Unfortunately the weaknesses of Chapter VII soon became all too apparent. The major powers were unable to agree on the composition of these

---

[1] Ibid, p. 1383, 2nd Session.

United Nations military forces, the total size of the United Nations army, the relative strengths of the various national contingents, on a policy concerning military bases and various related questions. These early divisions have deepened and persisted.

Thus, the underlying assumption on which this security system was based proved to be illusory. No more than two years after the signing of the Charter it became apparent that the system of security provided for in Chapter VII would not be effective because of failure to reach agreement among the permanent members of the Security Council. It also became apparent that the United Nations was in no way capable of taking collective action against one of the great powers. No great power would readily subordinate its decision to collective judgment when its political interests were at stake, nor were there means by which the Organization could deal with aggression resulting from a great power conflict. The Organization was unable to use the military resources of the great powers directly in dealing with other threats to the peace for fear of great power intervention in the situation.

Although the Military Staff Committee has continued to hold regular meetings, these have been rather perfunctory and devoid of any real meaning. No agreements have ever been concluded under Article 43 placing military forces at the disposal of the Security Council.

The Organization has been revitalized as a result of the change in thinking and emphasis in the years since the breakdown of the original Charter system. This transition has been a gradual and pragmatic process. The enforcement provisions of Chapter VII were tacitly abandoned for recommendatory measures. For example, the Security Council has in practice found it necessary to select the most expedient measures for the preservation of peace. Thus, on occasion it has recommended the setting up of international military forces under United Nations control and irrespective of the provisions of Article 43. In the case of the Congo, for example, the Security Council authorized the Secretary-General to provide military assistance to the Government of the Republic of the Congo. The peace-keeping force which was set up on the basis of these Security Council resolutions is obviously military aid of an entirely different character than the military forces foreshadowed by Article 43.

Steps were also taken to permit the General Assembly rather than the Security Council to initiate peacekeeping action in certain circumstances. UNEF was set up by the General Assembly in 1956 under the "Uniting for Peace" procedure. In its 1962 Advisory Opinion the International Court upheld the legality of the Assembly's action in creating UNEF, ruling that while the Security Council has the exclusive right to order coercive action, the powers of the General Assembly include the right to recommend measures for the peaceful adjustment of any situation. As a further development, recourse was had to the military resources of the smaller powers. Canada was among the first to realize that due to this evolution much of the responsibility for preventing or limiting the scope of international conflicts would shift from the great to the so-called middle and smaller powers. Over the years Canada has consistently supported and on occasion taken the lead in the major peacekeeping initiatives of the United Nations.

The peacekeeping forces in which Canada has participated and in which she continues to participate are of a different kind and have little in common with the use of coercive action to counter aggression foreseen in Chapter VII. They are essentially peacekeeping and not fighting forces, and they operate only with the consent of the parties directly concerned. It is worth noting that all the permanent members of the Security Council have, at one time or another in the past 19 years, voted in support of the creation of one or other

of these U.N. peacekeeping forces; and that none has in any case gone further than to abstain in voting on their authorization.

Peacekeeping Operations

Since 1945 the United Nations has been involved in missions or "operations" of a peacekeeping nature in widely-scattered parts of the world, from Palestine to the Congo and Cyprus to West New Guinea. Canada has firmly supported the United Nations in these endeavours and Canadian military personnel have seen service with the United Nations in Kashmir (UNMOGIP) (1949-), Palestine (UNTSO) (1949-), Korea (1950-53), the Gaza Strip and the Sinai Peninsula (UNEF) (1956-), Lebanon (UNOGIL) (1958), the Congo (ONUC) (1960-64), West New Guinea (UNTEA) (1962-63), Yemen (UNYOM) (1963-) and most recently in Cyprus (UNFICYP) (1964). At present about 2,200 Canadian military personnel are serving with various U.N. peacekeeping operations (see Appendix).

Characteristics of United Nations Forces

There have been four major U.N. peacekeeping operations: in Palestine (UNEF), the Congo (ONUC), West New Guinea (UNTEA) and Cyprus (UNFICYP). Although each of these forces has differed in composition, nature and task, they have shared certain common characteristics. Secretary-General U Thant has described the fundamental characteristics of UNEF, ONUC and UNTEA in the following terms:

> All three were improvised and called into the field at very short notice; all three were severely limited in their right to use force; all three were designed solely for the maintenance of peace and not for fighting in the military sense; all three were recruited from the smaller powers and with special reference to their acceptability in the area in which they were to serve; all three operated with the express consent and co-operation of the states or territories where they were stationed, as well as of any other parties directly concerned in the situation; and all three were under the direction and control of the Secretary-General acting on behalf of the organs of the United Nations.

In the case of the Unified Command in Korea, the United Nations entrusted a group of countries with the responsibility of providing independently for an international military force serving purposes determined by the Organization. This operation constituted a diversion in the main development of United Nations peacekeeping. For the first time, the Organization had to deal with a major military conflict in which the interests of the Great Powers were not far removed. The prompt response to this challenge required that the United Nations break new and significant ground. Up to that time, it had been assumed that because of Soviet intransigence, the Charter provisions concerning collective military measures could not be implemented. In this situation of grave necessity, the Security Council was able to take forthright and effective action mainly because the Soviet Union boycotted the Council and was therefore not in a position to use its veto.

The concept behind UNEF, ONUC and UNFICYP is a fundamentally different one. These have a truly international character, affirmed by the Regulations governing the three forces. In each case these forces have the legal status of subsidiary organs of the United Nations and as such they enjoy the status, privileges and immunities of the Organization itself.

Members of UNEF, ONUC and UNFICYP, although remaining in their national service, are, during the period of their assignment, international personnel under the authority of the United Nations and subject to the instruc-

tions of the Force Commander. The Regulations specify that the functions of the force are exclusively innternational and that members of the force shall discharge these functions and regulate their conduct with only the interest of the United Nations in view. On the whole this attempted marriage of national service with international function has been successful in practice.

Other United Nations Peacekeeping Operations

Canada has participated in a number of military observer groups set up under United Nations auspices. In 1948 a United Nations Observer Group (UNMOGIP) was established to watch over the Kashmir truce agreement. It has succeeded in keeping the peace in Kashmir ever since, despite the failure to devise a satisfactory solution to the dispute.

In July 1948, the conclusion of the first truce agreements in Palestine led to a wider use of military observation teams by the United Nations. The observers who worked under the United Nations Mediator in this area later became the United Nations Truce Supervisory Organization (UNTSO), entrusted with supervision of the armistice agreements between Israel and her Arab neighbours. UNTSO has proven to be an essential factor in keeping the peace in the Middle East and much of the know-how for subsequent peacekeeping operations has been derived from this experience.

The conflict in Lebanon in 1958 led to the establishment by the Security Council of an Observer Group (UNOGIL) to ensure that no illegal infiltration of personnel or supply of arms occurred across the Lebanese borders. On occasion UNOGIL acted as a committee of good offices, helping to reconcile differences among the various political factions in the country. UNOGIL was withdrawn from Lebanon by the end of 1958.

In the course of the past 18 months one U.N. peacekeeping operation was concluded and two more were begun. Canadians participated in all three. The first was of an unusual character for the U.N. since it involved the assumption of administrative duties over a non-self-governing territory for a limited period. That territory was West New Guinea (West Irian) which for a seven-month period between the withdrawal of the Dutch and the transfer of sovereignty to Indonesia was administered by a United Nations Temporary Executive Administration (UNTEA) backed by a U.N. security force. Canadian Otter aircraft, with air and maintenance crews, were part of the U.N. force in this operation.

The second operation, still continuing, was undertaken at the request of the Governments of the United Arab Republic, Saudi Arabia and Yemen. By a Security Council decision of June 11, 1963, a team of U.N. observers was despatched to Yemen to observe, certify and report on the implementation of the disengagement agreement concluded by the U.A.R. and Saudi Arabia. The air component of the Yemen Observation Mission consists of Canadian aircraft and crews. Although UNYOM has had a useful deterrent effect, implementation of the disengagement agreement has proceeded slowly and imperfectly and is still far from fulfilment.

The third operation, by far the largest of the three, has involved substantial movements of Canadian troops and equipment to Cyprus. In response to a request by the Secretary-General of the United Nations, Canada has authorized a total contribution of 1,200 men and equipment to the United force in Cyprus (UNFICYP). Within hours after Parliamentary approval of the Canadian contribution an advance party left to prepare for the arrival of the main body of Canadian troops. Canadian troops began operational duty on March 27, 1964 and with the arrival three days later of HMCS BONAVENTURE and RESTIGOUCHE carrying additional personnel and patrol equipment the Canadian contingent became fully operational. Under the original terms of reference

for the U.N. force in Cyprus a time limit of three months was specified as the duration of the force. This period has now been extended for a further three months, ending September 26, 1964.

The Indochina Commission

Canada is also playing a part in important peacekeeping operations which are not in any way connected with the United Nations, that is, the three International Commissioners for Supervision and Control in Cambodia, Laos and Vietnam.

In 1954, to deal with the serious crisis resulting from the war between the French and the Viet Minh in Indochina and to prevent the expansion of the conflict into what might have become an all out war between the great powers, a conference was held in Geneva. This conference arrived at a settlement which was embodied in three Agreements, one for each of the three successor states of former French Indochina. Each Agreement provided for an International Commission to supervise and control its implementation, and Canada, together with India and Poland, agreed to staff these Commissions. (It was, of course, the parties themselves, and not the International Commission, who were responsible for the *implementation* of the Agreements.) It was not possible to use United Nations machinery to deal with the Indochina problem because some of the parties principally concerned were not members of the United Nations.

It is now ten years since we accepted the responsibility of membership of these Commissions and there seems unfortunately little likelihood that we will soon be relieved of these obligations which involve a Canadian commitment of approximately one hundred civilian and military personnel.

The Commission in Cambodia (a country which remained unified under the settlement) has largely accomplished the task set for it by the Cambodia Agreement and it has therefore been possible to reduce its establishment to what amounts to a token representation. In our view the Cambodia Commission could well be withdrawn but we have acceded to the request of the Cambodia and South Vietnam. The decision to investigate these incidents

At the request of the Cambodian Government the Commission has investigated a number of border incidents occurring along the frontiers between Cambodia and South Vietnam. The decision to investigate these incidents has been taken by an Indian-Polish majority, with Canada dissenting on the grounds that the Cease Fire Agreement did not empower the Commission to investigate conflicts between Cambodia and countries which were not parties to the Cease Fire Agreement (i.e. other than Cambodia and the Democratic Republic of Vietnam). Because the South Vietnamese Government does not afford co-operation to the Cambodia Commission in its investigation of border incidents, the reports and conclusions of the Commission on border incidents have been necessarily one-sided.

In Laos it appeared in 1958 that, with the reunification of the country under a Coalition Government, the work of the International Commission was over. The Commission was therefore adjourned *sine die* and all its personnel were withdrawn. Unfortunately the settlement broke down and a new Conference had to be called. This Conference met in Geneva in 1961-62 and produced new Agreements on Laos. Under these Agreements the International Commission was revived with the same membership as before, Canada again undertaking a commitment involving approximately thirty civilian and military personnel. We have not been at all happy with the way in which the Laos Commission has been functioning. The unanimity rule which operates within the Laotian Coalition Government together with the unhelpful attitude of the Polish Commissioner having seriously frustrated the Commission in the

carrying out of its responsibilities. It now appears that, with the recent deterioration of the military situation in Laos, there is a strong possibility that yet another international conference will be held to consider the situation in that unhappy country.

The Vietnam Commission successfully completed the first part of its mandate: the withdrawal of forces to either side of the 17th parallel and other questions connected with the disengagement of opposing forces. At the same time it was found to be impossible to reach agreement on the political settlement (election leading to reunification) envisaged in the Cease Fire Agreement and the Final Declaration of the Geneva Conference. As a result the Commission has not been withdrawn.

The Commission operates today in what is in effect a renewal of the civil war. There has in other words been a virtual breakdown of the Cease Fire Agreement. The Commission has however a continuing mandate to supervise the execution of the Agreement as it affects the import of arms and subversion. In 1962 the Commission issued a Special Report, with the Polish member dissenting, finding that North Vietnam had engaged in hostile activities aimed at the overthrow of the government of South Vietnam and that South Vietnam had permitted the import of arms to an amount greater than that permitted under the Agreement. The South Vietnamese and the United States have justified their action by pointing out that the arms imports would come to an end when Northern subversion against South Vietnam itself came to an end.

Since the Special Report the Commission has relapsed into inactivity. We have been unable to convince our colleagues of the necessity for continued action on the subversion issue.

Although such a situation might argue in favour of winding up the Commission, the latter's presence may nevertheless remain of value in preventing a bad situation from getting worse. The Geneva Agreements represent the last symbol of international agreement on Indochina. We should therefore hesitate before taking final action to terminate them.

Administration and Operation

When a request is received from the Secretary-General of the United Nations for Canadian help in a peacekeeping operation, a joint submission from the Minister of National Defence and the Secretary of State for External Affairs may be made to Cabinet asking for Government approval to provide the required personnel and equipment for the operation.

When the request would require a substantial Canadian contribution, the established procedure is to seek parliamentary approval within 10 days of the passing of an order-in-council. Because of the experience that has now been built up, the request itself will be fairly specific as the Secretary-General and his military advisers will have discussed what Canada might be able to provide with the Canadian Delegation to the United Nations in New York, to which is attached a military adviser. If Cabinet agrees, the Department of National Defence is responsible for selecting the appropriate personnel and equipment and sending them to the area concerned, while External Affairs is responsible for negotiating conditions of service, and making any necessary arrangements through the United Nations with the country or countries to which the service personnel will be posted. Canadian diplomatic missions on the spot provide all appropriate assistance.

In United Nations peacekeeping operations policy direction is given by the Secretary-General, sometimes assisted, as in the case of the Congo, by an advisory committee representing the contributing powers. In the case of the Indochina Commissions, which do not come under the United Nations, instructions regarding implementation of the cease-fire agreements are sent from External Affairs to the three Canadian Commissioners.

Establishment of Permanent U.N. Peacekeeping Machinery

Suggestions have been made from time to time for the establishment of more permanent security forces under the United Nations. As early as 1947-48 Secretary-General Trygve Lie proposed the creation of a permanent United Nations Guard, to be individually recruited by the Secretary-General for duties requiring specialized personnel e.g. guard duty, observer corps work, supervision of plebiscites, etc. These guard forces were to be "non-military" in nature and form part of the Secretariat. The plan failed to find support in the Assembly and as a compromise the United Nations "Field Service" was established to take care of transportation and communications between United Nations headquarters and United Nations operations in the field.

After the outbreak of the Korean War, Mr. Lie proposed the creation of a voluntary military reserve group or "United Nations Legion". This was a much more revolutionary proposal than the "United Nations Guard". The basic idea was that individual nations should recruit volunteers for United Nations reserves. These groups of national units would be given special training and held in permanent reserve for United Nations service. This plan failed to gain acceptance and was eventually shelved.

The Canadian view has been that ideally the United Nations should have a permanent international force of its own, in being, and under its orders, for peacekeeping duties. It is evident, however, that this is not feasible at the moment for political reasons. There are a number of reasons why the establishment of a permanent United Nations force would be premature at the present time. Many governments would not be prepared to accept the financial let alone the political implications of such an institution. Moreover, as Secretary-General U Thant has pointed out, there are a number of parallel developments which must precede the organization of a permanent peacekeeping force:

> We have to go further along the road of codification and acceptance of a workable body of international law. We have to develop a more sophisticated public opinion in the world, which can accept the transition from predominantly national thinking to international thinking. We shall have to develop faith in international institutions as such, and a greater confidence in the possibility of a United Nations civil service whose international loyalty and objectivity are generally accepted and above suspicion. We shall have to improve the method of financing international organization. Until these conditions are met, a permanent United Nations force may not be a practical proposition.[1]

In the meantime much can be done to improve the present *ad hoc* arrangements. At the United Nations Canada has advanced these suggestions:

(1) That there should be an exchange of experience among interested governments on the special military problems encountered in United Nations operations.

(2) That a compact planning staff of military experts should be set up within the United Nations Secretariat to provide advice and assistance to the Secretary-General in organizing emergency peacekeeping operations.

(3) That national governments should try to improve their own arrangements for assisting United Nations operations, e.g. by responding to U Thant's appeal for additional stand-by units which can be made available at short notice for United Nations service.

---

[1] Extracts from an address by Secretary-General U Thant to the Harvard Alumni Association at Cambridge, Massachusetts, on June 13, 1963. Published in United Nations Review, July 1963, p. 54.

There is a growing interest in practical measures of this kind, aimed at strengthening and improving the peacekeeping capacity of the United Nations. Canada was the first country to earmark national military units for United Nations service. The Nordic countries—Denmark, Finland, Norway and Sweden—have introduced legislation setting up stand-by contingents to be held in readiness for United Nations duties. The Netherlands has also created a United Nations stand-by force and, most recently, the Government of Iran announced its intention to take similar action. These are encouraging developments which have Canada's strong support.

U.N. Financing

Financing the United Nations would present few major hazards were it not for the political and financial repercussions of the Organization's peacekeeping operations. As of April 30, 1964, the cash deficit of the United Nations amounted to over $124 million; more than 90 per cent of this sum—$112.7 million—represented arrears owed on UNEF and ONUC costs. In short, the arrears problem has arisen from the unwillingness or inability of certain members to pay the peacekeeping expenses of the United Nations—despite the General Assembly's Acceptance of the advisory opinion of the International Court of Justice that these expenses constitute "expenses of the Organization", which all members are obliged to pay, and despite the granting of sizeable reductions in assessment to the developing countries.

Article 19 of the United Nations Charter provides for automatic loss of vote for member states more than two years in arrears on contributions. At least a dozen states are now in a position to lose their vote at the 1964 session of the General Assembly unless their arrears are reduced to a permissible level in the intervening period. The General Assembly may, however, restore the vote if it is satisfied that failure to pay was due to conditions beyond the defaulting states' control. The application of Article 19 to states in arrears because of failure to pay peacekeeping expenses would undoubtedly provoke a stormy debate.

Since the financial problems of the United Nations arise largely from the continuing disputes over peacekeeping operations, it is the Canadian view that the solution may lie in securing general agreement on long-term arrangements to cover peacekeeping financing. Such long-term arrangements would include a special scale of assessments based on the principles of collective responsibility and relative capacity to pay.

There has been no consistent formula for financing those peacekeeping operations which the United Nations has undertaken to date. The early operations, which extended little beyond the deploying of observer groups or truce supervision teams, were financed out of the Regular Budget of the United Nations. In the Korean War the expenditure was borne by the states which contributed troops, each covering the cost of its own men and materiel. The United Nations Emergency Force and the United Nations Operation in the Congo were and are financed from Special Accounts established for that purpose and for which annually negotiated special rates of assessment have been established. For both UNEF and ONUC the practice has been to grant reductions (varying from 50 to 80 per cent of the whole) to the developing countries as a form of recognition that such countries have a very limited capacity to pay. The shortfall created by such reductions has been made up in recent years by voluntary contributions from a number of Western developed countries which have shared equitably in this additional cost.

While UNEF and ONUC experience probably provides the clearest guideline for a future special scale, other quite different arrangements for peacekeeping financing have been adopted since these two major operations were

launched. In the case of UNYOM (Yemen) and UNTEA (West New Guinea), it was agreed that the total costs would be shared by the parties directly involved—the United Arab Republic and Saudi Arabia in the case of UNYOM, and the Netherlands and Indonesia in the case of UNTEA. The first three months of UNFICYP were financed on still another basis. Some countries contributing troops to the operation have financed their own contingents and the Secretary-General was authorized to receive voluntary contributions to cover other costs.

The question of United Nations financing—in particular the problem of financing peacekeeping operations—is essentially political rather than financal. The Soviet bloc countries argue that the Security Council has sole responsibility for the maintenance of peace and security, and also exclusive responsibility for the financing of United Nations peacekeeping activities. They insist that the operations in the Congo and in the Middle East have thus been improperly initiated and conducted. France has refused to pay its ONUC assessments on the grounds that the United Nations is not a super state and has no power to levy assessments unless the members concerned support the activity in question. The Arab countries believe that the victim of aggression should be exempt from assessment. Some of the Latin American countries, while willing to pay, have indicated their inability to pay even at the reduced rates of assessment. These are some of the conflicting views on peacekeeping financing which must be reconciled before any workable solution can emerge.

The prospects for arriving at such a solution in the near future are uncertain. On the initiative of Canada the Working Group of Fifteen (now the Working Group of Twenty-one) was established in 1961 in an attempt to negotiate a generally satisfactory solution to the Organization's financial problems. The Working Group has made some progress—it recommended the request for an advisory opinion from the International Court which eventually led to General Assembly endorsement of the principle of collective responsibility to pay—and the Group has elaborated other principles relating to United Nations financing. The Working Group has deferred its 1964 session pending the outcome of informal discussions among the Great Powers on machinery to deal with the financing of future peacekeeping operations. If no progress is made in these discussions and the Group's subsequent formal session, the likelihood of an East/West confrontation over Article 19 at the next session of the General Assembly becomes measurably greater.

Canada's basic objectives continue to be:

(*a*) to ensure that the Organization is provided with sufficient funds to enable it to fulfil effectively its primary tasks under the Charter, in particular, the maintenance of international peace and security;

(*b*) to develop sound administrative and financial procedures to place the financing of United Nations activities on an orderly basis and to ensure the prompt payment of assessments;

(*c*) to foster the development and general acceptance of long-term financing arrangements for peasekeeping operations, including a special scale of assessments for peacekeeping, based on the principles of collective responsibility and relative capacity to pay;

(*d*) to resolve the problem of arrears satisfactorily.

Canada contributes 3.12 per cent of the regular budget of the United Nations—a higher percentage than any other member of the United Nations which is not a permanent member of the Security Council. For the UNEF and ONUC operations Canada contributes at the same rate, as well as sharing in the voluntary contributions to meet the short-fall arising out of reductions allowed the less-developed countries. In addition Canada has contributed or pledged a total of $1,500,000 to the United Nations Civilian Operations in the

Congo, and has absorbed additional peacekeeping costs by scaling down or writing off some United Nations debts for military services rendered. In the first three months of UNFICYP Canada has covered the full cost of its contingent ($1,900,000) but intends to bill the United Nations for the costs of providing and maintaining the brigade headquarters and Canadian personnel on the staff of UNFICYP headquarters.

Part II—*Implications for Canadian Policy*

Recently there has been a renewed interest in the problems and techniques of United Nations peacekeeping. Inevitably, crises will continue to occur, from time to time, such as the Cuban confrontation, where direct negotiation among the great powers may afford the sole means of averting disaster and U.N. involvement is peripheral. This in no way diminishes what the United Nations has sought to do, and in most cases accomplished, as international conciliator and peacemaker. Nor will the demands made on the United Nations lessen in future though its function as peacekeeper may be more cautious in some respects than the intense activity of the recent past.

As the United Nations alone is not yet capable of ensuring world peace and security, Canada regards its membership in NATO and NORAD and its contributions to peacekeeping operations as complementary aspects of its foreign policy. In respect of lesser conflict, the United Nations has shown itself to be a valuable stabilizing and peacekeeping influence. However, as regards the deterrence of nuclear and major non-nuclear war, the method of proven record is the association of free nations in NATO. Canada continues to consider that support for the North Atlantic Treaty Organization and for NORAD are major cornerstones of its foreign policy.

In 1954, before the announcement of Canada's intention to serve on the International Supervisory Commissions in Vietnam, Laos and Cambodia, Mr. Pearson, then Secretary of State for External Affairs, declared before the House of Commons:

> We have of course, through membership in the U.N., accepted the provisions of the Charter. Canada has therefore already definite, if general, obligation in the maintenance and restoration of peace and security in all areas where these are in danger.[1]

The spirit of this announcement has gone far indeed in shaping both Canada's foreign and defence policies in the past decade. The White Paper on Defence announces a wide-sweeping reorganization of the Canadian armed forces, but no facet of the programme is of any greater significance than the extent of the adaptation of Canada's military forces to the role she has assumed in assisting the world-wide security effort of the United Nations.

It is clear that Canada will carry out as in the past a role which now more than ever she is equipped to handle.

The Secretary of State for External Affairs has declared that:

> We must do more. We must strengthen the international capacity for keeping the peace... The Canadian Government is determined to explore and support practical ways of strengthening the peacekeeping methods of the United Nations.[2]

Accordingly the White Paper on Defence has announced:

> The objectives of Canadian defence policy, which cannot be dissociated from foreign policy, are to preserve the peace by supporting

---

[1] Hansard Session 1953-54, May 28, 1954, p. 5192

[2] Address to Annual Awards Dinner of the Overseas Press Club of America in New York, May 28, 1963.

collective defence measures to deter military aggression, to support Canadian foreign policy including that arising out of our participation in international organizations, and to provide for the protection and surveillance of our territory, our air space and our coastal waters.

Canada's foreign and defence policies have been shaped by some of the major international developments of the post World War II period. The first in time and importance was Canada's adherence to the Charter of the United Nations, which created an obligation to support a system of international co-operation for the maintenance of peace and security.

...Foreign policy and diplomatic negotiation are of great importance, being vital instruments in encouraging such opportunities as may exist for accommodation and relaxation. But it is essential that a nation's diplomacy be backed up by adequate and flexible military force to permit participation in collective security and peacekeeping and to be ready for crises should they arise.

Conclusions

1. Through membership in the United Nations, Canada has accepted the provisions of the Charter. Canada therefore has obligations to assist United Nations efforts to maintain international peace and security. In the Canadian view peacekeeping activity has now moved beyond the stage of a practical necessity in the conduct of international affairs, and should be provided for as such.

2. The failure of the Great Powers to agree on the enforcement arrangements envisaged in the U.N. Charter has caused much of the onus for peacekeeping to devolve upon the middle and small powers. Canada is one of the relatively small number of countries which are qualified and equipped to undertake a variety of roles in the service of the United Nations.

3. Canada has contributed in the past and continues to contribute not only to the peacekeeping efforts of the United Nations but also to the International Supervisory Commission in Vietnam, Laos and Cambodia, acting in the spirit of the United Nations Charter. Canadian forces have undertaken such operations in accordance with the necessary parliamentary authority. as reflected in parliamentary debates and approved expenditures for these operations.

4. The Canadian Government is determined to do more towards strengthening the United Nations capacity for keeping the peace. We have advocated and will continue to work for the adoption of practical measures designed to go some way towards meeting the need for advance planning and organization. We believe that these steps must be linked with renewed efforts to devise long term arrangements for financing U.N. peacekeeping operations. Canada has reorganized her armed forces, in large measure, to provide assistance to duly authorized U.N. operations, subject of course to individual decision in each instance when a request is received from the United Nations. United Nations peacekeeping operations constitute a major area of activity for Canada's armed forces, and will continue to do so for the foreseeable future.

APPENDIX

CANADIAN MILITARY PARTICIPATION IN PEACEKEEPING AND TRUCE-SUPERVISING ACTIVITIES SINCE NOVEMBER 9, 1945

Operation	Service Involved	Period of Participation	Personnel Involved	Annual Approximate Cost to Canada
United Nations Military Observer Group in Indian and Pakistan (UNMOGIP)	Army RCAF	Jan/49 (Cont.)	9 Officers 8 all ranks	$ 89,000
United Nations Truce Supervisory Organization (UNTSO)	Amry Navy	Jul/49 (Cont.) Jul/50 Sept/53	18 Officers 3 Destroyers	$177,000 —
United Nations Command, Korea	Army	Jul/50 Sept/53	22,500 all ranks (1 Officer, 10R remaining)	— $ 20,000
International Supervisory Commissions in Vietnam, Laos and Cambodia (I.S.C.)	Navy Army RCAF	Jul/54 (Cont.) Jul/54 (Cont.) Jul/54 (Cont.)	2–3 Officers 16 all Ranks 2–4 Officers	$ 33,600 $818,000 $ 42,000
United Nations Emergency Force in Palestine (UNEF)	Navy	Dec/56 Feb/57	HMCS MAGNIFICENT Sealift	
	Army RCAF	Nov/56 (Cont.) Nov/56 (Cont.)	858 all Ranks 86–275 all Ranks	$3,930,000 $612,000
United Nations Observer Group in Lebanon (UNOGIL)	Army	Jun/58 Jan/59	70 all Ranks	$ —
Organization of the United Nations in the Congo (ONUC)	Army	Aug/60 Jun/64	250 all Ranks	$1,424,000 (Subject to Reduction)
	RCAF	Jul/60 (Cont.)	6–19 all Ranks	$256,000
United Nations Yemen Observer Mission (UNYOM)	Navy Army RCAF	Jul/63 Jun/63 Jun/63 Sept/63	1 Petty Officer 5 Officers 56 all Ranks	— — —
United Nations Temporary Executive Administration (UNTEA)	RCAF	Sept/62 Apr/63	13 Officers	—
United Nations Forces in Cypres (UNFICYP)	Navy Army RCAF	Mar/64 Sept/64 (Estimated)	HMCS BONAVENTURE 1150 all Ranks 100 all Ranks	$1,500,000 (three months) (Estimated)

AN INTERNATIONAL POLICE FORCE

By

J. KING GORDON

Introduction

> There has been a tacit transition from the concept of collective security, as set forth in Chapter VII of the Charter of the United Nations, to a more realistic view of peace-keeping. The idea that conventional military methods—or to put it bluntly, war—can be used by or on behalf of the United Nations to counter aggression and secure peace, seems now to be rather impractical.
>
> U Thant, Speech to Harvard Alumni, June 12/63.

The word "police" in the title of this paper may be taken to imply too much or too little.

In the nation state—or the province, county, city, town, or village—the "police force" is the instrument employed by the organized community to enforce the law. The police may be used to detect a breach of the law, to inhibit or arrest a lawbreaker, to protect citizens against assault or violence, to restore order and to bring lawbreakers to justice. The power and authority of the police rest on the organized community and the wide acceptance of the law. To apply the term "police force" in the context of international affairs today might seem to assume the integration of the world community and the general acceptance of world law—conditions that do not exist.

It is possible to argue, as many do, that our ultimate survival depends on the organization of the world community under a world government and subject to world law enforced by a world police.[1] But it seems clear that the purpose of this paper should not be to discuss an international police force on the basis of such assumptions. Its purpose is a more modest one: to examine the functions and possible structure of such a force in today's world. The value of the analogy of a national or metropolitan police force is to remind one that an international police force has to have a measure of consensus from the world community if it is to fulfill its tasks.

A second implication of the term "police" might place too severe restrictions on our treatment. From this point of view we are not thinking so much of the police as an instrument of enforcing the law of the community as we are concentrating on the methods used to maintain order. Now it is true that an international force under certain circumstances will have to adopt "police methods" in the preservation or restoration of order, in the protection of individuals against violence—even in the direction of traffic. But United Nations' Forces during the past fifteen years have had a great variety of assignments to which the term "police", in the sense we have been using it, could not be appropriately applied. In many instances the international force has acted as a military force with limited objectives. It may be recalled that Lt. Gen. E. L. M. Burns, who commanded the United Nations Emergency Force (UNEF), was not happy about

---

[1] Grenville Clark and Louis B. Sohn: *World Peace Through World Law*

the term "paramilitary" which the Secretary-General had applied to the Force in one of his reports.[2]

If we avoid too literal an interpretation of the term "police" there is some advantage in using it to indicate a basically new development in the international approach to the problem of peace and war. Students of international affairs will point back to the Concert of Europe—a consultative arrangement among the great Epropean powers—as the beginning of a sense of international responsibility for the maintenance of peace in modern times. The idea was broadened into a general concept of collective security that found expression in the Covenant of the League of Nations. The Charter of the United Nations restated the doctrine with modifications to take into account what were held to be the superior rights and responsibilities of the Great Powers. The Charter, however, did go beyond the Covenant in outlining detailed provisions for the organization of an international force to express the will of the international community in the event of a threat to the peace, a breach of the peace or an act of aggression. The failure to implement the peace-enforcement provisions of the Charter, due largely to disunity among the Great Powers, did not, however, block the peace-keeping endeavours of the United Nations. In a number of instances in which local violence threatened to escalate into major war, peace-keeping operations were mounted which contained the danger and opened the way to political negotiations and mediation of the dispute out of which had arisen the threat to international peace.

These operations and the forces involved in them differed essentially from those envisaged in Chapter VII of the United Nations Charter—a difference noted by the Secretary-General in the quotation at the head of this section. It is this difference which calls for a new terminology and for want of a more exact phrase we use the term "international police force".

In the course of this paper it will be necessary to give a little attention to the transition from the concept of collective security to that of peace-keeping. We shall then examine the types of operations in which the United Nations has introduced an international force. And finally, we shall bring together a number of ideas on how permanent arrangements can be established which will permit the mobilization of an international force with greater efficiency.

From the beginning to the end it will be apparent that military considerations are less significant than political considerations. We have reached the point in human history when the settlement of major disputes among great powers by military means is unthinkable and the settlement of lesser disputes by military means highly dangerous. One writer has referred to the late Dag Hammarskjold as "the custodian of the brushfire peace".[3] This apt phrase might be taken as setting the terms of reference for most of the operations in which an international police force—or fire brigade—will be employed. If we push the metaphor farther, the essential political task is the task of the forester or the gardener: to encourage the growth of healthy vegetation that will be fire-resistant.

What emerges in the course of this study is that the problem of keeping the peace today calls for the closest possible liaison and co-ordination between effective political techniques involving negotiation, mediation and conciliation and highly efficient quasi-police or quasi-military techniques that will prevent a local dispute leading to wider and more dangerous involvement.

---

[2] Burns wrote: "I objected to the use of the term "paramilitary" to describe UNEF and its functions. The *Oxford English Dictionary* defines "paramilitary" as "having the status or function ancillary to that of military forces". Examples are constabularies or gendarmeries organized more or less on military lines and having functions of maintaining order in turbulent areas, with a regular army force behind them. But UNEF was and is unquestionably formed of military units, from the regular forces of the nations contributing. It is not ancillary to any other military force." *Between Arab and Israeli*, p313n

[3] Joseph P. Lash: *Dag Hammarskjold, Custodian of the Brushfire Peace*

I

WORLD SECURITY AND NATIONAL DEFENCE

"The Purposes of the United Nations are to maintain international peace and security..."

Article 1, United Nations Charter.

It has been the pride of those who drafted the Covenant of the League of Nations that they had provided the working drawings for an almost automatic system of collective security. Unfortunately, the solemn commitments in the Covenant found no expression in the foreign policies of member states. Some lay the blame on the fact that the League system lacked universality, that the absence of the United States, the Soviet Union and Germany from its original membership drove member and non-member states to seek security in traditional methods of armament and alliance. But others suggest that there was little to indicate that the great-power leaders ever contemplated any radical changes in the national policies of their governments. The efficacy of the collective system as formulated by the League was never put to the test.

With greater realism, the founders of the United Nations made no attempt to reconstitute the general system of collective security on which the original hopes of the League had been based. Collective measures against an aggressor were no longer called for automatically. The Security Council, which was assigned primary responsibility for the maintenance of international peace and security was to "determine the existence of a threat to the peace, breach of the peace, or act of aggression". The Council was also to decide what measures should be taken to maintain or restore international peace and security. But the Council could only act if the great powers on the Council—who occupied the five permanent seats—were agreed that a situation existed that called for action and were also agreed on the course of action that should be taken. It followed that no action would be taken in a situation in which the interests of one or more of the great powers was involved. To put it bluntly, the United Nations could not act to stop a great-power war or to restrain a great-power aggression.

But if the Charter was more realistic in recognizing the sovereign prerogatives of the great powers it was also more specific than the Covenant of the League in formulating plans for collective action on the assumption of great-power unanimity. The procedures for assembling an international force are set forth in considerable detail:

(1) All Members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance and facilities, including rights of passage, necessary for the purposes of maintaining international peace and security.

(2) Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

(3) The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council and Members or between the Security Council and groups of Members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.[4]

These agreements under which certain units would be set aside for service in an international force were to be negotiated with the assistance of a Military

[4] Article 43 United Nations Charter

Staff Committee composed of the Chiefs of Staff of the five permanent members of the Council or their deputies. The broad purposes of the Military Staff Committee were described as "to advise and assist the Security Council on all matters relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments and possible disarmament." It was further specified that the Military Staff Committee "shall be responsible under the Security Council for the strategic direction of any armed forces placed at the disposal of the Security Council.[5]

It will be seen that the requirements of great-power unity which governed any decision of the Security Council applied with even greater force to the decisions of the Military Staff Committee on the organization and strategic direction of an international force. The MSC met intermittently for two years from 1946 to 1948 but discovered that it could reach no agreement on the essential objectives, size and composition of the force. The specific arrangements prescribed under the Charter for the maintenance of international peace and security were never put into effect. Article 43 remained a dead letter.

UN Action in Korea

In June 1950, the armies of North Korea drove across the 38th parallel into the territory of South Korea. Here clearly was a breach of the peace and an act of aggression calling for collective measures under the Charter. The Security Council went into immediate session, called for a cease-fire, demanded the withdrawal of North Korean armies to the 38th parallel and called for assistance from Member states in implementation of the resolution. Fifty-one states expressed their support of the Council's stand, sixteen provided combat units to serve under the United Nations Command.

But while the action in Korea demonstrated a strong consensus behind collective action to meet aggression, the measures which were taken and the procedures adopted were hardly those called for under the Charter. In the first place, the Council decision was taken during the absence of the Soviet delegate—who was boycotting the Council in protest against the non-recognition of Communist China. In the second place, the UN force was not organized under the conditions called for in Articles 43-47 of the Charter. The Military Staff Committee was naturally never in the picture. In the third place, the conduct of the operation was not under the authority of the Security Council but under the authority of the Government of the United States. Even if the command was designated "United Nations Command" and the blue flag of the United Nations was raised, the troops from Member nations were used in support of what was essentially a United States military operation. Later, both the Council and the General Assembly took action of a political character and it is probable that the pressure of United Nations members influenced the decision not to carry military action beyond the Yalu River and eventually to settle on the 38th parallel as the final armistice line.

Peace-keeping and the General Assembly

The Charter gave prime responsibility to the Security Council for questions involving international peace and security. But the San Francisco Conference, under strong pressure from middle and small powers, had brought about the modification of the original Dumbarton Oaks draft so as to raise the prestige and the authority of the General Assembly. A new Article 10 empowered the Assembly "to discuss any questions or any matters within the scope of the present Charter." Australia's Secretary of State for External Affairs who had played a leading part in the smallpower revolt commented: "Inclusion of this

[5] Article 47 United Nations Charter

clause removes any shadow of doubt as to the general jurisdiction of the Assembly to discuss any matter of international concern, whether relating to security or welfare or whether particular or general in character."[6]

The extraordinary circumstances under which the Security Council had taken a decision on the North Korean invasion, namely the absence of the Soviet delegate, caused delegates to the General Assembly which met in the autumn of 1950 to give serious consideration to means of transferring responsibility to the Assembly for peacekeeping action should the Security Council be paralyzed by a veto. A United States resolution, which had the title *Uniting for Peace,* was passed which permitted the General Assembly to be summoned on 24-hours notice if the Council had been blocked on a crucial decision involving international peace and security.

The resolution worked out a procedure closely resembling the procedure for Security Council action under Chapter VII for the voluntary mobilization of an international force:

> (The General Assembly) recommends to the States Members of the United Nations that each Member maintain within its national armed forces elements so trained, organized and equipped that they could promptly be made available in accordance with its constitutional processes, for service as a United Nations unit or units, upon recommendation by the Security Council of General Assembly, without prejudice to the use of such elements in the exercise of the right of individual or collective self-defense recognized under Article 51 of the Charter.

The resolution provided for a Peace Observation Commission to report on a situation in any area where international tension threatened peace and security. It called for the appointment by the Secretary-General of a panel of military experts to give technical advice to member states on request. And it provided for the setting up of a Collective Measures Committee of fourteen members to study and report on measures to be used collectively to maintain and strengthen international peace and security.

While there was a formal similarity between the provisions for the establishment of an international force under the *Uniting for Peace* resolution and the provisions of Chapter VII of the Charter the action called for was essentially different. In the first place General Assembly decisions are recommendations: Security Council decisions under Chapter VII are mandatory—with certain allowance for constitutional processes in member states. In the second place, military units under the Assembly resolution were *volunteered* by Member states: under Chapter VII member states *"undertook"* to make units available. The nature of General Assembly decisions made it extremely doubtful whether a force recruited under the *Uniting for Peace* resolution could be used in peace-enforcement actions. Moreover, in spite of freedom from the veto, it would be extremely unlikely that such a force would be used in a situation in which big-power interests were involved.

The immediate results of the *Uniting for Peace* resolution were slight. The Peace Observation group played a small part in the Balkan crisis in 1952. The Collective Measure Committee prepared some studies which were filed away. Only four countries answered the request to set aside forces for possible UN action: the United States was not among them. But the long-term effect of the resolution was very significant. The General Assembly was given a new sense of responsibility in keeping the peace—a responsibility set forth in the Charter but up until then overshadowed by the prior claims of the Security Council. The veto lost some of its ominous portent. And perhaps of greatest importance was the new procedure established which permitted the

[6] Herbert Vere Evatt: *The United Nations,* The Holmes Lectures, p. 20.

overnight summoning of the General Assembly in a crisis which the Security Council had proved incapable of handling.[7]

The legal basis for the *Uniting for Peace* resolution has been the subject of considerable controversy. It was sharply challenged by the Soviet Union which refused at a later date to bear the expenses of any peace-keeping operation established under the authority of the Assembly, a position shared in some measure by France. One of the most convincing cases made out for the legality of the Assembly's role has been presented by the Norwegian jurist, Jens Evensen, in one of the papers prepared for the recent Oslo Conference on An International Peace Force.[8] He argues that "according to the Charter, the General Assembly also has a clear responsibility to take effective steps to maintain peace in the world. It has not only the right but the duty to accomplish this mission." This position is also maintained by the International Court of Justice in its advisory opinion on the question of considering the costs of peace-keeping operations as "expenses of the Organization" to be allocated among member states by the General Assembly on the same basis as the regular budgetary expenses of administration.[9]

What seems to be fairly evident is that the Charter's provisions are sufficiently flexible not only to validate the assumption of greater responsibility by member nations in the General Assembly but also to encourage innovations in the procedures and techniques of peace-keeping. Because the specific procedures for collective measures could not be satisfactorily implemented does not mean that we are locked in a stalemate or plunged into international anarchy. The General Assembly was able to take over some of the authority from the muscle-bound Security Council. And, not on a grand world scale, but incident by incident, crisis by crisis, both Security Council and General Assembly have proved that they can devise methods for the settlement of disputes and the keeping of the peace. If the post-war world has found it difficult to live by the letter of the Charter, at least it is managing to work out in practice an impressive structure of common law.

II

INTERNATIONAL PEACEKEEPING OPERATIONS

> I do not believe we are ever going into another United Nations operation of full-scale fighting like that in Korea. I do not see that as possbile... The tasks we will be called upon to carry on will be like those used at Gaza and the operation in the Congo and so on.
>
> General Charles Foulkes, CB, CBE, DSO, CD (Retired)
> Before Special Committee on Defence,
> October 22, 1963.

Professor Alistair Taylor of Queens University—who at one time served with the United Nations Good Offices Committee in Indonesia—draws an important distinction between *peace-enforcement* and *peace-supervision*.[10] Peace-enforcement belongs with the concept of collective security: it represents military action or a military deterrent against a nation that breaks the

---

[7] See William R. Frye, *A United Nations Peace Force* p. 57-65: also for a critical analysis of *Uniting for Peace* see Inis L. Claude, *The United Nations and the Use of Force*, International Conciliation No. 532.

[8] Jens Evensen, Problems of International Law relating to the Establishment of UN Security Forces. Internasjonal Politikk Oslo, 1964 pp. 44-75.

[9] Advisory Opinion in I.C.J. Reports 1962, p. 151 and following.

[10] A. M. Taylor, *Canada's Military Role and Universalism*. An address to the R.C.A.F. Staff College, Toronto, February 4, 1964.

peace or threatens to break the peace. Peace-supervision is an instrument to assist in the maintenance of peace and in the settlement of disputes. In peace-enforcement, military considerations are uppermost; in peace-supervision, political, diplomatic and mediatorial activity will play the most important part.

The operations of international forces under the United Nations, with the exception of Korea—a very doubtful example of collective security measures—belong in the category of peace-supervision missions. While they have wide differences in their stated functions and in their composition they have certain features in common. They are associated with political and diplomatic efforts to settle disputes through enquiry, negotiations, good offices, mediation, conciliation or "preventive diplomacy." The forces have been established and have taken up their positions with the consent of the parties concerned—and for the most part with the consensus of member states. They are forbidden to use military force except in self defense—or in rare cases to prevent civil war and violence. They are all committed not to interfere in the affairs of the country to which their mission has brought them.

UN peace-keeping operations may be divided into three general categories: (1) observer groups to supervise cease-fires and truce lines; (2) military forces to separate armies and later to patrol frontiers; and (3) military forces with a mandate to separate armies and assist in maintaining internal order. These categories are inexact. Every UN operation has its unique problems and its separate mandate which, however, may not exactly coincide with its field responsibilities. They will servie our purposes, however, in reviewing the various operations.

(1) *Observer Groups*

It may be noted that in most cases in which the United Nations sent in observer teams an internal situation was complicated by the intervention or threatened intervention of outside states.

Greece in December 1946 is the first example of active intervention by the United Nations in a situation that threatened international peace. A complaint from the Greek government charged Greece's northern neighbors—Albania, Bulgaria and Yugoslavia—with furnishing aid to Greek guerillas in rebellion against the government. The Security Council established a Special Commission of Enquiry and later the General Assembly appointed a Special Committee for the Balkans to investigate and attempt a settlement. An international group of military observers assisted the two bodies in their work.

Palestine came on the agenda of the United Nations in April 1947 when the British government declared they could no longer administer the Palestine Mandate. A Special Committee recommended partition into a Jewish and an Arab state, a proposal that was accepted by the Jewish representatives but turned down by representatives of the Arab states. Severe fighting between the two communities escalated into open warfare after the State of Israel was proclaimed in May 1948. To assist in enforcing a cease-fire and a truce a Truce Commission was established in April 1948 that consisted of the Belgian, French and United States consuls in Jerusalem assisted by military observers of their nationalities. Later the observer group was expanded to some 300 officers. In the early months of 1949 four armistice agreements were concluded between Israel and Egypt, Jordan, Syria and Lebanon. These were supervised by the Truce Commission now known as the United Nations Truce Supervision Organization assisted by four Mixed Armistice Commissions. Military observers reported incidents or infiltrations across Armistice Demarkation Lines.[11]

---

[11] cf. Lt. Gen. E. L. M. Burns, *Between Arab and Israeli* for a most perceptive account of the UN's peace-keeping role in Palestine.

An international group of military observers assisted the three-man Good Offices Committee and the UN Commission for Indonesia between 1947 and 1949 to supervise cease-fires and truces between Dutch and Indonesian forces in the bitter days that preceded Independence.

The dispute between India and Pakistan over Jammu and Kashmir was brought to the Security Council by India in January 1948. The Council appointed a Special Commission to investigate, mediate, and attempt to arrange terms for a peaceful settlement. One year later a cease-fire was arranged and military observers dispatched to supervise the truce. Fifteen years after their appointment, the military observers are still in position. The basic differences are still unsettled but there has been no war.

When in 1958, civil war broke out in Lebanon, the government charged that the rebels were receiving aid from the U.A.R. whose Syrian frontier touched Lebanon. The Security Council was primarily concerned with possible international implications of more than local consequence since Lebanon under the Eisenhower Doctrine was promised aid from the United States if its territorial integrity was threatened. Later a group of American marine was landed at Beirut but played a passive role. The Council decided to send a three-man observers group (UNOGIL) assisted by military observers—which at peak strength totalled 600—to ensure that there was no infiltration of arms, personnel or material across the Syrian border. Lebanon was an interesting precedent "where elements of an external nature and elements of an internal nature have been mixed" for Dag Hammarskjold's later policy in the Congo.[12] UNOGIL had a calming effect when tension was at its height: later in the year an agreement was reached among all Arab States.

In West Iran, the presence of a small UN force made up entirely of troops from Pakistan had a good effect during the brief interregnum between Dutch and Indonesian jurisdiction when the territory was administered by the United Nations.

In contrast, the UN observer group in the Yemen that was sent in following the intervention of troops from the United Arab Republic and Saudi Arabia led to no very satisfactory results because of the failure of the invading forces to carry out their undertakings for disengagement.

(2) *UNEF: A Military Force to Separate Armies and Patrol Frontiers*

In the late autumn of 1956, the invasion of Egypt by Israeli forces and the combined British-French action that took the form of bomber attacks on Egyptian airfields and landings at Port Said presented the United Nations with the worst crisis it had experienced since the Korean War. Efforts by the Security Council to bring about a cease-fire were blocked by the negative votes of France and the United Kingdom, and the General Assembly was called into special emergency session under the terms of the *Uniting for Peace* resolution. On November 4, on a proposal by Canada's chief delegate, Mr. L. B. Pearson, the Secretary-General was asked to explore the possibilities of establishing an international force to supervise the disengagement of the Israeli, French and British Forces. On November 7, the resolution authorizing the force and setting the terms of reference was passed. Three days later the advance party of Danish and Norwegian troops were putting down at the UNEF staging area at the Capodichino Air Base near Naples.

In assembling the Force, Mr. Hammarskjold laid down two principles: (1) no troops would be contributed by the permanent members of the Security

---

[12] Memorandum of 12 August 1960 on Implementation of Security Council Resolution of 9 August 1960: UN Document S/4417/Add.6.

Council, and (2) no troops would be accepted from countries which by reason of their geographic position or other reasons had special interests in the region. By the time it had reached its operational strength of 6,000 men, UNEF included contingents from Brazil, Canada, Columbia, Denmark, Finland, India, Indonesia, Norway, Sweden and Yugoslavia. The Force Commander was Lt. Gen. E. L. M. Burns of Canada who had formely served as Chief of Staff of the United Nations Truce Supervision Organization in Jerusalem.

UNEF was established with the full agreement of the four governments concerned—Egypt, France, Israel and the United Kingdom. It entered Egypt with the consent of the Egyptian government which later concluded an agreement with the United Nations setting forth the rights and privileges of the force. The troop withdrawals were arranged on the basis negociations between the Secretary-General and the respective governments.

The conduct of the UNEF operation may be taken as a model of a successful international undertaking involving a military force. On November 15, 1956, the first blue-helmeted troops began to arrive at the Abu Suweir airfield near Ismailia, the mid-point on the Suez Canal. Within a few days a small group had interposed itself between the Egyptian and British-French troops near the northern end of the Canal and other units had moved into Port Said and Port Fuad for the purpose of easing tension in these occupied towns. UNEF extended its area of control as the British and French troops withdrew within narrowing perimeters until the last of them embarked on their ships on December 22. Meanwhile, other UNEF troops followed up the staged withdrawal of the Israeli forces eastward across the Sinai entering the Gaza strip on March 7.

Their original objective achieved, most of the UNEF units were used to man fixed positions along the Gaza Armistice Demarkation Line while mobile units of the Canadians and Yugoslavs patrolled the Egyptian-Israeli frontier from Rafah on the Mediterranean to the Gulf of Aqaba. A small UNEF unit remained at Sharm el Sheik at the tip of the Sinai peninsula to ensure freedom of access to the ports of Elaat and Aqaba. The UN Force has remained in position for the past seven years, national units being rotated to maintain the strength at about 5,000 men. The tranquillity of the region, normally endemic with feudal strife, is a testimony to the effectiveness of its presence.[13]

(3) *ONUC: A Military Force to Separate Armies and Maintain Order*

The United Nations Operation in the Congo—or ONUC, from the French designation—was originally modelled on UNEF. In both cases, an international force was charged with supervising the withdrawal of foreign troops. In both cases the force was recruited from small powers: in the case of ONUC, the core was composed of African units. In both cases, the force had no military objectives and was barred from using weapons except in self-defense. In both cases, the force came into being with the agreement of the parties to the dispute. In both cases, the force was forbidden to interfere in the internal affairs of the country.

But as the Congo operation developed, marked differences between the missions became apparent. UNEF operated in a desert, ONUC in a populated country. UNEF had few problems of internal order. ONUC had the task of attempting to preserve order in a vast country plagued with political conflicts,

---

[13] The best short documen on the Force and the nature of its mandate is the Report of the Secretary-General of October 9, 1958 (A/3943). General Burns has written the best account of the field operations in *Between Arab and Israeli*, mentioned above. Useful accounts of the role of the Secretary-General in relation to the Force are to be found in William R. Frye's *A United Nations Peace Force*, and Joseph P. Lash's *Dag Hammarskjold, Custodian of the Brushfire Peace.*

tribal fighting, civil war and the undiscipline conduct of leaderless national security forces. ONUC encountered its most serious difficulties in a part of the country that was beyond the jurisdiction of the central government and under the control of a secessionist régime that resented ONUC's presence. The political frame of reference, which in UNEF's case remained solid and reliable, in the case of ONUC disintegrated—a breach developing between the Congo government and the United Nations when the Secretary-General held fast to the force's mandate and refused to commit it to an armed attack on the Katanga authorities. The breakdown of the Central government left no legal authority with which to deal; the Katanga régime defied the UN request to rid itself of foreign officers and advisers who were dictating its policy, interrupted its lines of communication and attacked its personnel; and at UN headquarters the consensus of states that had launched the operation broke apart along lines parrallelling the lines of factional conflict within the Congo.

The problems of tactics, logistics and communications were infinitely greater in the Congo than they were in Egypt. A force of 20,000 was deployed over a territory as large as Western Europe in which almost all transport and communication facilities had broken down because of the flight of Belgian technicians at the time of the Congolese army mutiny. The organization of air transport was difficult because of the absence of airport controls and navigation aids, shortage of aircraft and maintenance facilities, and a diverse assortment of air- and ground-crew. The problem of logistics, serious enough under the circumstances, was greatly accentuated by the unavailability of stores and vehicles, the multiplicity of ration scales and the lack of trained logistics personnel. While a number of military and civilian staff had had previous experience in UN field operations, the operation suffered in its early stages from the haste with which the force had been put together and local commanders in widely scattered positions were left to their own resources.

In spite of these enormous difficulties, few of which had been encountered in the UNEF operation, the UN force in the Congo managed to fulfill its main tasks. The danger of wider international involvement was contained. A measure of internal order was preserved and the country saved from anarchy. Military officers and civilian officials acting as mediators assisted in the re-establishment of a legal government. Perhaps the greatest contribution of all was made by the Civilian Operations team which supervised the activities of hundreds of technical and professional experts who kept the public services running and prevented the collapse of economic life.[14]

III

IN A STATE OF READINESS

> It is an entirely different matter if governments in a position and willing to do so, would maintain contributions in a state of readiness so as to be able to meet possible demands from the United Nations. And it is an entirely different matter for the Organization itself to have a state of preparedness with considerable flexibility and in the hands of a qualified staff which can quickly and smoothly adjust their plans to a new situation and assist the Secretary-General in the crucially im-

[14] Descriptions of the UN Congo operation are to be found in *The UN in the Congo* by King Gordon and in *Peacekeeping by UN Forces* by Arthur Lee Burns and Nina Heathcote.

portant first stages of the execution of a decision by the main organs to set up a United Nations force, whatever its type or task.

Dag Hammarskjold: Report to the General Assembly
August 31, 1960

The peace-keeping operations of the United Nations during the past seventeen years have revealed an increased awareness of the need to stabilize critical situations in an age of poised nuclear power. In fact, the menace of nuclear war has downgraded the doctrine of collective security which contains the threat of punitive action against an aggressor. In a thermo-nuclear age the term "punitive" has lost much of its meaning,

The international community has moved away from comprehensive schemes of peace-enforcement to *ad hoc measures* for peace-supervision, associated with intensive political and diplomatic efforts to bring an immediate end to violence and then, through mediation and negotiation, to work out a long-term settlement.

The improvisation in mobilizing international forces has had certain advantages. The force has been flexible, adapted to the task at hand, and usually mounted with incredible speed, But the haste and lack of preparation have also made for confusion and have reduced efficiency. Valuable experience gained in UN operations has been dispersed among thousands of officers and men of some 40 nations or filed away on dusty shelves rather than applied in some new undertaking. Ever since the establishment of UNEF in 1956 there has been growing insistence that member nations should devise permanent arrangements to put international peace-keeping efforts on a more effective basis.

As early as 1948, Secretary-General Trygve Lie had suggested the formation of a permanent UN Guard of from 1,000 to 5,000 men. Later, during the Korean War, he advanced a much more ambitions plan for a United Nations Legion which would be a military force with considerable striking power. Neither idea received much support. A permanent force-in-being seemed politically unfeasible and unreasonably costly.

In an article in *Foreign Affairs* in April 1957, Mr. L. B. Pearson, in the course of an analysis of the organization and role of UNEF, brought forward the idea on which most of the future discussion was to centre. In terms of procedure it was related to the plan in Chapter VII of the Charter and the revised plan in the *Uniting for Peace* resolution. But its essential meaning was much more closely tied in with the practical experience in peace-keeping shared by UN members that had culminated in UNEF. There were two essential points in the scheme: 1) each member nation should earmark units in its regular armed forces for service in future UN peace-keeping operations; and 2) there should be a small military advisory group attached to the office of the Secretary-General to develop and co-ordinate plans for the effective utilization of this standby force.

This plan has received serious discussion in journals dealing with international affairs. It has been raised repeatedly during debates in the United Nations. It has been examined in its administrative, technical and military aspects by professional soldiers. New interest in the idea was awakened during the UN Congo operation in the course of which the bad effects of improvisation and lack of advance planning were clearly revealed. The Prime Minister of Canada advanced the proposal with greater urgency at the 18th Session of the General Assembly in 1963 and subsequently the Canadian Secretary of State for External Affairs has referred to the proposal as one to which the Canadian government is seriously committed.

In fact, the plan has begun to take practical form. Six countries, Canada, Denmark, Findland, Netherlands, Norway and Sweden, have already earmarked

units from their armed forces for international service and the specially trained Canadian unit, the 22nd Regiment, is now serving in Cyprus. A recent conference in Oslo attended by unofficial but highly qualified representatives of these six nations discussed the more general application of plans for the organization of a standby force. What follows is based on a study of various proposals that have been advanced for a permanent standby force, on discussions with officers who have served in UN field operations, and on the author's own experience in UNEF and ONUC.

THE REQUIREMENTS OF A PERMANENT STANDBY FORCE

1. *A Military Planning Staff*

Any intelligent thinking on a permanent international force on a standby basis must begin with the consideration of a headquarters Military Planning Staff. Acknowledgment of this principle is to be seen in the Charter provisions for a Military Staff Committee, in the Panel of Military Experts called for in the *Uniting for Peace* resolution, and in Mr. Pearson's proposal in his *Foreign Affairs* article of April 1957. It is further acknowledged in quotation from the late Dag Hammarskjold which heads this chapter.

The establishment of a Military Planning Staff would, in fact, be the institutionalization and expansion of the office of the Military Adviser to the Secretary-General that now exists. At the time of the UNEF operation, the Secretary-General appointed General Martola, a retired senior officer of the Finnish army, as his military adviser to assist him with the military problems arising out of the organization, maintenance and utilization of the Force. In the Congo operation, Major General Indar Jit Rikhye of the Indian Army, who had been Chief of Staff and Deputy Commander of UNEF, was appointed to a similar position. More recently, General Rikhye has been transferred to a permanent post as Military Adviser to the Secretary-General and is assisted by three staff officers from Canada, Brazil and Norway. There has therefore been some development in the conception of the role of Military Adviser from one closely associated with the military problems of a force-in-being to one concerned with problems that are likely to arise in situations in which the United Nations may become involved. The Military Adviser was consulted on the military aspects of the observer group in Yemen, the Supervisory force in West Irian, and the force in Cyprus.

A headquarters Military Planning Staff would therefore be a natural expansion of the present office of Military Adviser. It would work in close relationship with the Secretary-General, advise him on the military implications and requirements arising from the decisions taken by the principal United Nations organs, and constitute the co-ordinating link between the United Nations and the standby units earmarked for service in an international force.

We have already emphasized the necessary close association between the mandate of any United Nations Force and the political goals that are sought. It follows that there must be complete rapport and understanding between those who are concerned with the political objectives embodied in a Security Council or General Assembly resolution and those who are planning the military measures aimed at supporting the attainment of those goals. Col. Bjorn Egge, a military officer who served with ONUC in the Congo, puts it this way: "The essential principle would be that military action only represents an auxiliary means for the achievement of a non-military goal: the establishment of peace and order as a basis for carrying out the normal activities of a local community. The security forces should be regarded as an integral part of UN

action, and not as an isolated phenomenon. The military command must, therefore, be integrated with the civilian authority, and the military elements of the staff must be carefully adapted to the primary goals of the mission so that civilian and military activities of the U.N. may be co-ordinated in the area of operations."[15]

While Col. Egge is primarily concerned with problems of a field staff, the principle he is discussing applies with equal force to the headquarters Military Planning Staff.

From this basic principle comes a specific corrollary: the composition and functions of any U.N. force must be closely related to the role to which it is assigned. It would not be appropriate, for instance, to equip an observers group with bazookas or heavy arms. It might, however, be appropriate to assign them some helicopters as well as jeeps. But if a UN force was to carry out its mission in an area endemic with civil war or communal strife it might well require more formidable armour, particularly if it were given the task of preventing the spread of civil war or calming communal fighting. The decision taken by the Security Council on February 21, 1961 which authorized ONUC to use force if necessary to prevent civil war was not immediately reflected in changes in weapons and armour that the enlarged mandate might require—and in fact did require in September.

A headquarters Military Planning Staff is, therefore, a key factor in the development of earmarking units in the armed forces of member states for service with an international force. It is this that would mark off international forces in future operations from the improvised forces which have been put together in haste to meet a particular emergency.

2. *National Earmarked Units*

It may be assumed that an international force on a standby basis will take shape as a development out of practice which has already begun. The earmarked units in the armed forces of Canada, Denmark, Finland, Netherlands, Norway and Sweden are already being trained in tasks likely to be required in a future international assignment. A Bill to provide for the establishment of a standby force was introduced into the Swedish Parliament in March 1964. The Force would consist of some 1,600 men, the main part of which would comprise two battalions equipped for guard duty and the maintenance of order. In addition, there would be one technical unit equipped for the operation of communications and transport and an air transport unit with aircraft suitable for operation in a country with limited runways and airfield facilities. The standby force would also include personnel who could serve as staff officers and observers. The Bill also provides for the equipment of the force with small firearms and light supporting weapons and with the appropriate vehicles and communications equipment. The Introduction to the bill referred to negotiations which had been carried on among the Defence Ministers of Denmark, Norway and Sweden through a joint work group on standby UN forces. They may be considered as pioneers in a new effort to relate national defense plans to the requirements of preserving international peace and security.

The earmarking of national units, however, without reference to the plans of a headquarters Military Planning Staff is not likely to lead to satisfactory results. The Military Planning Staff will be concerned with assembling a

---

[15] Col. Bjorn Egge, *"Regional Command of the UN Force"*, Internasjonal Politikk, Oslo, February 1964, p. 89

balanced force to meet an anticipated emergency. The two major UN operations—UNEF and ONUC— were at the beginning far from balanced; they were desperately short of ancillary and supporting units. Nasser's refusal to accept the Queen's Own Rifles, as Gen. Burns himself admitted, turned out to be a blessing in disguise and Canada's contribution of engineers, signal units, supply and ordnance, a maintenance workshop, military hospital, and reconnaissance and transport aircraft were indispensable for the widely deployed operation over the Sinai desert. Later, Canada's reconnaissance squadron of light-armoured vehicles, suitable for desert work, filled a needed role in patrolling the Egyptian-Israeli frontier.

Up until Cyprus—and excepting Korea—it has become an established principle that UN forces would be drawn from the middle and small powers. While politically justifiable this had its technical disadvantages since the UN forces were deprived of the highly-developed resources of the big powers, except in the case of external airlift. Most of the nations that have contributed to a UN force are able to offer infantry battalions: very few are able to supply transport, communications, internal air transportation, and trained administrative personnel. In planning a well-balanced force for an anticipated emergency, the Military Planning Staff may have to request a higher proportion of administrative and supporting services from the more technically developed nations. Ideally, a national contingent offered to an international force will be balanced within its self—or will achieve a balance through association with other national contingents as in the case of the Scandinavian countries. The airlifting of the Canadian Twenty-Second Battalion to Cyprus in Canadian Hercules transport aircraft, with heavy equipment and stores following by sea transport, is an admirable arrangement—but an arrangement that few states can duplicate. It is quite likely, therefore, that special calls will have to be made on certain nations to add to or modify the components of their volunteered units in the interest of achieving a better balance in the international force.

Military experts who have given consideration to the task of assembling a balanced force from earmarked units in national armed forces have stressed the necessity of having at headquarters detailed information on supplies, equipment and personnel. The following is the sort of information that would be called for:

Detailed organization of unit
Number of personnel
Types of weapons
Types of vehicles
Load of ammunition
Supply of all kinds of spares
Preferable type of ration
Size of national allowance
Weight and cube of stores and equipment.
Equipment for various types of terrain and climate
Administrative and logistic capability included in the unit.

Every item in this inventory could be graphically footnoted by reference to some incident, serious or exasperating, tragic or comic, which in UN field operations arose from the lack of just specific information and the consequent lack of planning.

Quite apart from technical balance, the political composition of any force is important. The "mix" in UNEF was different from the "mix" in ONUC. The "mix" in Cyprus is different again. At present, the countries that are earmarking units for international service are all from Western Europe and North America—not a broad enough selection for the future missions that

may be required. But there are in all some forty nations that have contributed officers or contingents to UN peace-keeping operations. If the present voluntary base could be broadened to include most of these nations, not only would the requirements of geographical and political distribution be met but any future force could draw on a large reserve of trained personnel with valuable experience in international service.

3. *Training*

The kinds of duties required in a UN field operation are very different, in most cases, from those for which a soldier has been trained. The absence of military objectives, the role of strict neutrality, the ban on the use of arms except in self-defence all call for re-orientation in a soldier's attitude. It is a testimony to the character of the troops that have served with UNEF and UNOC, as well as on other UN missions, that there have been very few instances where self-restraint has broken down under severe provocation.

In many cases, the functions performed by an international force more closely resemble those of the police than the military. This is especially true in a country experiencing the breakdown of internal order or torn by civil war. Police training is usually not a part of military training but is essential for members of a standby force. Some have suggested that trained police would be more useful than a military force. In some situations this has proved true: the Nigerian police in Leopoldville contributed greatly to the restoration or order in that city and assisted in the training of Congolese police. But more often police duties will alternate with military duties and the UN soldier must have that military training that will equip him to act calmly and effectively in an emergency. The extra margin of military training and discipline is frequently the factor that prevents violence.

In the tasks of separating armies, supervising truce lines, or calming communal or tribal feuds, the UN soldier will frequently be called upon to exert his influence as mediator. This is different from the high-level mediation and conciliation conducted at UN headquarters or through the official Mediator. There are many cases in which an explosive situation has been brought under control through the coolness, good humour and common sense of a UN soldier. And this applies not only to high-ranking officers but to N.C.O.'s and enlisted men.

Training for UN service, therefore, is a special exercise. It should be carried out with some uniformity in all countries with standby troops, taking into account the special training that may be required for individual units. Instructors and lecturers can be drawn from veterans of UN service. An exchange of instructors among the contributing countries would be useful. Above all troops should be educated in the aims and purposes of the United Nations, in its relevant administrative procedures, in the significance of the UN's peace-keeping role.

It may seem too much to expect a soldier to make a quick transition from being a loyal member of a national army to being a member of an international force with loyalty to the international organization. It is, however, a significant fact that among all the problems faced by an internal force in the field the least have been those arising from differences or misunderstandings between soldiers of various national units. It may be that a soldier tends to be non-political. It may be that the training of a soldier produces a similar type of man, who can get along with other soldiers regardless of nationality, race or color. Often enough it seems that a soldier with a blue helmet faced with a peace-keeping job responds to the challenge of that role and finds common ground with others engaged in the same pursuit.

4. *Field Headquarters Staff*

Here is one of the most acute problems that has been faced by a UN force, hastily assembled to meet an emergency: the political requirements of speed usually outdistance the military necessities of adequate preparation and experienced direction. In some instances, the first components of a force have arrived in the area of operations before the commander and before even the nucleus of a field headquarters staff has arrived to brief the UN units on the special nature of their tasks.

A field headquarters staff should be international and broadly representative of the nations contributing units to the force. Too frequently, however, this political requirement has been met to the neglect of the more important requirement of choosing officers with specialized staff experience. The elementary task of translating a political resolution of the Security Council or General Assembly into clear directives for a field operation has sometimes been delayed or neglected simply because the few qualified officers in the "pick-up" team have been too overburdened with minute-to-minute chores to devote time to mapping out an over-all schedule of duties and responsibilities.

Preparations and planning for a standby force on a permanent basis must include careful planning of the composition of a field staff which at the outset can assume responsibility for the direction of the force as a whole.

The qualifications of the commander must be related to the defined tasks of the force and to the special problems that may be encountered in the course of the development of the operation. Except possibly in a situation where the tasks of the force are restricted to observers' duties, the commander should be a serior officer who has had command experience in active service. While normally the work of the force will entail no recourse to arms, the force must nevertheless be prepared to assume a military posture should a breakdown of law and order require firm action. A senior officer who has commanded troops in wartime is likely to anticipate a worsening situation and through his contingent commanders prepare for any emergencies that may arise. A UN commander must be a good manager: with the best of preparations a UN force is bound to encounter more complex problems than a national force. The commander must be qualified to plan, organize, co-ordinate and control. Above all a UN force commander must be a man who from previous experience and inner-conviction fully comprehends and is identified with the United Nation's approach to the problems of peace-keeping.

Previous experience with a UN operation is also an invaluable asset for an officer who is selected to serve on a UN Field Headquarters Staff. The most careful preparations and planning may lessen but will not entirely overcome the special difficulties of welding together a grouping of national components into a single integrated and efficient force. Logistics problems are accentuated by a wide variety of ration scales, vehicles, equipment, weapons and supplies. Transport and maintenance invariably pose more acute problems than in a national force of the same size. Movement control raises incredible difficulties. And above all, the combined military-civilian character of the operation, both in direction and servicing, is apt to be a source of bafflement and frustration for any who have not had previous experience of a similar operation at the administrative level. An urgent necessity for the Military Planning Staff is to prepare a roster of qualified staff personnel from the nations which up to now have supplied contingents and officers for international service.

Ideally, it would be most satisfactory to have a field staff in a state of semi-readiness which could be immediately activated when a decision was taken to send a force into a troubled area. But there are obvious difficulties in the way. In the first place, political considerations will in every case have some bearing on the components of the force and consequently on the composi-

tion of the staff. In the second place it might be difficult to assure that any particular officer could at short notice be released from responsibilities in his national service. There is, however, nothing to prevent staffing tables being drawn up, with alternates for each position, so that the difficulties heretofore encountered would be overcome at the very outset of an operation.

Since all UN field operations are under joint civilian-military administration, it is equally important that the civilian component be thoroughly qualified for its particular task. By now a vast body of experience has been gained and the United Nations Secretariat should be able to supply their most qualified administrators to carry their share of the joint staff load. What is chiefly required is improvement in the liaison and integrated co-ordination between military and civilian components. Here it would be useful to arrange prior consultations and seminars that bring together staff officers and civilians who have been tentatively assigned to future UN missions. A manual of established procedures, particularly relating to logistics and procurement, would be very useful both for military and civilians charged with responsibility in field administration.

5. *Global Transport Section*

The planning of air transport must be given priority in estimating the needs of any future United Nations force. The small and middle powers which normally may be counted on to contribute contingents to the force are usually lacking in adequate long-distance transport facilities. In the two previous major operations, UNEF and UNCO, most of the external airlift was provided by the U.S. Air Force, with supplemental assistance in a considerable amount from Canada, and in the case of the Congo, to a minor extent from the U.S.S.R.

While it is likely that the United States will continue to be willing to provide the aircraft for long-distance lifting of troops and supplies, there are political reasons why there should not be sole dependence on the major power of the West. It is, therefore, desirable that the headquarters Military Planning Staff should include a Global Transport Section which could prepare plans in advance for the transport by air—or by surface, where conditions permit—of the components of the prospective force from their home bases to the theatre of operations.

In terms of ready availability, there will be primary dependence on the great powers and Canada. Canada is one of the countries which might be called upon to provide an even greater contribution towards an external airlift than on previous occasions. It should also be possible to count on some assistance from commercial carriers. In the beginning on the UNEF operations, aircraft of SWISSAIR were used to lift troops from the staging area of Capodichino Airport to the Abu Suweir Base in Egypt.

Admittedly it will be more difficult to earmark air transport than ground units for a prospective UN force. But through consultations and negotiations some advance provision can be made for airlifting designated units into specified areas of operation. The degree of improvisation can be cut down and time, expense and confusion reduced to the minimum.

The problem of internal air transport is always likely to be an acute one. The normal integration between air and ground forces which characterizes national armies cannot be developed to the same extent in a UN operation where national contingents may not be greater than battalion strength. Advance planning, however, can reduce many of the problems which have been previously encountered, for example in the Congo operation.

In the Congo, the airport and navigational facilities, which had been highly developed by the Belgians prior to Independence, were suddenly de-activated following the army mutinies when most of the Belgian operators and technicians

left the country. An emergency program under the direction of a team from the International Civil Aviation Organization (ICAO) put a number of the key provincial airports back into operation. The UN Air Transport Command faced incredible difficulties owing to the lack of military aircraft, the diverse assortment of aircraft and aircrew contributed by the supporting countries, and the lack of adequate maintenance facilities and parts. The core of military aircraft had to be supplemented at considerable expense by commercial chartered aircraft. While these latter discharged their functions as efficiently as the unusual circumstances permitted, they were rendered inactive during the period of military action in Katanga when supplies and re-inforcements were urgently needed.

The problem of internal air transport must be taken into account, therefore, in any advance planning which aims at a balanced force. The size and composition of the airforce must be related to the size and composition of the ground forces and to the objectives of the operation. An assorted collection of aircraft and aircrew from a number of countries, lacking proper maintenance personnel and facilities, invites trouble. The same number of aircraft and aircrew contributed by a few countries, each contingent self-contained in its maintenance personnel and maintenance facilities, is infinitely more efficient. The policy being adopted by the Scandinavian countries—parallelling that already put into effect in regard to their ground forces—of providing a composite but fully integrated airforce unit might well be taken as a model for other groups of countries employing similar types of aircraft.

6. *Logistics*

Inevitably, the logistics problem is one that will always prove a headache for an international force. The standardization and rationalization that has been followed in the larger military coalitions is much more difficult in an international force.

The sources of the difficulties that have already been experienced include: multiplicity of ration scales, types of equipment, stores and weapons of the national contingents; lack of knowledge concerning the actual supplies and equipment accompanying each unit; unsatisfactory transport arrangements; the lack of trained logistics staff officers; the joint civilian-military control of requisition, procurement and distribution.

Two proposals, pointing in opposite directions, have been discussed. The first would call for a central stores depot which could be drawn on to meet the needs of any operation. This would at once make possible greater standardization and increase the ease of speedy integration in an international force. The difficulties it raises, however, are probably greater than the difficulties it solves. It would be costly and it is most unlikely that member nations would be willing to underwrite the initial expense. The location of the depot would be a problem. Lack of knowledge of the possible theatre of operations and the size, functions and composition of the prospective force would raise a multitude of unanswerable questions. However, some serious study could be given to the standardization of certain equipment—vehicles for instance—and advance arrangements might be made for drawing on existing army stores or other sources of procurement.

The other suggestion is that contingents should come fully equipped and self-sufficient within themselves, prepared to take care of their own logistics problems. A central logistics bureau would have only the responsibility of providing storage and transportation facilities within the area of operations. However, such a scheme would also raise many practical difficulties. Uniform standards between national units would be difficult to maintain. The smaller units could not operate economically on a self-sufficient basis and would have to be assisted by a central procurement service. Accounting procedures would present

serious problems if the United Nations—as at present in most operations—were responsible for the field costs. And instead of moving towards standardization, the system would lead to the greatest possible diversification—with resulting difficulties in replacement parts and maintenance.

There is, therefore, much to be said for the present systems of mixed civilian-military central control. The UN Office of Field Operations is responsible for all major procurement and works in close co-operation with the field headquarters military logistics branch—with the ordance and supply sections—which in turn keeps in close touch with contingents' needs.

Many of the present problems would be eased through the proposals that have already been advanced. The inventories called for from the contributing countries would provide the basis for estimating supplementary requirements. In UNEF and ONUC, basic ration scales were simplified and reduced to three or four—with "culinary adjuncts" taking care of national tastes. Provision for improved external and internal transport would better the system of distribution. Selection of specialized personnel for field headquaters staff would improve administration. And the establishment of standard logistic procedures with advance consultation between military and civilian administrative personnel would cut down on confusion and promote efficiency.

7. *Standard Orders and Operating Procedures*

An important function of the headquaters Military Training Staff would be to draw up a Manual of Standard Orders and Operating Procedures for an international force. These would be based closely on those governing military practice in the countries contributing contingents. A beginning has already been made in the present office of the Military Adviser.

A breakdown in communication is a primary cause of problem in the smooth functioning of an operation or the prompt execution of commands. A Standard Manual would provide a solid framework of communication within which all units could operate. There would still be certain language problems to overcome although experience in UN forces has proved that English and French are normally adequate for headquarters and inter-contingent communication. There is, however, the not unexceptional case of the Air Command in Leopoldville which sent a message to the UN Air Officer in Stanleyville. The message went through the Canadian Signals Squadron to the English-speaking Ethiopian at the transmitter who translated it into Amharic, passed it in Morse to the station in Stanleyville, where a French-speaking Ethiopian translated it into French and delivered it to the Norwegian Air Officer who was fluent in French and English. Some of the nuances in the original message were lost!

8. *Staff Training Centre*

We have already discussed the training of national units earmarked for international service. Of perhaps greater importance is the training of staff officers for Field Headquarters Staffs and for the headquarters Military Planning Staff.

Some of this training can be given at national Staff Colleges where parts of the curriculum could be geared to the requirements for service in an international force. But what would be of vital importance would be a Staff Training Centre, preferably at UN headquarters—an international equivalent of the Imperial Defense College—to provide a staff course at senior level. Most of those attending the staff course would have had previous UN field experience. The Staff Training Centre would be open to both civilians and military. It would provide opportunity for a close study of problems we have touched on in this survey—political aspects of UN peace-keeping operations, the special

tasks of a UN force, an integrated logistics program, problems of external and internal air transport, problems of command and inter-contingent relations. Those attending courses at the Centre would have access to senior United Nations officials dealing with political problems as well as to those dealing with administrative and procurement questions. For the first time, such a centre would provide an opportunity for working out the basic problems of an integrated force, serving an international purpose, and specially trained for international assignments.

IV.

The Feasibility of a Standby Force

> Yes. In the sort of world in which we are living today I think we have to co-operate with like-minded nations in heading off or preventing the outbreak of a major thermo-nuclear war. Lieutenant-General Guy Simonds Before Special Committee on Defence, October 17, 1963.

From a technical point of view, there are no serious obstacles in the way of an international force on a standby basis. In fact, there is everything to be said for taking measures that would institutionalize and render more effective some of the practices that have developed during the co-operative experiences in peace-keeping in which Canada, along with a number of other nations, have participated in the course of the past seventeen years.

The problems that are likely to be faced are political problems. There is the plain fact that up to now efforts at establishing a permanent force have been unsuccessful. Some of the grounds for objection have been related to the very nature of the collective security system which was outlined in the Charter of the United Nations. We have noted that there has been a movement away from some of these original concepts on which the Charter was based. Some of the objections have been directed against the idea of a permanent force-in-being, a concept that has not been seriously advocated as an immediate possibility for some time and which differs essentially from the standby arrangements that we have been considering. The standby proposals under the *Uniting for Peace* resolution were advanced against the background of the Korean War and long before the United Nations had had the experience of a new kind of peace-keeping operation as exemplified in UNEF and ONUC. The question then is whether on the basis of practical experience and in a more favorable international climate political support could be found for permanent arrangements for a standby force.

There are several reasons for believing that today there is a greater chance of favorable response to such suggestions. The nuclear stalemate as well as the awesome potential of nuclear war have directed attention to the increasing need to deal effectively with local disturbances which hold the danger of escalating into major conflicts. The effectiveness of UN quasi-military operations to contain local brushfire wars has won substantial support to the idea of an international force, a fact demonstrated to the extent of voluntary contributions to the UN forces in the Middle East and the Congo. The present developments in earmarking units in national armed forces for international service and the modest extension of the office of the UN Military Adviser suggest significant trends in thinking. Plans for an international force on a standby basis involve no essentially new principle and follow directly from the activities which have had the support of the majority of nations

members of the United Nations. Admittedly, there is resistance on the part of certain nations to any departures from or advances beyond the specific requirements of the UN Charter. But even this resistance has not prevented action in particular emergency situations. There is, therefore, some ground for hoping that advocacy of permanent arrangements for a standby force would receive considerable support.

Possibly more serious objections would arise from the financial implications of such arrangements. Stated bluntly, the argument would be posed: is it worthwhile planning for future UN forces when the United Nations has reached the verge of bankruptcy as the result of its last two major operations?

The financial question is a serious one. But it has to be faced regardless of whether it is determined to carry out advance arrangements to meet future crises. The additional expenses that would be entailed in such plans as have been outlined would be insignificant. The earmarked forces would remain in the national armed forces of member nations and the costs of establishing a Military Planning Staff and a Staff Training Centre would not be large. It has been demonstrated that if an emergency is serious enough some form of international action is likely to be taken. And if the costs of such undertakings, which are minute in comparison with national defense expenditure, are considered as a block to needed peace-keeping operations, then international peace and security is indeed resting on a very flimsy foundation.

The argument can well be made on the other side. The advance planning and preparations which have been suggested would result in a saving in costs since much of the extravagance in past operations has been a direct result of the improvisation necessary to get a force quickly into the field and maintain it there. It may even be stated that the solution of the United Nations present financial crisis must be related to responsible and intelligent provision for the future United Nations operations that are bound to come. Planning for personnel, equipment, logistics and the training and mobilization of an effective force are part of the same process. The solution will be reached when it is realized that planning for the maintenance of international peace and security is part of the defense policy of all nations.

SELECTED BIBLIOGRAPHY

Lester B. Pearson, *Force for U.N.* (*Foreign Affairs,* April 1957)

Hamilton Fish Armstrong, *The U.N. Experience in Gaza,* (*Foreign Affairs,* July 1957)

William R. Frye, *A United Nations Peace Force,* (Oceana Publications, 1957)

Inis L. Claude, *The United Nations and the Use of Force,* (Carnegie Endowment for International Peace, 1961)

Joseph P. Lash, Dag Hammarskjold, *Custodian of the Brush-fire Peace,* (Doubleday, 1961)

Lieut. Gen. E.L.M. Burns, *Between Arab and Israeli,* (Clarke, Irwin, 1962)

King Gordon, *The U.N. in the Congo,* (Carnegie Endowment for International Peace, 1962)

International Force—A Symposium, (*International Organization,* Spring 1962) Contributions by: Herbert Nicholas, Brian E. Urquhart, Edward W. Bowman, James E. Fanning, Lincoln P. Bloomfield, Hans J. Morgenthau, Stanley Hoffman, Henry V. Dicks, Thomas C. Schelling.

Arthur Lee Burns and Nina Heathcote, *Peace-keeping by U.N. Forces,* (Princeton Studies on World Politics, Frederick A. Praeger, 1963)

Internasjonal Politikk, (Olso, 1964)

A symposium in preparation for the Oslo Conference in February 1964 on a U.N. standby Peace Force.

Contributors: Olav Stokke, Jens Svensen, Lt. Col. G.C. Bowitz, Bjorn Egge, Abjrn Eide, Knut Midgaard, Lt. Gen. Sean McEoin.

A COMPARISON OF DEFENCE EXPENDITURES IN CANADA AND CERTAIN OTHER COUNTRIES

By: Department of National Defence

Preface

1. In seeking statistics for a comparison of this nature, a number of problems are encountered, ranging from simple non-availability to much more complicated questions concerning composition of published figures and the methods by which they were calculated. Even when figures are willingly provided to such international organizations as the UN or NATO, their exactitude for comparative purposes may be tempered by many considerations or by simple problems of inexperience in some of the less developed nations. When they are not provided at all, as in the case of the east European nations, the difficulties are inevitably much greater. A slightly more detailed discussion of some of these problems is included in the paper. Suffice it to emphasize here that, while these figures are useful guides to orders of magnitude, they are definitely not susceptible to exact comparisons between one country and another.

Introduction

2. The selection of countries in this comparison has not been entirely arbitrary. Useful purposes are served by setting the Canadian figures in the context of our allies in NATO. Similarly, there is interest in the comparison of Canadian figures with the remainder of the major countries in the Commonwealth. The countries which are the chief motivation of a continued high level of defence expenditure in Canada, are the USSR and the European Satellites. Among these nations, Bulgaria, Roumania and Albania were not considered because of the much more primitive nature of their economies vis-a-vis the more industrialized northern Satellites, Poland, East Germany and Czechoslovakia. Finally, Sweden and Switzerland, as the undoubted leaders of the economically mature neutrals and Mexico, as the other neighbour of the United States, were included.

3. In order to give a year by year comparison over a period of the last decade, so many statistical difficulties are evoked that the result is not profitable. The latest year for which information is available for most of the selected countries is 1962. For comparative purposes, the earlier year of 1953 was chosen largely because at this time the budgets of many countries were close to a peak, following the Korean war, and in the "West" at any rate, have shown a more or less steadily declining trend since that time.

4. The total defence expenditures of the nations included in the attached tables reflect, evidently, different levels of wealth and population, and corresponding differences in military capacity and ambition. These countries may usefully be considered in four groups, between which there are significant breaks in military expenditure levels. First, of course, are the two "superpowers", the USA, and the USSR, whose defence expenditures in 1962 were 52 and 26 billion dollars respectively. Measured in American dollars (and ignoring for the moment the problems of exchange rates) this level of American expenditure was indeed twice as high as that of the Soviet Union but both outlays are so much larger than all other countries that they constitute a group—a unique group of continental powers wielding a comprehensive armory of strategic

weapons, and peacetime military establishments numbered in millions (only the People's Republic of China can match these two in point of numbers, and, of course, that country has not a comparable level of equipment). By comparison, the important European nations, which constitue our second group, spend between 4-5 billion American dollars on defence, a level only one-fifth to one-tenth as high as the two great powers. This difference is greater than the contrast in wealth and population, and reflects differences in military policy, as well as relative capacity to sustain expenditures. The three countries included are the United Kingdom, France and the Federal Republic of Germany. Of these three, the first two have limited strategic and atomic weapons, and sustain some military responsibilities outside strictly domestic defence requirements. Of course, all three are important NATO members and have concomitant responsibilities. But none of them sustains or could sustain a world-wide military capacity of the comprehensive nature of the two great powers. The third group of powers is more heterogeneous. We may consider it as being constituted by those countries who expend less than half the amount on defence as the three European powers, but a minimum of 500 million American dollars. Canada falls into this group. It also includes Italy, the Netherlands, Poland, Czechoslovakia, India, Sweden and Australia. These countries have a limited modern military capacity—in most cases devoted primarily to purely local defence requirements—and sometimes sustained completely outside military alliances (Sweden and India are the outstanding examples). The other countries in the group, however, do participate, in a limited way, in military alliances, and make contributions to regional as well as local defence. Finally, there are a great many countries whose defence expenditures scarcely exceed, or even fall short of, the requirements of internal security, and whose total outlays amount to a few hundred million dollars or less. Some of these countries maintain a small but efficient force (Switzerland and New Zealand) whose modesty merely reflects a very small population. Mexico's low level of expenditures, on the other hand, may be taken as a sensible reaction to a relatively low per capita income and the presence of powerful neighbours.

5. The use of total expenditures as an index to compare the relative size of military establishments, is however, subject to fairly serious modifications. Difference in relative costs of manpower and equipment are not adequately reflected by official exchange rates. A particularly important instance is the relatively low *financial* cost of manpower and equipment in the Soviet Union by comparison with the United States, a difference which considerably modifies the impression given by comparing the two countries' outlays measured in American dollars. Some countries make effective use of conscription and reserve training systems, enabling them to devote a relatively high proportion of total outlay to equipment (Sweden and Switzerland). Again, a low level of per capita national income enables a country to maintain a commensurately low pay level and a relatively high number of men in uniform (given the level of defence expenditures). Mexico is an example. In addition, except for the NATO nations who have agreed upon a common definition, there are considerable differences in the definition of military expenditures, and the content of the category may be more or less comprehensive. It is probable that the total defence expenditures of the Soviet Union (as defined by American budgetary categories) are considerably larger than the sums reported under that head by the Soviet Government.

6. It is notable that the relative burden of defence expenditures (as a proportion of GNP) declines *pari passu* with total expenditures, in most cases. In 1962, the two great powers expended about 10% of their total resources on defence, the major European powers 5-5.6% and the middle group of

powers 3-5%. (Portugal, with defence expenditures reflecting costly military operations abroad, spent nearly 8% of its GNP, and India, though falling into the middle powers group in point of total expenditure, spent only 2.2% of its GNP on defence, reflecting the exigencies of extreme poverty. Such particular circumstances do not alter the general point of this paragraph.) In general the smaller nations are altogether excluded by technical problems of scale from certain kinds of expenditure. Evidently, most modern strategic weapons, even in minimum quantities, exceed the total resources available for defence expenditure in all countries except the great powers. Even the relatively modest programmes of the European NATO countries impose difficult choices on the military budgets of those countries. Thus, the progressive limitation on the kinds of military tasks which smaller countries can undertake tends to reduce the relative as well as the absolute level of military expenditures of these nations, whether in terms of proportion of GNP or total outlays per head.

7. The development of total expenditures since the end of the Korean War (in current dollars) for nearly all the countries concerned has increased substantially, though the burden of defence (again, considered in proportion to total income) has declined. The most dramatic increase in expenditure by a major power has been made by Western Germany (an increase from $1.5 billion dollars in 1953, in the first stages of rearmament, to $4.3 billion in 1962). Even in this case, however, thanks of course to a very rapid expansion of the economy, defence expenditures as a proportion of GNP have declined. Portugal's rapid expansion of expenditures, outpacing the growth of the economy, is unique in NATO, though of course, its absolute extent remains small. Among the Commonwealth and non-aligned countries, only India's outlays have similarly increased in relation to GNP. The absolute as well as relative decline of dollar expenditures in Canada is the only case among the countries considered, whether in NATO, Commonwealth or non-aligned countries. In respect to the effect on the military establishment again, the rate of growth or decline of dollar expenditures is an imperfect measure. The various countries have experienced different rates of inflation, and several countries have revalued or devalued their currencies with respect to the American dollar. France, Italy and the UK are important countries in NATO whose total increase in defence expenditures since 1953 is seriously overstated as a result of inflation. Among important Commonwealth and non-aligned countries, Australia and Sweden have experienced inflation to a significant extent. Of course, scarcely any country, including Canada, has entirely escaped a measure of inflation over the last decade, and the proportion of GNP expended on defence is seldom seriously affected by the progress of inflation.

TABLE I

NATO COUNTRIES

(Ranked by % GNP Expended on Defence in 1962)

Country	Population (millions) (mid-year)		Gross National Product Total (bil. current US dollars)		Gross National Product Per caput US dollars		Defence Expenditures Total (bil. current US dollars)		Defence Expenditures As percent of GNP		Defence Expenditures Per caput US dollars	
	1953	1962	1953	1962	1953	1962	1953	1962	1953	1962	1953	1962
U.S.A.	159.6	186.6	334.6	505.4	2,906	2,708	49.377	52.392	14.76	10.4	309	281
Portugal	8.6	9.0	1.51	2.518	176	280	.069	.1998	4.6	7.93	8	22
Britain	50.2	53.4	41.75	69.885	832	1,309	4.71	5.0784	11.3	7.3	94	95
France	43.9	46.9	35.45	61.091	808	1,303	3.88	4.3467	10.9	7.1	88	93
Turkey	22.5	29.4	5.46	5.572	243	190	.295	.3311	5.4	5.9	13	11
West Germany	49.0	54.8	29.53	76.493	603	1,396	1.475	4.3081	5.0	5.6	30	79
CANADA	14.8	18.6	22.1	33.254	1,493	1,788	1.99	1.7154	9.0	5.2	135	92
Netherlands	10.5	11.8	5.67	11.936	540	1,012	.350	.6039	6.2	5.1	33	51
Greece	7.8	8.5	1,49	3.438	191	404	.091	.170	6.1	4.9	12	20
Norway	3.4	3.6	2.63	4.722	774	1,312	.149	.1919	5.7	4.1	44	53
Italy	48.1	50.2	16.8	34.709	349	691	.768	1.3773	4.6	4.0	16	27
Belgium	8.8	9.2	8.0	11.310	909	1,229	.396	.4222	5.0	3.7	45	46
Denmark	4.4	4.7	3.45	6.472	784	1,377	.129	.2245	3.7	3.5	29	48
Luxembourg	.3	.3	.304	.464	1,013	1,547	.01	.0071	3.3	1.5	33	24

TABLE II

COMMONWEALTH AND OTHER COUNTRIES
(Ranked by % GNP Expended on Defence in 1962)

Country	Population (millions) (mid-year)		Gross National Product Total (bil. current US dollars)		Gross National Product Per caput US dollars		Defence Expenditures Total (bil. current US dollars)		Defence Expenditures As percent of GNP		Defence Expenditures Per caput US dollars	
	1953	1962	1953	1962	1953	1962	1953	1962	1953	1962	1953	1962
Britain	50.2	53.4	41.75	69.885	832	1,309	4.71	5.0784	11.3	7.3	94	95
CANADA	14.8	18.6	22.1	33.254	1,493	1,788	1.99	1.7154	9.0	5.2	135	92
Sweden	7.2	7.6	6.48	14.5	900	1,907	.400	.592	6.2	4.1	56	78
Pakistan	80.1	106.0	N.A.	7.0	N.A.	66	N.A.	.214	N.A.	3.1	N.A.	2
Australia	8.8	10.7	10.04	16.1	1,141	1,504	.38	.476	3.8	3.0	43	44
Switzerland	4.9	5.6	5.78	10.6	1,180	1,892	N.A.	.259	N.A.	2.4	N.A.	46
India	372.0	449.0	24.08	30.7	65	68	.438	.688	1.8	2.2	1.2	1.5
New Zealand	2.0	2.5	2.33	4.0	1,165	1,600	.078	.078	3.3	2.0	39	31
South Africa	13.1	16.5	4.77	8.3	364	503	N.A.	.1	N.A.	1.2	N.A.	6
Mexico	28.1	37.2	4.7	14.2	167	382	.032	.101	6.2	.7	1.1	2.7

N.A. not available

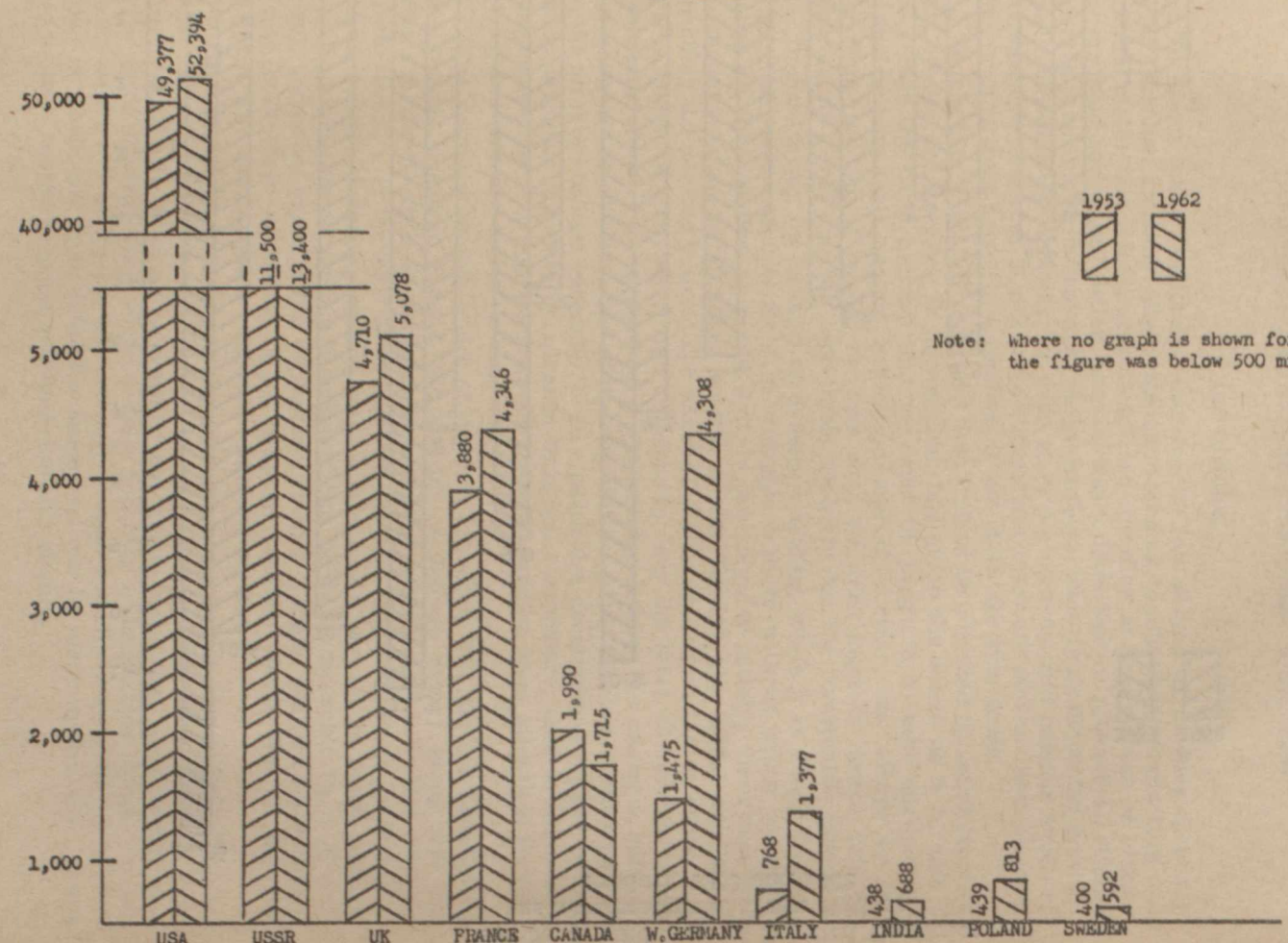
TABLE III

USSR, SELECTED EASTERN EUROPEAN COUNTRIES AND CANADA[3]
(Ranked by % GNP Expended on Defence in 1962)

Country	Population (millions) (mid-year)		Gross National Product: Total (bil. current US dollars)		Gross National Product: Per caput US dollars		Defence Expenditures: Total (bil. current US dollars)		Defence Expenditures: As percent of GNP		Defence Expenditures: Per caput US dollars	
	1953	1962	1953	1962	1953	1962	1953	1962	1953	1962	1953	1962
USSR[2]	187.9	221.5	114.5	255	609	1,150	11.5	13.4	N.A.	10.2[4]	N.A.	117[4]
CANADA	14.8	18.6	22.1	33.254	1,493	1,788	1.99	1.7154	9.0	5.2	135	92
Czechoslovakia	12.7	13.9	11.1	20	870	1,439	.418	.775	3.8	6.9	33	56
Poland	25.8	30.3	12.9	25	500	969	.439	.813	3.4	6.3	17	27
East Germany	18.3	17.2	12.5	26	683	1,420	N.A.[1]	.238	N.A.	1.9	N.A.	14

[1] For East Germany there are no official military expenditures before 1956.
[2] USSR 1953 figures adjusted for the currency revaluation to make them comparable to the 1962 dollar values. USSR defence expenditures in total are estimated to be considerably higher than the budget appropriations recorded here.
[3] Gross national products of Eastern European countries are estimates and not official statistics.
[4] Adjusted for expenditures excluded from budgetary appropriations.

Defence Expenditures of Selected Countries in 1953 and 1962, in millions of US dollars.



Note: where no graph is shown for 1953, the figure was below 500 million dollars

Defence Expenditures of Selected Countries as a percentage of Gross National Product, 1953 and 1962

DEFENCE EXPENDITURE AND ITS INFLUENCE ON THE CANADIAN ECONOMY

By: Department of Defence Production, April, 1964

I Introduction

There are many conflicting views on the role played by defence spending in the Canadian economy. Much misunderstanding is caused by overstating one or more of the many influences of defence spending at the expense of others. For example, such spending has been variously described as: a beneficial stimulant; the prime mover of research; the major factor underlying industrial growth; the lifeblood of the economy; or even as an uneconomic and ruinous waste of irreplaceable resources. All of these things, and more are now or have at some time or other been true—in a relative, if not in an absolute sense.

To take the "wasteful" argument first, it must be admitted on social grounds that all defence spending is undesirable. But given the world as it is, and if we accept the basic premise that we must be prepared to take our part in defending ourselves against aggression and if, further, we adhere to the Canadian tradition of paying our own way, we must logically accept defence spending as a more or less regrettable necessity for the foreseeable future.

In considering the benefits of defence spending, while it is wrong to consider it as an essential element in economic activity without which we could not exist, there can be no doubt that, in our complex society, these expenditures have many ramifications which go far beyond the initial results of spending the defence budget. The effect of such spending on the economy as a whole cannot be overlooked, and decisions to vary the level, the direction and the timing of such expenditures are not to be taken lightly. For example, defence spending can, to cite but a few of its possibilities, provide an important stimulus to the level of business generally, or in a particular geographical region; reduce unemployment; maintain or advance technical competence, lead to important new inventions and improvements in the non-defence area; stimulate foreign trade, and increase capital investment.

The actual economic effect of defence spending will depend broadly on the general economic climate, the amount of defence money going into the economy, the direction of such spending, and the suddenness with which changes in the direction or the level of such spending occur. With respect to general economic climate, defence spending may, within limits, expand an under-utilized or stagnant situation, sustain a declining one, or do considerable harm if suddenly forced on top of a full expanded economy. Canada has had some experience with these variations. What happened during World War II and the Korean War demonstrates two quite different results.

This paper proposes only to describe in general terms some of the influences that defence spending has exerted on the Canadian economy in the recent past; to indicate its effect on some of our major industries, and to point to a few grave problems with which defence spending is inseparably linked. Certain conclusions will be drawn, but are only offered with the important reservation that no absolutely final, definitive judgments can be made in this area, where so much is subject to great and unforeseeable change.

II Influence On The General Level Of Business

Consideration of the influence of defence expenditures on the general level of business is best approached by looking at what occurred during four time periods. These are 1939 to 1945, 1946 to 1949, 1950 to 1954 and the years 1955 to date. In the first period, the tremendous volume of spending, reaching more than a third of gross national product in 1944, was associated with World War II. Spending raised business activity from levels of under-employment to a place where resources were in very short supply and prepared the ground for much of the post-war period of expansion and inflation. In the second period expenditures were of relatively little importance and the economy stood at high levels based on civilian demand. In the third period expenditures associated with the Korean War and the defence build-up were superimposed on an economy operating at a high level. They combined with other expansionary forces to create strong inflationary tendencies and to complicate Canada's balance of payments problems. In the years since 1955, although defence expenditures have been declining generally they often added an element of buoyancy in a situation where the general rate of economic growth was slower than in the earlier years. 1939-1945—In September 1939, Canada was still suffering from the Great Depression of the 1930's. Unemployment was estimated at no less than 11.4 per cent of the labour force. Gross national product stood at about 5.6 billion and there is evidence that considerable excess plant capacity existed. The problem was to mobilize these under-employed resources and set them to work to satisfy military as well as mounting civilian demands. In spite of the rapid increase in defence expenditure, it was not until late 1941 that the slack was taken up, and serious competition appeared between the needs of the armed forces and the demands of the civilian sector.

A new phase of the war economy began in 1942. By that time resources were fully employed and further increases in output for war purposes meant diverting resources for civilian needs. In 1944, government expenditures reached $5 billion, about 42 per cent of the nation's output, as contrasted with about 12 per cent in 1939. Civilian employment outside of agriculture was up by about 600 thousand over 1939, while there were 780 thousand in the armed services compared with only nine thousand at the outbreak of the war. Inflation was controlled mainly by diverting resources from business investment and by encouraging huge savings by consumers, as well as by direct price control. 1946-1949—While government expenditure was reduced sharply as the war drew to a close, accumulated civilian demand, both domestic and foreign, began to exert a strong influence. Gross national product in 1945, at $11.8 billion, was down only slightly from that of 1944. Between 1946 and 1949, defence expenditures remained small. At the low point reached in 1947 they amounted to about $200 million, a mere 1.7 per cent of gross national product.

Accumulated savings and the enormous pent-up demand, coupled with the needs of overseas countries whose industries had been destroyed by wartime operations, continued to carry the Canadian economy along at a high level. The period was one of heavy investment in plant and equipment and extensive use of credit. Demand far outstripped supply, putting strong upward pressure on Canadian prices. Hundreds of thousands of ex-servicemen were reintegrated into civilian life with unexpected ease. By 1949, with supply catching up to demand, gross national product had reached $16.3 billion and unemployment stood at 2.8 per cent of the labour force. 1950-1954—When the Korean War broke out in 1950, the situation was in marked contract to 1939 as very little slack existed in the economic system. Accordingly, the effort to re-equip for defence purposes, which by 1953 still accounted for only 7.6 per cent of gross national product placed severe strains on the economy. Prices began to rise almost with the outbreak of the war. The federal government

again had to introduce measures to divert scarce resources to defence. Although the situation was stabilized sufficiently by 1952 to allow many controls to be relaxed, heavy demand continued throughout this period. This related to direct defence expenditures, business investment in plant, much of which was for defence purposes, and continued high levels of domestic consumption and exports.

The close of the Korean War, and the consequent reduction in defence expenditures both here and abroad, was associated with one of the few periods of economic decline in the North American economy since 1939. The year 1954 was one of mild contraction in Canada. Gross national product, having reached $25 billion in 1953, dropped slightly to $24.87 billion the following year. Defence spending shaded off to 6.9 per cent of gross national product. Unemployment rose to 4.3 per cent of the labour force reflecting the general decline in business conditions. 1955-1963—In the period, spending on defence contributed decreasingly to the upward movement of business activity. Between 1955-1963 defence fell gradually from 6.5 per cent to 4.2 per cent of gross national product. In the years immediately following the 1954 recession the Canadian economy moved ahead rapidly largely as a result of the impetus provided by large scale business and government investment in capital assets. High personal incomes and a heavy backlog of housing needs initiated a high level of residential construction. In the latter years of the decade the rate of growth slowed somewhat in keeping with reduced activity in North America. In these latter years defence spending probably contributed an element of buoyancy in a situation of easing economic activity.

In summarizing the effect of defence spending on the general level of business in Canada in the past 25 years, it is difficult to avoid the conclusion that such spending has not only been occasionally of overwhelming importance, as in periods of actual warfare, but also has practically always been of some importance at other times in either preventing or cushioning the effect of a decline or inducing a mild increase in business activity. The only period when little impact was registered, the immediate postwar area, was one characterized by a quite extraordinary combination of circumstances wherein war-created shortages at home and abroad were associated with great purchasing power in the hands of consumers, and a war-swollen capacity to produce on the part of the manufacturers.

III. DEFENCE SPENDING AND INDUSTRY

From the standpoint of industrial development, World War II was probably one of the most important periods in Canadian history. It was during the war years that this country emerged from its traditional position as a supplier of basic materials to become an industrialized state. The record of what was accomplished is impressive. Existing industry was converted and expanded, and many new industries were established. In a remarkably short time, Canada produced a large volume of complex war goods while at the same time sharply increasing the already large output of basic materials. The following quotation graphically depicts the extent of the war production effort:

> From the automotive plants came over 700,000 mechanical transport vehicles and more than 50,000 armoured fighting vehicles; field, anti-aircraft and naval guns were produced to the number of more than 40,000; more than 1,700,000 small arms were manufactured; ammunitions, chemicals and explosives were produced in astronomical figures. From shipyards came escort ships, minesweepers, landing craft and cargo vessels; from aircraft factories combat, patrol and trainer aircraft. Instruments and signals equipment were produced having a value of $551,000,000. The output of steel, coal, lumber, metals and basic materials

was substantially increased, the output of aluminum became greater than the peacetime production of the entire world. From the general manufacturing industry came $1,558,000,000 worth of food and furnishings for military establishments and personal equipment for the services.[1]

Something of the extent of this industrial growth is illustrated by the data in Appendix A—*Indexes of Real Domestic Product for Selected Canadian Industries*. In this Appendix the Indexes are based on 1949 = 100. It will be noted that total gross domestic product increased from 60.2 in 1939 to 103.0 in 1944, the peak year of output. The increase occurred largely in the manufacturing sector, and within that again, mainly in the durable goods industries. Some of these increases are quite remarkable. For example, the output of iron and steel products trebled, as did that of electrical apparatus and supplies (including electronics). The output of the transportation equipment industry, (including aircraft and ship-building) increased no less than six-fold.

Again defence expenditures influenced industrial growth during the 1955's and 1960's. Following the heightening tension in Europe and the start of the Korean War it became apparent that a defence preparedness program would be needed. Apart from the direct impact of defence orders for equipment and services the Canadian Government gave assistance to defence and defence supporting industries in order to build up productive capacity.

Among the programs employed were capital assitance and accelerated depreciation. Standby Crown-owned defence assets were procured and have been maintained and premiums allowed to secure Canadian produced goods. In the 1960's, following major decisions to participate with allies in production and development sharing programs considerable efforts were directed to establishing sources of component parts, competitive production capacity and to encourage research development.

Among the large Canadian manufacturing industries, aircraft, ship-building, and electronics have continued to be affected substantially by defence spending. The effect of such spending on the aircraft and shipbuilding industries is examined hereunder by an analysis of size, employment, and value of output as a function of annual expenditures against prime contracts for defence purposes. The electronics industry is discussed in more general terms.

Aircraft and Parts

The Canadian aircraft and parts industry, having reached a considerable size in World War II, declined in the immediate postwar era, but experienced a revival as a result of the Korean War and the general defence build-up in the 1950's. A high proportion of the industry's business represents defence. In 1950 the industry comprised 15 establishments, employing about 10,500. Factory shipments amounted to about $55 million.

By 1955, this industry had more than trebled in size. It then embraced 52 establishments with 33,000 employees engaged in turning out nearly $354 million worth of goods and services. In that year, expenditures on prime contracts under the aircraft programme amounted to no less than $448 million. For more recent years, the equivalent statistics for shipments are at roughly comparable levels. During 1961 and 1962, for example, annual shipments amounted to about $304 million and $352 million respectively. Defence spending under the aircraft programme in the same two years amounted to $231 million and $244 million, emphasizing the strong reliance of this industry on defence procurement. Aside from some commercial repair work, the production of reciprocating engines, and the construction of a few types of light aircraft, the industry is very closely tied to defence sales, both domestic and foreign.

[1] Page 7, Volume I, Kennedy, J. de N; *History of the Department of Munitions and Supply Canada in the Second World War.*

It should be emphasized in connection with this industry that a considerable proportion of the defence work done has been for foreign sources, especially the United States. Sales of equipment in that market, stimulated in recent years by Defence Production Sharing arrangements, have given support to the industry despite reduced levels of Canadian procurement.

Shipbuilding

In the shipbuilding industry, defence spending has represented a somewhat smaller percentage of total business, for two reasons. First, the major firms in the industry often produce a range of products for sale to a more diversified market than is the case for aircraft and parts manufacturers. Secondly, although non-defence work has been relatively hard to get the industry has still managed to acquire some volume of new non-defence construction as well as commercial repair work.

Nevertheless, defence spending has been of great importance to the industry. Factory shipments by 79 establishments employing over 22,500 workers amounted to approximately $183 million in 1953. Defence spending in the same year was valued at about $99 million. In 1955, 70 establishments with 16,800 employees shipped $134 million worth of goods. Defence outlays for the year were $87 million. In 1961, shipments stood at $137 million from 63 establishments employing some 14,800 persons. Defence payments amounted to $52 million.

Electronics

Some material available allows a more general discussion of the electronics industry and its relationship to defence expenditures not possible with shipbuilding and aircraft and parts industries. The industry illustrates many of the problems associated with a highly specialized manufacturing industry in Canada and the influence exercised by defence expenditures.

Broadly speaking the electronics industry in Canada is dominated by a number of large firms, in the main foreign owned, established basically to manufacture foreign designed and developed products for the Canadian market. The Canadian industry imports parts and equipments where demand is not sufficient to warrant production in this country at a price that will encourage purchasing by plants located in Canada. Plants located in Canada usually engage in less research and development work than associated companies in the heavily industrialized nations of the parent companies. The parent firms supply technical back-up activities to Canadian subsidiaries.

Canadian located manufacturers draw a very high portion of their business from the Canadian market and sometimes find it difficult to make much headway in the export field. This is probably a result of several factors including relatively high unit costs for short production runs, lack of unique products and sometimes of controls imposed by foreign associates. It is also because many companies have never geared for an appreciable export sales effort.

Demand for defence products has encouraged expansion of facilities and output. In some cases military requirements provided a basic demand on top of which profitable commercial sales could be developed. In other instances facilities have been established to produce components and parts for use in equipment, thereby widening the technical ability of the industry. The industry has shown a truly remarkable rate of growth since 1939, increasing by eighteen times. While a great deal of the demand came from non military sources, defence has been and still is a very important influence. In recent years estimates suggested that defence absorbed about 20 to 25 per cent of Canadian supply

while during the Korean War and World War II the evidence indicated a much higher proportion. Only in the 1946-1949 period has military demand been inconsiderable.

But it is not only in the important quantities of goods and services taken off the market that defence has contributed to growth. In addition it has supplied a vigorous drive to provide the most up-to-date equipment that ingenuity can devise. Abroad a considerable portion of research in the electronics field is financed by defence. The same is true in Canada. Defence-oriented research has been instrumental in providing companies in this country with a number of specialized items for production and sale.

Finally in the 1960's integration of Canadian and American efforts for defence of North America and the concomitant Defence Production Sharing program for economic co-operation have given the industry access to a very large U.S. market for defence goods. This, in itself can provide the industry with some incentives for improvement of production capabilities, design and development capacity, and other aspects necessary to better its chances to trade abroad.

IV. THE REGIONAL INFLUENCE OF DEFENCE SPENDING

Until recently, no material was available that permitted even a rough appraisal of the influence of defence procurement spending on particular Canadian regions. It has, of course, always been possible to isolate specific communities whose economic life centred around a military installation or a defence plant, and indicate some of the effects that a change in spending would have on the installation or the area. However, nothing was available that allowed any type of measurement on a broader basis.

Recently, however, data on expenditures against Canadian prime contracts, placed in Canada for procurement of goods and services, have been tabulated for four major industries. These are aircraft and parts, electronics, shipbuilding, and instruments.

Even so, we do not have a complete picture. The material is restricted to Canadian prime contracts only: it takes no account of subsequent transfers of business between areas by sub-contracting for materials and parts, and it fails to allow for expenditures against goods and services bought from other industries. Within these limits, however, the data provide quantitative indications of the extent to which some economic areas benefit from Canadian defence expenditures in these four industries. Appendix "B" sets out this data for the fiscal years 1960-61 and 1962-63.

The heavily industrialized complexes of southern Ontario and Greater Montreal account for most of the business received. In 1960-61, of total expenditures for the four major industries of $277 million, the Montreal area obtained nearly $144 million. The province of Quebec received $150 million. Metropolitan Toronto got $74 million worth of this business, with a further $27 million to the rest of the Province of Ontario, leaving only about $26 million for the rest of Canada. For 1962-63, the total was about $259 million. Shares by area were $117 million for Montreal, an additional $13 million for the remainder of the Province of Quebec, and $62 million and $31 million for Toronto and the rest of the Province of Ontario respectively. The remaining $36 million went to other areas of the country.

While the most highly industrialized areas of Canada perform most of the work on prime defence contracts, such expenditures are also of importance to the Maritimes, British Columbia, and the Winnipeg area. In the case of

Winnipeg and British Columbia, the bulk of defence procurement is directed, respectively, to aircraft and shipbuilding. In the Maritimes, expenditures were made in the electronics, aircraft and shipbuilding industries.

V. DEFENCE EXPENDITURES FOR FOREIGN TRADE

Defence expenditures exercise a great influence on Canada's balance of trade and international payments. The dominant factors appears to be our trade with the U.S. and fluctuations therefore depend on U.S. decisions concerning strategy which influences spending in Canada.

Canada has held a favourable balance of payments position in relation to total expenditures on defence over the past five years. Foreign expenditures in Canada on the defence account have amounted to about $2.4 billion against Canadian expenditures abroad of about half as much. U.S. expenditures in Canada amounted to nearly $2.2 billion in contrast to Canadian expenditures in that country of about $0.7 billion. The highly favourable Canadian balance results in the main from U.S. expenditures to provide and maintain continental defence installations and to purchase uranium which the U.S. classifies as a defence requirement. That and continental defence expenditures in Canada by the U.S. account for most of the surplus in Canada's favour.

In contrast, the situation in relation to production of military hardware of the kind needed for modern forces is quite different from that favourable position. Canada normally imports more of such items than are sold abroad. However, under the Canada-United States Defence Production Sharing program U.S. procurement, which included F104 MAP and Caribou I aircraft, gave a small advantage to this country during the 1959 to 1963 period. If these orders were disregarded exports would stand perhaps $150 million lower revealing Canada's more normal position as a net importer of weapon systems.

To review the background of current developments, three times since the outbreak of World War II defence expenditures have exercised an influence on our foreign trade great enough to warrant extraordinary government action. In 1939, the traditional trading pattern for Canada was to use her current account surpluses with Britain and other countries to finance her deficits with the U.S.A. World War II reduced supplies of convertible currencies from traditional markets while increasing imports from the United States. To finance these increases, comprising largely defence goods or plant intended for defence purposes, a variety of measures were taken, including the Hyde Park agreement of 1941. That arrangement provided for the sale of specialized war materials by Canada to the U.S.A. to provide financing for Canadian imports.

In 1950 and 1951, Canada incurred substantial deficits on current account, due in large measure to investment demands, at least some of which originated with defence expenditures. The defence requirements of the Korean War were superimposed on the Canadian economy, then operating at close to capacity. This exerted inflationary pressures, and greatly increased imports. International buying took place on a large scale, in anticipation of shortages and price increases. The government had to act to control imports and to channel resources to essential industries.

Since then, the concepts of continental defence, weapons standardization and development and production sharing have accelerated the adoption by Canada of United States-type equipment. The complex nature of modern weapons systems, their very high cost, rapid obsolescence, and the cost of carrying out of their research, development and production processes, have resulted, within the last few years, in increasing Canadian reliance on U.S. sources for research and development, and often the production of most major equipment.

If the Canadian requirement was too small or too immediate to permit economic production in Canada, the equipment had to be purchased directly from the U.S.A. Where production in Canada was feasible, the cost of royalties and technical assistance as well as of components still meant an outflow of Canadian defence money to the U.S.A.

This trend meant that an increasing proportion of the Canadian defence dollar would go to U.S. industry. To offset such dependence on United States developed equipment, the Canada-United States defence production sharing programme was initiated in 1959. This arrangement, while restricted to defence equipment, provided a significant degree of access for Canadian firms to the world's largest single market for highly-engineered goods.

In 1963, $142 million worth of U.S.A. defence production sharing business was placed with Canadian industry. Total purchases by the U.S.A. in Canada in this category during the first 5 full years of the programme amounted to $748 million. Against this, Canadian defence production sharing business placed in the U.S.A. amounted to $152 million in 1963, bringing the total for the 5 years to $678 million. The cumulative 5 year balance of such business between Canada and the U.S.A. was, accordingly, $70 million in Canada's favour. The long-term aim of the two countries, and one which is important to both, is to maintain a rough balance at increasing levels in their trade in defence production sharing items.

Generally speaking, sales of Canadian defence equipment abroad help to keep down the cost of the limited requirements of the Canadian Armed Forces; stimulate research and development in secondary industry; contribute to the standardization of military equipment among allied countries; and benefit the Canadian economy through their effect on such things as employment, the technological capability of industry, and our balance of payments. The success of the defence production sharing arrangement with the United States has led to recognition of the desirability of establishing comparable non-conflicting arrangements, of rather more limited scope, with other NATO countries.

The abiltiy of Canadian industry to compete effectively with foreign industry for defence production business is, in the long run, dependent upon its ability to develop equipment and components that have the potential to meet some future military requirement, and to be able to produce items of required quality within necessary time limits at a competitive price. This means that Canadian manufacturers must be competitive with United States and other manufacturers of comparable products.

The Government has had to institute action to assist Canadian industry to become competitive. This action has taken many forms, among the most important of which, although small in money terms, is aid to industry to develop items that have some defence potential, to establish qualified sources for the production of components and equipment and to modernize Canadian defence industry.

The benefits of this assistance are not limited to defence production. The resulting technological advances in the complex production operations of highly sophisticated weapons systems spread readily into other areas of Canadian production. The economy as a whole is made stronger and better able to make its way in world markets.

Several major problems are faced by Canada in attempting to reach export markets for manufactured goods. Two show up clearly in the defence industry field. The first is the effect of foreign ownership or control of much of this country's manufacturing industry. In the main foreign owned operations in Canadian secondary manufacturing were intended to produce for the Canadian market or to take advantage of British preferential tariff rates.

This has resulted sometimes in a tendency to exclude Canadian plants from foreign markets or to inhibit Canadian development of unique products suitable for sale abroad. However, the Defence Production and Development Sharing Programs have been bringing about relaxations in these restrictions. Canadian subsidiaries are taking an increasing part in exports and in development for defence.

Secondly, some Canadian owned and controlled companies, never having developed extensive export programmes, appear unwilling to act aggressively in seeking foreign defence business. Provision of favourable circumstances for exporting can be done at the government level but individuals and firms must act to expand trade.

VI. POSSIBILITIES AND PROBLEMS

So much is background. It is part of the story of what defence expenditures have contributed to Canadian economic growth and development. The question that now has to be asked is how changing levels of spending may influence the future. The answer to this depends on what the future holds in the way of changes in the level of spending and on the direction in which expenditures are channelled. Will disturbed international conditions make a large increase in spending necessary or will a continued period of relative stability permit further reductions? What decisions on defence policy will be taken by the Government thereby affecting the way in which available funds are spent and influencing the business done by plants, industries and areas of the country?

Inasmuch as we cannot know what the future holds the best that can be offered here is to suggest the results of two or three possible courses of action. These must be based on assumptions as to spending levels and possible decisions as to the direction spending may take. To do this, rather extreme positions have to be assumed, making the discussion perhaps a trifle academic. Nevertheless this approach has the advantage of sharply emphasizing problems inherent to some degree in less extreme situations that have characteristics similar to those stated.

First of all is it possible to visualize a sharp reduction in total funds available for defence? Such an action combined with the fact that major weapon systems are costly leads to the decision that they cannot be conceived, designed, developed and produced in Canada but must be purchased abroad. Purchases abroad could, under defence production sharing arrangements, be offset by foreign procurement in Canada composed largely of sales of components or of less sophisticated items.

This approach has serious implications for the technical development competence of Canadian manufacturers. Even though purchases of major systems abroad are balanced by equivalent dollar-value business in Canada the effect is not the same. The difference lies in the demands placed on the technical knowledge of manufacturing companies. A major new weapon system conceived, designed, developed and produced places the ultimate in demands for ingenuity on prime contractors and supporting firms. It is this struggle for new and better products that keeps industry in the front rank of technical knowledge.

If most major systems are bought abroad there is a good chance that subcontracting against foreign systems will not be enough to maintain competence. Foreign prime contractors have their own supporting firms to which they generally turn during the conceptual phase of weapon building for assistance in designing and developing components. Canadian subcontractors will not likely be included during the conceptual phase and may well miss some

part of the development phases as well. This is a serious disadvantage to producers and must inevitably lead to a gradual decline in technical knowledge and a lessening in ability to compete for contracts.

The second major possibility is a considerable expansion of the defence effort leading to the design, development and production of some major weapon systems in this country. The result would like be a heavy emphasis by Canadian industry on technological improvement. Here the problems are largely costs and the difficulty of making sales to foreign countries. Because major systems are extremely costly, making quantity sales of production models to major industrial nations is very difficult. The hundreds of millions and often billions of dollars of business is much sought after and governments are under extreme pressure not to place such contracts abroad but to adopt comparable domestic designs.

The third possibility lies between the extremes stated above. Clearly it would be desirable to find a course of action that would permit, indeed encourage, expansion of technical skills while at the same time making it feasible to take advantage of the economies offered by procuring many major weapons abroad. Present defence development sharing policies designed to encourage participation by Canadian companies in the research and development of U.S. defence projects are a step in this direction. Even so, there are at least two problems here. One is the degree to which doors can be opened sufficiently early to assure Canadian participation in the conceptual phases of U.S. major projects. Unless access to the conceptual phases of weapon development is possible Canadian firms will be handicapped. A few minutes thought will indicate how immensely complicated providing such access becomes and how it implies increasing integration of Canadian and U.S. business and armed forces.

The second problem concerns the extent of specialization of Canadian industy. Canadian industry has never been able to compete abroad in all areas of economic activity. In specialized fields Canadian industry has done well and the probabilities are that if specialized areas of defence business could be developed to the point where this country were an acknowledged world leader, markets could be found abroad for its production.

Because participation by Canadian industry in foreign defence production programs does not itself assure maintenance of a high technological level it needs to be supplemented wherever possible by creation of joint defence research, development and production programs with other countries to meet mutual military requirements. Establishment of such programs on a bilateral basis can lead to trilateral or multilateral programs where other allied countries have similar military requirements. The current joint UK/Canada plan for development and production of the CL89 Surveillance Drone to meet British and Canadian military requirements may serve as an example of the type of joint program visualized. As in any such solution, there are major obstacles to the development of this concept, chief of which are considerations of national prestige and the extent of the respective military requirements for the equipment involved.

In general, it can be said that unilateral national development of major weapon systems amongst the western countries is rapidly giving way to the concept of collaboration among allies in defence research, development and production in the interest of conservation of the respective national resources in money, manpower and technological capabilities. In this general direction, with all its inherent difficulties, appears to lie the best hope for strengthening scientific and technological capability within Canada's engineering industry.

APPENDIX "A"

INDEXES OF REAL DOMESTIC PRODUCT FOR SELECTED CANADIAN INDUSTRIES—1939 and 1944

(1949 = 100)

	1939	1944
Gross Domestic Product	60.2	103.0
Manufacturing	48.7	106.1
Durable Manufacturing	42.7	128.3
Wood Products	54.0	76.1
Iron & Steel Products	39.1	118.4
Transportation Equipment	37.7	235.7
Non-ferrous Metal Products	58.4	130.9
Electrical Apparatus & Supplies	28.4	85.5

APPENDIX "B"

TABLE I

CANADIAN DEFENCE EXPENDITURES AGAINST PRIME CONTRACTS PLACED IN CANADA FOR FOUR MAJOR INDUSTRIES BY AREA, FISCAL YEAR 1960/61

Area	Industry				
	Electronics	Aircraft	Instruments	Shipbuilding	Total
	$000	$000	$000	$000	$000
Maritimes	2,933	5,595	—	4,935	13,462
Montreal	27,074	101,081	8,695	6,928	143,778
Other Quebec	182	1,793	—	4,066	6,041
Total Quebec	27,257	102,874	8,695	10,994	149,819
Toronto	13,375	57,186	3,642	1	74,204
Niagara	6,957	779	—	—	7,736
Other Ontario	1,024	1,055	6,840	49	19,970
Total Ontario	32,356	59,021	10,482	50	101,909
Winnipeg	—	3,621	—	—	3,621
Other Manitoba	—	—	—	—	—
Total Manitoba	—	3,621	—	—	3,621
Saskatchewan	—	—	—	—	—
Alberta	—	3,016	5	—	3,021
Vancouver	18	343	—	5,119	5,481
Other B.C.	—	—	—	—	—
Total B.C.	18	343	—	5,119	5,481
Total Canada	62,564	174,470	19,182	21,098	277,313

Figures do not balance exactly because of adjustments caused by rounding.

APPENDIX "B"—Concluded

TABLE II

CANADIAN DEFENCE EXPENDITURES AGAINST PRIME CONTRACTS PLACED IN CANADA FOR FOUR MAJOR INDUSTRIES BY AREA FISCAL YEAR 1962/63

Area	Industry				
	Electronics	Aircraft	Instruments	Shipbuilding	Total
	$000	$000	$000	$000	$000
Maritimes	2,460	5,777	—	6,674	14,912
Montreal	22,052	75,128	10,148	9,563	116,890
Other Quebec	267	1,005	—	12,055	13,328
Total Quebec	22,319	76,133	10,148	21,618	130,218
Toronto	18,022	36,277	7,469	—	61,768
Niagara	7,802	1,184	1	—	8,987
Other Ontario	14,996	3,238	6,124	58	24,415
Total Ontario	40,821	40,699	13,594	58	95,172
Winnipeg	—	4,615	8	—	4,623
Other Manitoba	—	—	—	—	—
Total Manitoba	—	4,615	8	—	4,623
Saskatchewan	—	—	—	—	—
Alberta	—	2,637	—	—	2,637
Vancouver	6	204	—	5,069	5,279
Other B.C.	—	—	—	6,408	6,408
Total B.C.	6	204	—	11,476	11,686
Total Canada	65,606	130,065	23,750	39,826	259,247

Figures do not balance exactly because of adjustments caused by rounding.

THE ECONOMIC CONSEQUENCES OF DISARMAMENT

By: G. ROSENBLUTH

This paper is based on research, not yet completed, which has been financed by the Canadian Peace Research Institute. Bob Rand, Janet Smith and Al. Prentice served as part-time assistants.

Most of the major economic problems that would arise in the event of disarmament on a substantial scale fall into one of two broad classes. First there are the problems of "aggregate demand". Defence expenditures are part of the total demand for goods and services in our economy, and when these expenditures are reduced, production and employment fall. *In the absence of compensating measures* one would therefore expect disarmament to intensify the problem of unemployment which is already with us.

Secondly, there are problems of "mobility". Even, if compensating measures are taken and aggregate demand is maintained, one cannot expect that the industries, areas and occupational groups that experience an expansion of demand as a result of compensating measures would coincide with those that experience a decline in demand due to disarmament. Indeed this is impossible since the largest "industry" affected by disarmament, in terms of employment, would be the armed forces. There would therefore be the problem of getting labour, capital equipment and business enterprise to shift their activities, to produce new products, to acquire new skills, to move to other regions. There would be the problem of the extent to which compensating measures can and should be tailored so as to minimize the need for mobility, and the problem of what to do in cases where adequate regional or occupational mobility cannot be achieved.

It will be recognized that both the problem of aggregate demand and the problem of mobility are with us now and are frequently discussed in connection with the current problem of unemployment. Disarmament would not create these problems, but it would intensify them, and one of the aims of research is to answer the question: "How much?". It is also clear that a precise answer to this question cannot be given since no one can predict when, if ever, disarmament will come, what the level of defence expenditure and employment will be at that time, what the extent of disarmament will be and at what speed it will proceed. One can only illustrate the nature and dimensions of the problem by making plausible estimates based mainly on current defence expenditures and disarmament plans now under discussion. It is clear that the *speed* of disarmament is of crucial importance in determining the severity of the problems that will arise, in terms of both aggregate demand and mobility.

My approach in this paper is to compare the effects of two patterns of disarmament, one "fast" and one "slow". Both are based on official proposals put forward for international negotiation.

Special mention should be made of the problem of scientific and technical research and development, which is one of the major problems in the "mobility" category. Research and development resources are highly concentrated on defence problems, so that disarmament must involve a change in the direction of research and development activity and may involve a change in its extent. These changes may have implications concerning the rate of technological progress and hence the rate of economic growth.

THE PROBLEM OF AGGREGATE DEMAND

The Proportion of Output devoted to Defence:

Canadian Defence expenditures on currently produced goods and services are shown in Table 1 in relation to the Gross National Product. We follow the convention adopted in the Public Accounts of defining "defence expenditures" as expenditures by the Department of National Defence and the Department of Defence Production. Expenditures by the Atomic Energy Control Board and Atomic Energy of Canada Ltd., are omitted since our activities in this field are supposed to be confined to Civilian applications. Defence expenditures, both in absolute terms and as a proportion of G.N.P. rose from very low levels after the war to a peak of nearly two billion dollars or 7.6 per cent of G.N.P. in 1953 and have tended to decline somewhat since that time, running at about four and a half per cent of G.N.P. or a little over one and a half billion dollars between 1959 and 1961, and probably falling below four per cent of G.N.P. in 1963. In round figures the present level can be taken as four per cent of G.N.P.

TABLE 1

CANADIAN DEFENCE EXPENDITURES AND GROSS NATIONAL PRODUCT

Year	(1) Defence Expenditures on Goods and Services ($ millions)	(2) Gross National Product ($ millions)	(3) (1) as percentage of (2) (%)
1947	227	13,165	1.7
1948	236	15,120	1.6
1949	361	16,343	2.2
1950	493	18,006	2.7
1951	1,157	21,170	5.5
1952	1,800	23,995	7.5
1953	1,907	25,020	7.6
1954	1,727	24,871	6.9
1955	1,760	27,132	6.5
1956	1,802	30,585	5.9
1957	1,765	31,090	5.5
1958	1,661	32,894	5.1
1959	1,559	34,915	4.5
1960	1,546	36,254	4.3
1961	1,613	37,421	4.3
1962	1,680	40,401	4.2
1963	1,576	43,007	3.7

SOURCE: *D.B.S. National Accounts, Income and Expenditure.*

These figures tend to understate the demand for goods and services attributable directly to defence expenditures since they exclude payments by the two defence departments that are not for currently produced goods and services, such as grants to municipalities and provincial governments, payments for land and existing buildings, contributions to superannuation funds. Some of these transfers are really indirect payments for goods and services. The inclusion of these sums does not, however, alter the order of magnitude of the figures significantly: Total expenditures of the two departments as given in the Public Accounts amounted to $1657 million in the fiscal year 1961/62 and $1542 million in the fiscal year 1960/61.

The ratio of defence expenditure to G.N.P. given above (4 per cent) may be compared with a figure of about 7 per cent for the United Kingdom in 1960 and between 9 and 10 per cent for the United States in recent years (Ref. (1), pp. 191, 203).

The figure of 4 per cent of Gross National Product is a good index of the proportion of our output of goods and services diverted from other uses for the sake of defence, on the assumption that an equal level of employment and output could be maintained in the absence of defence expenditures. It is not, however, an adequate measure of the proportion of aggregate demand that would have to be "replaced" in order to maintain employment and output if defence spending disappeared. For that latter figure, it is necessary to add an estimate of the demand for Canadian exports that is attribuable to foreign defence expenditures.

An accurate estimate of the proportion of Canadian output attributable to foreign defence expenditures cannot be made. It would have to include not only expenditure on defence contracts placed with Canadian suppliers, as well as subcontracts (and there is not even a reliable and complete record of such prime contracts and subcontracts), but also the Canadian materials going indirectly into defence work done abroad.

A very rough estimate of the import content of United States defence expenditures has been made by Stevens (Ref. (3) pp. 229-232) and shows that in 1958 United States imports from Canada directly and indirectly related to defence amounted to $588 million U.S. currency, which was about $570 million Canadian currency or 1.7 per cent of Canada's G.N.P. for that year.

About three quarters of this sum consists of the amount estimated by the U.S. Department of Commerce as "U.S. Defence Expenditure Abroad for Goods and Services" and includes not only purchases of materials, equipment and supplies but also construction expenditure, expenditure for services and expenditures in Canada of U.S. defense personnel and Post Exchanges. The remaining one quarter consists of Canadian materials going "indirectly" into U.S. defence goods.

While the Estimate of the "indirect" Canadian content of U.S. defence expenditures is available only for 1958, the trend of "direct" expenditures for later years suggests that 1958 was a peak year:

U.S. Defence Expenditures on Goods and Services in Canada

	$ million (U.S.)
1957	288
1958	443
1959	431
1960	379

(U.S. Survey of Current Business, January 1962, p. 14).

It is, therefore, reasonable to estimate the amount Canadian content of U.S. defence expenditure as well under 1½ per cent of Canadian G.N.P.

Not even a rough estimate is available for overseas countries. A number of inconsistent figures on overseas prime contracts and subcontracts are given in the Annual Report of the Department of Defence Production, and the largest totals one can construct from these figures are $45.1 million for 1961 and $67.8 million for 1962. (Ref. (4) pp. 14, 32, 52, 53).

These figures refer to contracts placed whereas what is wanted is a measure of the use of goods and services, i.e. expenditures against contracts. For a part of these totals, (prime contracts placed through Canadian government agencies) figures of expenditure are available and show that in both years expenditure ran well below contracts placed. One may therefore estimate expenditure by overseas countries on defence procurement in Canada as not over $45 million, and add an estimate of $15 million—most likely very much too high—for the

"indirect" Canadian content of overseas defence contracts and subcontracts. The total of $60 million would be about two-tenths of one per cent of G.N.P. Even if the correct figure were twice the estimate or half the estimate, it would in any case be less than one half of one per cent of G.N.P.

The direct and indirect foreign defence demand for Canadian goods and services may thus be estimated at well under 2 per cent of G.N.P. Adding foreign and domestic defence demand gives an estimate of about 6 per cent of G.N.P. for 1961 as the portion of the total demand for goods and services dependent on defence expenditures. This is a substantial figure but is still less than the proportion of G.N.P. attributable to domestic defence expenditures alone in either Britain or the United States. The present level is most probably well below 6 per cent.

These figures overstate the proportion of output and employment devoted to defence since they include imports: direct imports of equipment, expenditures on Canadian bases abroad, and the import content of equipment produced in Canada. Direct defence expenditures on foreign goods and services are estimated by Adams (Ref. (2), p. 81) at $113 million in fiscal year 1960/61, or about 7½ per cent of total defense expenditures and 0.3 per cent of G.N.P. Indirect import content has to be estimated on the basis of a tabulation of inter-industry transactions and I hope to present rough estimates at a later date. It should be pointed out here, however, that one of the most serious deficiencies of Canada's statistical equipment (which is generally excellent) is the absence of a suitable table of inter-industry sales. An inter-industry table is available, but it is badly out of date, relating to the year 1949, its industry classifications are not sufficiently detailed, and its treatment of government expenditures is not suitable for analytic uses. These deficiencies are important not only in relation to the use of the table for the study of disarmament, but for many other investigations concerned with issues of public policy. A table based on the year 1961 is now in preparation but it is not expected to be available until 1966.

In the absence of very precise information on direct and indirect import content, our figures give the best available estimate of the proportion of aggregate demand that would have to be replaced if all defence expenditures were wiped out and a decline in employment was to be prevented. Any "compensating" expansion of other public or private expenditures would also have at least an indirect import content, and unless the import content of such compensating expenditures were significantly different from that of defence expenditures, a fall of one million dollars in defence expenditures would still have to be compensated by a rise of about one million dollars in other public or private expenditures if a fall in output is to be avoided.

It would be possible, of course, deliberately to choose compensating expenditures with a low import content. This would amount to solving our domestic problem by "exporting" a part of the decline in demand that disarmament would bring about. Such a policy would be an example of so-called "beggar-my-neighbor" policies designed to export unemployment, and one may perhaps assume that a Canadian government would wish to avoid the opprobrium earned by such conduct.

The Composition of Defence Expenditures:

Tables 2 and 3, based on the Public Accounts, summarize defence expenditures in different ways (in Table 3 major items are listed under some of the main categories, but they are selected items and hence their total does not add to that of the main category).

Nearly half of defence expenditures are devoted to pay, allowances and supplementary benefits of the armed forces and civilian personnel, and half

to purchased goods and services, with a small amount of inter-government transfers. Table 3 shows that nearly half the expenditures are on air services and that the share of air services exceeds the combined share of the army and navy.

TABLE 2

DEFENCE EXPENDITURES, CANADA

by Main Categories and Major Items

	Fiscal Years			
	1961/2		1962/3	
	($ million)			
Department of National Defence				
Military pay and allowances		540		545
Civilian pay and allowances		190		195
Major procurement of Equipment		311		234
Aircraft and Engines	190		128	
Ships	40		39	
Electronic and Communication Equipment	35		28	
Bombs and Ammunition	17		16	
Materials and Supplies		108		115
Gasoline, Fuel Oil, Lubricants, for M.E.	31		33	
Food	22		25	
Fuel for heating, cooking, power	16		16	
Professional and Special Services, Transport and Communications, Office Supplies, Publication, etc.		106		111
Travel and Removal Expenses	42		40	
Construction, repair and upkeep of buildings and land		119		109
Repair and upkeep of Equipment		135		131
Contract repair	66		66	
Ships	19		18	
Electronic Equipment	19		19	
Aircraft	18		15	
Pensions and Other Benefits		65		68
Municipal and Public Utility Services		19		21
Mutual Aid and NATO Contributions		11		25
Development		10		11
Other Expenditures		19		24
		1,633		1,589
Department of Defence Production				
Administration and General		18		19
Capital Assistance Programme		2		2
Technological Capability Programme		4		8
		24		29
Total		1,657		1,618

SOURCE: *Public Accounts.*

The industries with the largest share of defence procurement are aircraft, construction, shipbuilding, transportation, petroleum and coal products, electronic equipment. Bombs, ammunition and armament do not account for a large proportion of total expenditure.

TABLE 3

BUDGETARY DEFENCE EXPENDITURES

	Fiscal Years			
	1961/2		1962/3	
	($ million)			
Naval Services	272		270	
Army Services	442		443	
Air Services	781		714	
		1,496		1,426
Administration and General—D.N.D.	23		24	
D.D.P.	18		19	
		41		43
Research and Development	40		41	
Capital Assistance and Technological Capability Programme	6		10	
		46		51
Mutual Aid and NATO		11		25
Contributions to Armed Forces Superannuation Account		56		58
		1,650		1,604

SOURCE: *Public Accounts.*

THE PROBLEM OF AGGREGATE DEMAND UNDER CONDITIONS OF RAPID DISARMAMENT:

Among disarmament schemes with official international status the fastest timetable is provided by the Soviet proposal for general and complete disarmament put forward for discussion at the Geneva conference on disarmament. Under this scheme general and complete disarmament is to be achieved in five years.

The most severe problem of aggregate demand that it is reasonable to contemplate would arise if the Soviet proposal were implemented, and if, at the time of its implementation the proportion of aggregate demand due to defence were about the same as now. Total real output of the Canadian economy has been rising at an average rate of 4 per cent per year in recent years, (1951 to 1962 increase on Gross National Product at constant prices). It is likely to go on rising at a substantial rate as the labour force increases and technological progress raises output per worker. Defence expenditures in real terms, on the other hand are not likely to rise significantly. The percentage of G.N.P. devoted to defence is therefore likely to continue to fall.

Our analysis is based on data for the 1961/62 fiscal year since there has not been time to analyze the more recent figures.

The Soviet proposals provide for disarmament in three stages, the first two of two years duration each and the third one year. Table 4 shows estimates of the amount by which defence expenditures might be reduced in each of the first two stages. In Stage I all means of delivering nuclear weapons are to be destroyed and their production is to cease (except for a small stock of deterrent missiles to be kept by both the United States and the Soviet Union). This includes aircraft, ships, artillery and rockets capable of nuclear delivery. I make the extreme assumption that this provision would eliminate all defence procurement, upkeep and repair of aircraft and ships in Canada.

Soviet and U.S. armed forces are to be limited to 1.9 million men in Stage I with "agreed levels" for other countries, and the production of conventional armaments, transport, etc., is to be reduced proportionately to the reduction in the armed forces. To work out the implications of these provisions for Canada I make the arbitrary assumption that the proportionate reduction in Canadian armed forces would be about the same as that implied for the U.S. by the Russian proposal, that is, about one-quarter, and this figure is used in Table 4. A larger proportionate reduction is applied to construction, since a substantial part of this item is *new* construction, which one would expect to be cut back severely in the event of disarmament. A smaller proportionate reduction has been applied to civilian pay and allowances to allow for the fixed element in administrative overhead. The Soviet proposal provides for a 30 per cent reduction in the *stock* of conventional armament, etc. and this factor has been applied to repair and upkeep of equipment other than ships and aircraft.

TABLE 4

HYPOTHETICAL SCHEDULE OF REDUCTION IN CANADIAN DEFENCE EXPENDITURES

—Rapid Disarmament—

(Based on Expenditures for Fiscal Year 1961/62).

	Stage I (2 years)	Stage II (2 years)
	($ million)	
Military pay and allowances	135	216
Civilian Pay and allowances[a]	23	38
Aircraft and Ships[b]	230	—
Other Major Equipment	20	36
Materials and Supplies	26	43
Services, etc.	26	41
Construction and Repair of Buildings[c]	60	48
Repair and Upkeep—Ships and Aircraft[b]	37	—
—Other Equipment[d]	29	34
Mutual Aid and NATO	3	4
Department of Defence Production	6	10
Miscellaneous Expenditures	13	22
Total Reduction	608	492

NOTE: Reductions are 25% in Stage I and 40% in Stage II except the following:

[a]—1/8-1/5

[b]—100% in Stage I

[c]—50%-40%

[d]—30%-35%

In Stage II the Soviet proposal provides for the reduction of armed forces of the Soviet Union and United States to 1 million, that is a reduction by just under 40 per cent of the original level (before Stage I). Levels for other countries are to be agreed upon, and again it is necessary to guess at the implications for Canada. As in Stage I, the production of armament and other equipment is to be reduced in proportion to the reduction in armed forces, while the stock of such equipment is to be reduced by a further 35 per cent of the original amount.

In order to guess at the implications for Canada, I have assumed a reduction by 40 per cent of the original level in the armed forces and major

equipment procurement items in Stage II. Civilian pay and allowances is reduced by only 20 per cent of the original amount, and repair and upkeep of equipment is reduced in proportion to the stock.

On the basis of these assumptions military expenditure would be cut by about $600 million in Stage I and $500 million in Stage II. These amounts represent an average of 0.8 per cent of the 1961 G.N.P. in each of the two years of Stage I, and 0.7 per cent in each of the two years of Stage II.

One cannot of course claim any degree of realism for these figures since the future with regard to disarmament is quite unpredictable. But the details of the calculation could be varied a great deal without changing the *order of magnitude* of the conclusions. Since the calculations have been based on the Soviet proposal, which provides the fastest rate of disarmament of any official proposal, the actual rate of reduction is very likely to be much lower. Thus the conclusion seems quite safe that in the first four years of an international disarmament agreement the reduction that Canada would be required to make in her defense expenditures would be well under one per cent of G.N.P. per year. This conclusion could be upset by a drastic increase in the level of defence expenditures in relation to G.N.P. but in the light of current trends such an event seems most unlikely.

Continuing the exercise we find that at the end of Stage II Canada would have armed forces at 35 per cent of the present strength and total defence expenditures of about $550 million per year, or 1.5 per cent of 1961 G.N.P.

The Final Reduction:

A plausible guess at the final reduction in Stage III is not easy. Both the Soviet and the U.S. proposals provide for the maintenance of some forces for internal security, and both provide for a large international inspection organization and a U.N. police force. One must therefore try to guess how large a contribution Canada is likely to make to these international forces. Adams suggests a residual level of defence expenditures of 1 per cent of G.N.P. in his study (Ref. (2) p. 69.) This may be on the high side. In spite of the frequent discussion of Canada's potential as a contributor to United Nations peacekeeping operations, the actual contributions in the past have not been exceptionally large, as has been remarked in this committee (Ref. (5) No. 14, pp. 463-465). As for inspection services, a careful estimate by Melman suggests that the cost of inspection for disarmament might be between two and three per cent of annual defence expenditures throughout the world (Ref. (3) p. 65). If one estimates Canada's share as five per cent of defence expenditure, this would amount to under one-quarter of one per cent of 1961 G.N.P.

While one per cent may be too high, however, it is hard to imagine that Canada's residual defence expenditure, including both inspection and peacekeeping services plus the necessary reserves, could amount to less than one-half of one per cent of G.N.P. On this basis, the reduction in defence expenditure that would be required in Stage III—the fifth year—of the Soviet disarmament proposal would be just one per cent of G.N.P.

It is thus evident that the most rapid rate of disarmament that it is realistic to contemplate would be likely to involve reductions in defence expenditure of not over about three-quarters of one per cent of G.N.P. in each of the first four years, and not over one per cent in the fifth. While such reductions are by no means trivial, they are not of an order of magnitude that suggests that they could be responsible for precipitating a major depression if uncompensated, and it does not seem particularly difficult to compensate for them by reductions in taxation and increases in government expenditure for non-defence purposes.

The Canadian economy would of course be affected by reductions in the roughly 2 per cent of the total demand for its goods and services attributable

to defence expenditures in the United States and overseas. It is, however, reasonable to suppose that the United States, Britain and other countries would take steps to counteract the decline in demand resuling from disarmament, and in this case their demand for Canadian goods and services would fall, if they fell at all, by less than two per cent. If they were to pursue "beggar-my-neighbour" policies to maintain their own employment by curtailing imports, then of course Canadian exports might be cut back by more than two per cent of G.N.P., but in a world in which general and complete disarmament takes place such policies are not likely to be fashionable.

As a rough estimate one might guess that the possible reduction in demand from this source would not be more than one-quarter of one per cent per year over a five year disarmament period. At the worst, if a full two per cent cut back took place over five years, an average of two-fifths of one per cent per year would be involved. The total reduction in defense demand over the five year disarmament period would then average more than one per cent of 1961 G.N.P. per year but still well under one and one-half per cent.

THE PROBLEM OF AGGREGATE DEMAND UNDER CONDITIONS OF GRADUAL DISARMAMENT

The United States proposal for general and complete disarmament put forward at the Geneva Eighteen-Nation Committee on Disarmament involves a much more gradual process than the Soviet proposal, It is not, however, sufficiently specific for our purpose. We have therefore combined certain elements of this proposal with others found in the disarmament model developed by Benoit and his associates (Ref. (3) Ch. 2, esp. Tables 1, 2, 3) which provides for a twelve-year time table.

Table 5 shows the time table of reductions in Canadian defence expenditures that might be expected on the basis of our assumptions. Like Table 4, it is based on the expenditures of Fiscal Year 1961-62. The main assumptions are the following:

Stage I (3 years):

Reduction of armed forces to 100,000, i.e. by about one-fifth (U.S. proposal). Military pay and allowances, materials and supplies, services, mutual aid and miscellaneous expenditures are reduced by the same proportion.

Reduction of stocks of major armaments by 30 per cent (U.S. proposal). Expenditures on repairs and upkeep of equipment are cut by the same proportionate amount.

Major procurement of equipment reduced by 40 per cent. This is roughly equal to the proportionate reduction envisaged by Benoit. The U.S. proposal does not specify the levels to which procurement is to be cut. In view of current and prospective shifts in the direction of Canadian procurement by major categories, it is not profitable to consider the several categories separately.

Civilian pay and allowances and Department of Defence Production reduced by 15 per cent on the assumption that they would be cut by less than military pay and allowances; (this assumption is not shared by the Benoit model).

Construction expenditures reduced by 75 per cent (Benoit).

Stage II (3 years):

Reduction of armed forces by a further 50 per cent of the level reached in Stage I. (In the U.S. proposal this figure is required for the U.S.A. and U.S.S.R. with "agreed levels" for other countries). Various expenditure categories cut by the same proportionate amount, as in Stage I. This would leave armed forces at a strength of about 50,000 at the end of Stage II.

TABLE 5

HYPOTHETICAL SCHEDULE OF REDUCTION
IN CANADIAN DEFENCE EXPENDITURES

— Gradual Disarmament —

(Based on Expenditures for Fiscal Year 1961–62).

Items	Stage I 3 years	Stage II 3 years	Stage IIIA 3 years	Stage IIIB 3 years
			$ million	
Military pay and allowances, Materials and supplies, Services, Miscellaneous Expenditures, Mutual aid and NATO	162	323	162	
Repair and Upkeep of Equipment	40	47	24	
Major Procurement of Equipment	124	93	47	
Civilian Pay and Allowances, Dept. of Defence Production	32	72	44	
Construction, Repair and Upkeep of Bldgs. and Land	89	18	12	
	447	553	289	116
Average Annual Reduction $ million	149	184	96	39
% of 1961 G.N.P.	0.40	0.49	0.26	0.13

Reduction of armament stocks by 50 per cent of Stage I levels (U.S. proposal). Repair and upkeep expenditures are reduced proportionately.

Procurement of equipment reduced by 50 per cent of Stage I levels. This is roughly equal to the overall proportionate reduction envisaged by Benoit.

Civilian pay and allowances and Department of Defence Production expenditures reduced by 40 per cent of Stage I levels.

Construction expenditure reduced by 60 per cent of Stage I levels (Benoit).

Stage IIIA. (3 years):

Reduction of armed forces and associated expenditures by a further 50 per cent of the Stage II level. This is the percentage reduction envisaged in the Benoit proposal, although the preceding reductions in this scheme are less than in the U.S. proposal.

Stocks of equipment and armaments reduced by a further 50 per cent. This would bring them to a somewhat lower level than envisaged by the Benoit proposal. Repair and maintenance expenditures cut accordingly. A part of the reduction to be accomplished by transferring weapons to the U.N. Police Force that is to be established.

Major procurement of equipment cut by 50 per cent of the Stage II level. This exceeds the reduction envisaged by the Benoit proposal because the latter allows for the continuation of procurement under the military space program at relatively high levels.

Civilian pay and allowances reduced by 40 per cent of the Stage II levels.

Construction expenditures eliminated (Benoit).

Stage IIIB. (3 years):

The U.S. proposal provides that at the end of Stage III a country's defence effort should be limited to the minimum required for internal security, a contribution to the U.N. peace force, and to the disarmament inspection service that is to be established.

It is reasonable to assume, as was done in our account of rapid disarmament, that the residual defence expenditure might be of the order of one-half of one per cent of 1961 G.N.P.—about $180 million at 1961 prices. This could support armed forces of about 15,000. Benoit and associates envisage a proportionately much higher residual level for the United States.

The difference between the pattern of expenditure cut-backs shown in Table 5 and that for "rapid" disarmament (Table 4) is not as great as one might expect, because under the proposals for gradual disarmament the bulk of the reductions would be concentrated in the first six years. Under the "gradual" cheme, cut-backs would average less than one-half of one per cent of 1961 G.N.P. over the first six years, while under the Russian proposal they would average between three-quarters of one per cent and one per cent over five years. Under the gradual scheme, they would then fall to one-quarter of one per cent of 1961 G.N.P. per year from the seventh to the ninth year, and one-eighth of one per cent in the last three years.

There may be a further reduction in aggregate demand due to disarmament in the United States and elsewhere. Under a program of gradual disarmament, it is, however, considerably more likely than under the rapid program that steps taken to counteract declining demand in the countries concerned will prevent any significant reduction in the demand for our exports.

It is evident that under both patterns of disarmament the cut-back in demand that is to be expected on an annual basis is considerably less than the normal annual growth in aggregate demand experienced in the post war period. The problem of aggregate demand arising from disarmament should therefore be thought of as a slowing down of the rate of expansion of demand rather than a decline in demand.

This does not mean, of course, that there would be no unemployment in the absence of compensating measures. The persistent unemployment of the last six years has been associated with a growth in demand that has been "too slow" in relation to the growth in the labour force. Moreover, if no steps were taken to counteract the effect of disarmament on aggregate demand, the loss of employment would be greater than our figures suggest, since there would be a "multiplier effect". The reduction in aggregate demand would not be confined to the reduction in defence expenditures but would include the reduced private expenditures of those no larger employed, directly or indirectly on defence, as well as the reduced expenditures of those whose employment and incomes are affected by this secondary reduction of private expenditures, and so on.

Measures to Maintain Aggregate Demand:

To prevent the development of such a spiral, compensating measures must be planned and implemented in step with the reduction of defence expenditures. Such reductions would promote spending by households and may stimulate some business expenditure for expansion of plant and equipment. In addition, an extended program of re-establishment grants and related benefits for those dismissed from the armed forces would serve the double purpose of stimulating demand for goods and services and facilitating the transition of former members of the armed forces to new occupations. Such a program might also be extended to civilian employees of the defence departments and workers in industries highly dependent on defence contracts, such as the aircraft industry. These programs were a major factor in preventing the spread of unemployment following the Second World War.

Current discussions of the "crisis in higher education" and "medicare" make it clear that there is considerable scope for the socially profitable expansion of government expenditures on education and health services, which would take up some of the slack of reduced defence expenditures. Planning in these fields would require further Provincial-Federal cooperation.

Following World War II, the problem of reconversion to civilian production was handled with very little unemployment, which was generally of very short duration. The "reconversion" task that would accompany disarmament under present circumstances is trivially small by comparison. Given a modicum of advance planning, the maintenance of aggregate demand should present no difficulty.

THE PROBLEM OF MOBILITY

If defence expenditures are replaced by other expenditures from public or private sources, both businessmen and labour will face problems of mobility. Business firms will have to find new markets for their output or to change their products. Some firms may have to change their location and some may be forced out of business. Members of the armed forces, some civil servants and some employees of private firms will have to find a new employer in a different "industry". In many cases they will have to change the type of work they do and to learn new skills. In many cases they may have to change their location. One may thus distinguish problems of industrial, occupational and regional mobility.

It should presumably be an object of government policy to ensure that such changes as are necessary take place with a minimum of friction and a minimum of loss to the persons concerned. One of the most difficult problems of policy is the extent to which compensating expenditures should be "tailored" to minimize the need for mobility.

It is evident that serious problems of mobility have already arisen from shifts in the direction of defence procurement. The termination of uranium contracts, the Avro Arrow cancellation and the recent reduction in shipbuilding programs have been instances of this trend. It is to be expected that problems of this kind will continue to arise, even in the absence of disarmament. It is reasonable to suppose, for example, that the increasing reliance on missiles will progressively reduce the military market for the aircraft industry.

A government seriously concerned with the possibility of disarmament would endeavour to obtain, well in advance, as good an impression as possible of the location and scope of the mobility problems that are likely to arise. This task requires information and facilities not readily accessible to the private investigator. The character and scope of the problems that will be met depend not only on the industrial and geographical distribution of the defence effort but also on the nature of the compensating measures that are envisaged.

A very rough indication of the industries, occupations and areas likely to experience problems of mobility may be obtained by looking for the industries, occupations and areas in which defence demand accounts for a very high percentage of output or employment. But even the relatively simple task of measuring the proportion of output or employment in each industry, occupation, and area that is attributable to defence is beyond our present resources, since it again requires reliable information on inter-industry transactions and this, as has been pointed out, constitutes a major gap in our statistical equipment. We shall therefore be restricted in the present paper to a rough analysis of the *direct* impact of the defence effort and shall have to ignore the indirect impact on the subcontractors and the chain of suppliers who receive a portion of each defence dollar.

The Regional Distribution of Defence Employment:

Some information on the regional distribution of the defence effort is now available to the writer from three sources.

(*a*) A distribution of employees of the Department of National Defence by Census Division, kindly made available by the department.

(*b*) A distribution of defence contracts by region which the Department of Defence Production has been good enough to supply.

(*c*) Details of the regional distribution of the labour force available from the 1961 Census.

The Census is the only source that permits the pooling of information on the distribution of armed forces, civilian defence department employees, and industrial employees, without a great deal of estimation. It is also the only source that provides industrial detail for small as well as large cities. Consequently, our analysis in this paper is based mainly on the Census.

The disadvantage of the Census is that it does not permit the explicit segragation of defence from non defence industrial employment. Our analysis is therefore based on those industries (as classified by the Dominion Bureau of Statistics) in which defence orders account for a high proportion of total output.

These industries are:

Industry	Defence expenditure as percentage of value of shipments[a]	Total Labour Force[b]
	1960	1961
Defence Departments (incl. armed forces)		173.1
Aircraft and parts	89	29.5
Shipbuilding and Repair	21	16.3
Electronics (Communications Equipment)	41	24.2
Ammunition and Explosives	25	4.7
Instruments	19	12.4

[a] Estimates by Department of National Defence.
[b] 1961 Census.

Table 6 shows all incorporated centres of 10,000 inhabitants or more in which there are at least 200 employees in one of the industries listed above (which will be referred to as "defence-sensitive industries") and in which these industries together account for 6 per cent or more of the labour force. These are the centres which may be said to have the greatest likelihood of experiencing problems of regional mobility in the event of disarmament. Table 7 contains the same information for those cities where defence-sensitive employment is high in an absolute sense, with a figure of 2,000 employees as the cut-off point. The cities where the problem of regional mobility is both likely to occur and to be serious in its extent are those that appear on both tables. Halifax and Victoria stand out by their high ranking on both lists. Ottawa and Quebec present less extreme cases. Both lists also include Oromocto, the future of which is entirely in the hands of the Defence Department. Montreal would be on both lists if the arbitrary cut-off percentage for table 6 had been placed at 5 per cent instead of 6 per cent.

Our analysis thus suggests that there are only a few localities where the problem of regional mobility arising from disarmament is likely to be serious.

Our rough estimates are a poor substitute for an accurate and up-to-date picture of the local and regional impact of defence, which could be produced from the statistical and accounting records now available within the government. In view of the need to prepare for possible disarmament, the establishment of a system for producing this information should be given high priority.

In the event of disarmament cases will arise in which the government will have to decide whether it is worthwhile to design compensating expeditures specifically to take up the slack in a particular city or region. Indeed such problems have already arisen. The most likely candidates for the problems of mobility are, as we have seen, Halifax and Victoria, and in both of these, shipbuilding is of major importance. Many observers believe that some of the naval shipbuilding programmes in the last few years have been motivated in part by a desire to support local shipyard employment. The recent cancellation of programmes has been followed by lobbying for business on the part of the shipyards and local authorities and proposals for subsidized construction of a merchant fleet.

TABLE 6

TOWNS AND CITIES WITH A HIGH CONCENTRATION OF DEFENCE-SENSITIVE EMPLOYMENT, 1961.

Area	Labour Force		(2) as percentage of (1)	Main Defence Industry
	Total (1)	Defence-Sensitive Industries (2)	(3)	(4)
	(000)		%	
Oromocto, N.B.	4.3	3.8	89	D.
Trenton, Ont.	4.8	1.5	32	D.
Halifax, N.S.[a]	73.0	20.0	27	D.S.A.
Victoria, B.C.[a]	55.4	11.0	20	D.S.
St. Jean, Que.	10.0	1.7	17	D.
Belleville, Ont.	11.6	1.7	15	C.D.
Portage-la-Prairie, Man.	4.1	0.6	15	D.
Barrie, Ont.	8.2	1.1	14	D.
Sorel, Que.	5.5	0.8	14	S.
Georgetown, Ont.	3.6	0.5	13	A.C.
Ottawa, Ont.[a]	167.7	20.0	12	D.
Cobourg, Ont.	3.7	0.5	12	D.
Pembroke, Ont.	6.3	0.7	11	D.
Kingston, Ont.	20.9	1.8	9	D.
Fredericton, N.B.	8.1	0.7	9	D.
Brockville, Ont.	7.2	0.6	9	C.
Brampton, Ont.	7.5	0.5	7	A.
Quebec, Que.[a]	126.4	7.2	6	D.S.E.

SOURCE: D.B.S., 1961 Census, Bulletins 3.2—2, 3, 4.

D = Defence Departments; A = Aircraft and Parts; S = Shipbuilding and Repair; C = Communications Equipment; E = Explosives; I = Scientific Instruments.

[a] Metropolitan Area.

Sensible decisions on matters of this kind must involve some attempt to weigh the greater economic efficiency of expenditures that are not subject to a regional constraint against the costs and sacrifices involved in forcing people to move and in a local decline of population. In this context it is relevant to note that a great deal of the employment in each city serves the *local* market for goods and services, so that if disarmament leads to a loss of population,

TABLE 7

TOWNS AND CITIES WITH OVER 2,000 MEMBERS OF THE LABOUR FORCE IN DEFENCE-SENSITIVE INDUSTRIES, 1961.

Area	Labour Force		(2) as percentage of (1)	Main Defence Industry
	Total (1)	Defence-Sensitive Industries (2)	(3)	(4)
	(000)		%	
Montreal, Que.[a]	807.0	39.5	5	A.C.D.
Toronto, Ont.[a]	789.7	21.7	3	A.I.C.D.
Halifax, N.S.[a]	73.0	20.0	27	D.S.A.
Ottawa, Ont.[a]	167.7	20.0	12	D.
Victoria, B.C.[a]	55.4	11.0	20	D.S.
Quebec, Que.[a]	126.4	7.2	6	D.S.E.
Winnipeg, Man.[a]	194.3	7.0	4	D.A.
Vancouver, B.C.[a]	294.8	5.7	2	D.S.C.
Edmonton, Alta.[a]	131.6	5.2	4	D.A.
Calgary, Alta.[a]	109.3	5.0	5	D.
London, Ont.[a]	73.8	4.0	5	D.C.
Oromocto, N.B.	4.3	3.8	89	D.

NOTES AND SOURCES: see Table 6.

employment in industries serving local needs will be lost in addition to the loss of defence employment. The magnitude of this "multiplier effect" can be estimated from the information in the 1961 Census. Chart I shows the relation between "local" and "basic" employment for cities and towns of 10,000 or more inhabitants.[1] There is very little variation from a stable relation for large cities and Metropolitan Areas, but small cities show large deviations from the average relation. The chart suggests that the average relation is very close to one position in "local" employment for each member of the labour force in a "basic" industry. The best computed estimate of the average relation[2] is that for a one per cent decline in the labour force in "basic" industries, including defence, employment in "local" industries would decline by 0.98 per cent. Very roughly, and on the average, for every position lost through disarmament which is not replaced *locally* there would be an additional loss of one position in "local" industry. The relation may be very different from this average in a particular small town, and in order to be prepared for disarmament detailed case studies should be made for those localities where problems are likely to arise.

The costs and hardship imposed on those who must move to a new city to find work, should also be taken into account in deciding whether compensating expenditures should be tailored to protect the cities affected by disarmament. Up to a point no such hardship arises, because there is a normal movement of families between cities and regions. In evaluating the possible effects of disarmament in a given city it would therefore be important to know what proportion of those employed in defence-sensitive industries normally change their employment and place of residence each year. Unfortunately, very little

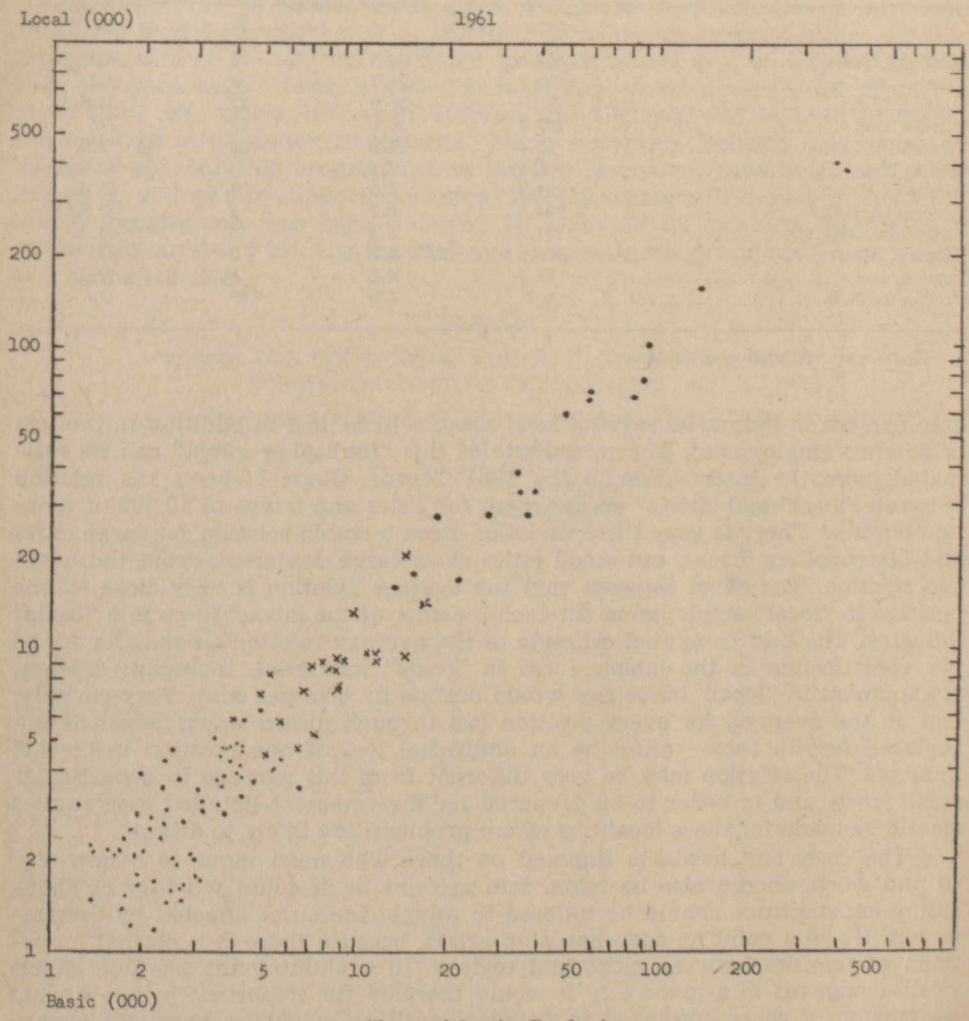
[1] For the purpose of this investigation we have defined "local" employment as consisting of the following census industries and groups: dairy factories, bakeries, soft drink manufacturers, sash and door and planing mills, printing and publishing, construction, urban transit, taxi cabs, telephone, post office, utilities, retail trade, savings and credit institutions, insurance and real estate, schools, health and welfare services, religious organizations, recreational services, personal services, miscellaneous services, local administration.

"Basic" industries are those not dependent on the local market. This terminology is borrowed from the geographers.

[2] Based on regression analysis on the logarithms of "local" and "basic" employment.

CHART I

Labour Force in "Basic" and "Local" Industries
Cities, Towns and Metropolitan Areas of 10,000 or More.



(Logarithmic Scales)

Source: D.B.S. 1961 Census.
(for definitions see text)

statistical information of this type is at present available, so that special studies would have to be made. This question is one aspect of the general problem of labour mobility which is discussed more fully in a later section.

Occupational Concentration of Defence Expenditure:

Detailed information on employment by occupation is available from the 1961 Census. To determine how much of the employment in each occupation is dependent on defence would, as in the case of regions, require accurate information on inter-industry transactions, which is not at present available.

A rough idea of the occupations that are likely to be seriously affected by disarmament can, however, be gained by examining the occupational structure of the major defence-sensitive industries. Table 8 shows the occupations with the highest concentration of employment in the aircraft, shipbuilding, and communications equipment industries. Of the sixteen occupational groups shown, nine are in the metal working field and three are in the professional field, including the very important group of professional engineers. Apart from members of the armed forces, it is members of these groups who run the greatest risk of having to acquire new skills in the event of disarmament. Such and private demand that take the place of defence expenditures will utilize the same skills. The list of occupations suggests that the type of expenditure most likely to utilize the existing skills would be expenditure on machinery and equipment and durable consumer goods, as well as research and development.

For the individual faced with the need to change his occupation, the psychological and financial sacrifice is greatest if the obsolete occupation is a highly skilled one involving a substantial investment in training. This is clearly the case for professional engineers. Information on the training requirements of various crafts is not readily available, but four of the occupations that are listed in Table 8 are analyzed in a Department of Labour publication (Ref. (7)), from which the following results are summarized:

PERCENTAGE OF THOSE IN THE OCCUPATION WITH FORMAL TRAINING

Occupation	Place of Training		
	Canada	Foreign	Both
	%	%	%
Tool and Die Makers	88	91	86
Sheet Metal Workers	56	90	64
Senior Draughtsmen	99	100	99
Electronic Technicians	97	98	97

MEDIAN LENGTH OF FORMAL TRAINING IN YEARS
(For those with Formal Training)

Occupation	Place of Training		
	Canada	Foreign	Both
Tool and Die Makers	4 or more	4 or more	4 or more
Sheet Metal Workers	less than 1	4 or more	2 - 4
Senior Draughtsmen	4 or more	4 or more	4 or more
Electronic Technicians	2 - 4	2 - 4	2 - 4

These findings are the result of a sample survey involving interviews. Two of the occupations shown involve, on the average, over two years of formal training and two involve at least four years. It would be very helpful to have corresponding information on other occupations.

TABLE 8

OCCUPATIONS WITH A HIGH CONCENTRATION OF DEFENCE-SENSITIVE EMPLOYMENT[a]

Occupation	Labour Force		(2) as percentage of (1)	Main Defence Industry
	Total (1)	Defence Industries (2)	(3)	(4)
	(000)		%	
Fitters and Assemblers, Electrical and Electronic Equipment	8.4	4.9	59	C.
Mechanics and Repairmen, Aircraft	6.8	2.9	43	A.
Riveters and Rivet Heaters	1.4	0.5	36	A.S.
Inspectors, Examiners, Gaugers, n.e.s. —Metal	14.6	3.1	21	A.C.
Boilermakers, Platers, and Structural Metal Workers	8.5	1.7	20	S.
Patternmakers, (except paper)	2.0	0.3	17	A.S.
Fitters and Assemblers n.e.s.—Metal	17.6	2.8	16	A.
Toolmakers, Die makers	10.6	1.2	11	A.C.
Machinists and Machine Tool Setters	34.6	3.2	9	A.S.C.
Sheet Metal Workers	17.1	1.4	8	A.S.C.
Science and Engineering Technicians, n.e.s.	39.8	3.4	8	C.A.
Welders and Flame Cutters	38.7	3.0	8	S.A.C.
Professional Engineers	43.1	3.0	7	A.C.
Polishers and Buffers,—Metal	2.8	0.2	7	A.
Metalworking Machine Operators, n.e.s.	28.2	1.8	6	A.S.
Draughtsmen	20.6	1.3	6	A.S.C.

[a]Aircraft, Shipbuilding, and Communications Equipment.

n.e.s.—not elsewhere specified.

A = Aircraft

S = Shipbuilding

C = Communications Equipment

The Mobility of Labour:

The difficulties of adjustment that will accompany disarmament will be reduced to the extent that there is a high level of voluntary mobility of labour. What is mainly relevant here is mobility with respect to industry, occupation, or residence, and not moves from one employer to another within the same industry and occupation. Unfortunately, "turnover rates", for which extensive statistics exist include the latter type of move. They are therefore not useful for our purpose.

Information on the extent of voluntary mobility and is determinants is very inadequate, and a great deal more should be known in order to minimize the difficulties connected with disarmament. Some relevant conclusions can, however, be drawn from presently available sources.

It is generally believed that voluntary mobility is high when there is little unemployment and aggregate demand is high. A study by Greenway and Wheatley (Ref. (6), p. 1) confirms this typothesis for the Canadian economy in the fifties. The analysis is based on a sample of annual unemployment insurance book renewals and measures mobility by the percentage of renewals that record a change in industry, area, or occupation from the preceding year. Mobility is measured only for those with a job at successive renewal dates and is thus a fairly good index of voluntary mobility. The rates are very high, and fell as unemployment increased, from 54 per cent in 1957 to 41 per cent in 1959. (Ref. (6), p. 5).

A little under one half of these job changes involved a change in industry. Thus between one fifth and one quarter of those with jobs at successive renewal dates changed their industry of employment during the year. These high rates suggest that if turnover in defence-sensitive industries is not abnormally low, substantial annual cut-backs in their output could take place without layoffs in excess of normal voluntary turnover, by halting the flow of new entrants into these industries. Of course, in the absence of detailed studies no firm conclusion on this matter is possible.

Occupational mobility was considerably higher than regional mobility. The proportion of renewals involving a change in both industry and occupation fell from 16 per cent in 1957 to 10 per cent in 1959 while the proportion of renewals involving a change in both industry and region ("local office area") fell from 6 per cent in 1957 to 4 per cent in 1959 (computed from Ref. (6), p. 5). The *relatively* low level of regional mobility suggests that *on the average* people are more easily induced to change their occupation than their place of residence. This finding tends to support a policy of providing job opportunities and retraining at the local level but it cannot take the place of a more concrete weighing of benefits and costs.

Mobility and Government Policy:

The problems of mobility generated by disarmament will not be different in essence from those receiving a great deal of attention at present. There is a widespread belief that "automation" is rapidly changing the skills required in the labour force, and that a great deal of present unemployment is due to the fact that workers do not have the right skills and hence cannot move to the jobs that are available as their old positions are rendered obsolete by technological change. While few economists would share the belief that a major part of present unemployment can be explained in this way, all would agree that it is highly desirable to facilitate the smooth flow of labour between occupations, industries, and regions. One may therefore ask whether disarmament introduces any new special factors into the discussion of mobility; are there any measures which would be desirable in the event of disarmament but could not be recommended in its absence.

An important difference between mobility problems due to disarmament and those due to automation is that disarmament involves a discretionary step of the federal government. One consequence of this is that these mobility problems will enter into the political considerations affecting disarmament. A second consequence already evident, is that in the event of disarmament there will be political pressures in favour of compensating expenditures which are tailored to reduce the mobility problem. A third consequence relates to the controversial question of the degree to which the Federal Government should be responsible for promoting labour mobility and for shifting the costs and sacrifices occasioned by imperfect mobility from the shoulders of the employees concerned. In the case of disarmament there is likely to be more general agreement that the Federal Government should accept a major share of the responsibility.

Our further discussion will be based on the view that the Federal Government should accept full responsibility for the costs of any measures to deal with mobility problems, but that responsibility for planning and action must be shared by junior governments, employers, and labour.

Problems of mobility will be minimised if disarmament is very gradual. It is unlikely, however that even the twelve year disarmanment scheme we have outlined would be gradual enough to permit all changes to be accomplished, through normal voluntary mobility, retirements, and redirection of the flow of new entrants. Some defence workers and members of the armed forces will be compelled by disarmament to seek employment in new occupations and

regions. One of the most effective steps the federal government can take to facilitate these movements is to maintain aggregate demand for goods and services at a high level. This is confirmed by the experience of World War II and of the post-war period of reconversion, and by the statistical findings on mobility discussed above. If the problem of aggregate demand is solved, the problem of mobility is reduced to a minimum.

Next to the maintenance of aggregate demand a most important requirement is advance planning on the part of business firms and regions that will be affected by disarmament. The types of non-defence goods that can employ the labour and facilities currently devoted to defence projects should be kept under continuous review, the markets for them should be studied and developed. This task requires the detailed knowledge that only the firms and local authorities concerned can have, and therefore canot be left to the Federal Government. At present the Department of Defence Production encourages research and development work by business firms designed to enable them to compete successfully for Canadian and U.C. defence contracts. Preparation for disarmament requires that there should be similar incentives for research on the civilian alternatives to defence work.

Planning of this kind will reduce the need for actual shifts of labour between firms and regions. These shifts can be further reduced, as we have indicated, by directing government exenditure in nondefence areas to the industries and firms affected by reduced defence demand. The shipbuilding and aircraft industries are obvious candidates for treatment of this kind. The political pressure to use public funds to subsidize "obsolete" industries is always great, and earlier examples can be found in federal policies relating to gold mining, agriculture, and fisheries.

Taking into account the costs and sacrifices involved in the movement of labour and capital between industries and regions, there is certainly a case for some degree of adjustment of public expenditures to the existing disposition of resources. There should however be machinery for making decisions in this area that are based on a full exploration of alternatives and a careful weighing of costs and benefits. Many of these are intangible and cannot be accurately measured, but a sensible policy requires that they should be considered in a systematic way, so that decisions are not uncoordinated responses to special pressures and problems.

The majority of those who will be forced to change their employment and perhaps their location in the event of disarmament will be members of the armed forces and civilian employees of the Department of National Defence. A very rapid transfer of personnel out of the armed forces was greatly facilitated at the end of the last war by the system of war service gratuities, reestablishment, credits, and various allowances for veterans. A system of benefits of this kind, extended to civilian employees of the defence departments, would do a great deal to reduce the mobility problems of disarmament.

The mobility of employees of private industry is at present assisted by a variety of Federal and Provincial programs including unemployment insurance and the National Employment Service, the technical and vocational training programs, and a newly established Manpower Consultative Service. Under the latter program financial incentives are to be provided for planning and research by employers and unions in situations where a reduction of employment opportunities is foreseen. All these programs will help to alleviate the difficulties resulting from disarmament, but it is arguable that they are not adequate in scope even for the mobility problems we face now. In particular there does not seem to be adequate provision for relieving discharged employees of the costs involved in moving to a new area, and for supporting discharged employees and their families during retraining.

Research and Development:

In Canada as in other countries a very high proportion of scientific research and development is financed from defence funds. This applies not only to work carried out by the Defence Research Board and other government agencies but also to the research undertaken by private business and non-profit institutions. It is most unlikely that in the event of substantial disarmament the reduction in defence-financed research would be compensated by an expansion of research financed by private industry. Disarmament will therefore call for a reconsideration of government policy with regard to the financing and organization of scientific research and development with "peaceful" applications.

Conclusion:

The economic problems arising from disarmament would be far less severe than those solved successfully at the end of the war. They can be kept to minimum proportions by well known devices that have been amply discussed in recent economic literature. However, our lack of success in maintaining a high level of employment from 1957 to 1963 points to the limitations imposed by the political and constitutional environment in which economic policies must be implemented.

REFERENCES

(1) United Nations, *Economic and Social Consequences of Disarmament, Replies of Governments and Communications from International Organizations,* New York, 1962.

(2) International Institute for Peace, *Economic Aspects of Disarmament,* Vienna, 1963.

Contains: E. G. Adams, "Economic Effects of Disarmament, The Example of Canada",

C. Freeman, "Economic Effects of Disarmament: Research and Development"

and other articles.

(3) E. Benoit and K. E. Boulding (editors), *Disarmament and the Economy* (New York, 1963)

Contains: R. W. Stevens, "Balance of Payments Adjustments",

S. Melman, "The Cost of Inspection for Disarmament",

and other articles.

(4) *Report of the Department of Defence Production, January 1 to December 31, 1962,* Ottawa, 1963.

(5) Canada, House of Commons, Special Committee on Defence, *Minutes of Proceedings and Evidence,* Ottawa, 1963.

(6) Canadian Political Science Association, Conference on Statistics, 1961, *Papers* (in press).

Contains: H. F. Greenway and G. W. Wheatley, "Regional Aspects of Labour Mobility in Canada, 1956-'59."

(7) Canada, Department of Labour, *Acquisition of Skills,* April, 1960.

DISARMAMENT AND ARMS CONTROL

By: HEDLEY BULL

Reader in International Relations
in the University of London.

CONTENTS

I. Basic Concepts.

II. Areas of Controversy.

III. General and Complete Disarmament.

IV. Local and Partial Measures.

V. Arms Control and the Changing Pattern of International Politics.

I—BASIC CONCEPTS

Disarmament may be defined as the reduction or abolition of armaments or armed forces. It may be:

(*a*) unilateral or multilateral. That is to say, acts of disarmament may be carried out irrespective of undertakings by other states to do the same; or they may be made conditional upon them;

(*b*) comprehensive or partial. In order words, disarmament may involve reductions in *all* categories of armaments and armed forces; or only in some such categories;

(*c*) general or local. Disarmament may involve all militarily significant states; or it may be confined to the countries of a particular region;

(*d*) drastic or modest. The reduction and abolition involved, that is to say, may have the effect of greatly weakening states in their military capacity or even of rendering them militarily impotent—as in proposals for "total disarmament" or (what amounts to the same thing) "general and complete disarmament"; or it may affect their military capacity only slightly. It should be noted that disarmament which is general and comprehensive in the senses noted above, is not necessarily drastic: it is conceivable that all militarily significant states might undertake measures of disarmament that would weaken them in all categories of their armaments and armed forces, but not weaken them very much. "General and comprehensive disarmament", therefore, is not identical with "general and complete disarmament", a confusion which is fostered by the use of the initials G.C.D.

Arms control may be defined as restraint exercised upon armaments policy, whether in respect of the quantity of armaments and armed forces possessed by a state, their character, deployment or use. In its broadest sense arms control embraces all those kinds of restraint in military policy that are practised or might come to be practised by states that are in conflict with one another but wish to keep their conflict within bounds. Arms control arrangements are relevant only to situations of international conflict; it is only where tension or hostility exists, as it does today between the Soviet Union and the Western

22439—9½

alliance, that the dangers are present which arms control is concerned to remedy. On the other hand, it is also a presupposition of all thinking about arms control that in the situations of conflict to which arms control remedies are to be applied the parties do in fact wish to preserve limits; that the Soviet Union and the Western powers, while they wish to exploit the military power available to them in the conflict in which they are engaged, at the same time recognise common interests in avoiding war and in preserving limitations in it if it occurs.

In the senses in which the terms are used here, the relationship between disarmament and arms control is that the latter includes the former. However, arms control also includes a number of other kinds of restraint in military policy in addition to that involved in disarmament:

(*a*) In addition to international agreements which impose disarmament it includes agreements which do not require reduction or abolition of armaments but impose restrictions of different kinds. They may restrict, for example, the test explosion of weapons, as in the case of the limited nuclear test ban treaty; the deployment of weapons in certain areas, as in the use of proposals for regional denuclearised zones; the future increase of armaments, as in the case of proposals for a "cut-off" in the production of nuclear explosives or of missiles; the economic resources devoted to armaments, as in the case of proposals for the limitation of defence budgets; or the use that is made of armaments in war, as in the case of the Geneva Protocol of 1925 prohibiting the use of poison gas.

(*b*) In addition to agreements contained in a formal international treaty it includes informal or tacit agreements to practice restraint in military policy. The clearest example of an agreement of this sort was the informal agreement not to test nuclear weapons while the negotiation of a test ban treaty was in progress, observed by the United States, Great Britain and the Soviet Union from 1958 to 1961. Many other areas of great power military policy are also sometimes said to be the subject of tacit agreements: the United States and the Soviet Union, for example, are said not to allow their military expenditures to rise above a certain level, to limit the resources they devote to destabilising aspects of the arms race such as the anti-missile missile and civil defence, and to respect the inviolability of one another's most vital spheres of influence, in deference to a mutul awareness that if either of them disregarded the prohibition in question the other would be bound to follow suit and the competition between them would take a new turn dangerous to them both. It is difficult to establish whether the above are genuine examples of tacit agreements or not. Where, as in the case of the restraint observed in military expenditures, neither side actually makes public reference to any sort of understanding with the adversary, nor even to the danger of provoking him into stepping up the competition to an unacceptable level, it cannot be positively demonstrated that any such understanding exists. Moreover, the restraint displayed on both sides can perhaps be adequately explained by the domestic pressures on each country limiting the resources it is prepared to channel into the arms race. On the other hand the area of tacit arms agreements is undoubtedly of great importance. The area of great power military relations is in fact for the most part unregulated by formal agreements; and in so far as understandings do exist to reduce the risk of war and limit it if it occurs, these are chiefly of a tacit or informal sort. The sharpness

of the United States' reaction to the discovery in September 1962 that the Soviet Union was establishing strategic missiles in Cuba was perhaps due to a feeling that a tacit understanding had been disregarded.

(c) In addition to international agreements, formal and tacit, the concept of arms control embraces restraint that is unilateral. There are certain actions in the field of military policy which each side may take without waiting for the agreement of the other, but which nevertheless promote interests that are common to them both. The clearest examples are the actions taken by the United States to reduce the danger of war arising from technical accident or from a failure on her part to ensure adequate control of her own forces and weapons. A great many other areas of United States military policy at the present time, however, may be said to constitute unilateral arms control in this sense. Thus the acquisition by the United States of nuclear retaliatory forces that are invulnerable has as at least one of its purposes that of advancing an interest shared with the Soviet Union in replacing weapons which must be fired instantaneously upon receipt of warning of an impending attack, in order to be used in retaliation, with forces that can survive any attack and therefore do not confront the political decision-maker with the need to make a rapid and possibly erroneous decision. The United States government's provision of a strong conventional capability in Western Europe has as one of its purposes that of reducing the danger of a nuclear war in Europe arising from an expansion of a conventional conflict unintended by either side. Again, the resistance offered by the United States to the spread of national nuclear forces within Nato, and her championship in its place of an integrated alliance nuclear force, has as one of its declared purposes the promotion of an interest shared with the Soviet Union in arresting the spread of nuclear weapons to non-nuclear countries in general and to Western Germany in particular. It is one of the difficulties of the concept of unilateral arms control that actions of the sort that have been decribed, although they have arms control as part of their purpose, have other possible purposes also. Thus the United States, by improving her command and control arrangements, by making her retaliatory forces invulnerable, by equipping herself with a strong conventional capability in Europe and by resisting the spread of nuclear weapons in Nato, also places herself in a stronger position to advance perceived interests that are not shared with the Soviet Union but are exclusively her own. The ambiguity of purpose and intent surrounding all acts of military policy means that it is difficult to have the adversary recognise that the actions performed in the West are directed towards interests held in common, even where this is in fact the case.

II—AREAS OF CONTROVERSY

Disarmament and arms control are the subject of a number of important theoretical controversies, which it is helpful to take into account before proceeding to consider present problems. No attempt is made here to settle these controversies, nor even to investigate them fully. It is intended rather to state some of the main issues in each area of controversy and to present the arguments used on each side. The matters at issue are the desirability in principle of disarmament and arms control; their political practicability at the present time;

and the methods most appropriate for advancing them—the direct vs. the indirect approach; the unilateral vs. the multilateral approach; the comprehensive vs. the partial approach; and the drastic vs. the modest approach.

The Desirability of Disarmament and Arms Control

The objective towards which disarmament and arms control are directed is that of increased international security; that is to say, they are concerned to make war less likely or less frightful if it occurs. This objective itself is not in dispute among men of goodwill; but it is a matter of legitimate disagreement as to whether or not disarmament and arms control are the best means of advancing it. The idea of disarmament theory, in particular, that international security is best advanced by abolishing military force or by reducing it to the lowest possible level, conflicts with two other doctrines about international security which are widely held at the present time. One is the idea of the balance of power or balance of terror: the doctrine that international security is best advanced by preserving an equilibrium in military force among the major powers, rather than by attempting to abolish it or reduce it to the lowest level. The other is the idea of a world government or world police force: the notion that security is best promoted not by eliminating military force but by depriving sovereign states of it and concentrating it in the hands of a central authority.

According to the advocates of a balance of military power, disarmament represents an inadequate approach to the problem of international security, for two reasons. In the first place, it is held, disarmament in the sense of the total abolition of all military force is an unattainable objective; while it is conceivable that the armaments and armed forces available to states may be rendered few in number and primative in kind, it is not possible to bring about a world in which states, having no physical capacity for violence, cannot make war even when they want to. In the second place, it is held, the best way to dispose of the military force that inevitably will exist in the world is not to reduce it to the lowest quantitative and qualitative level, for the military force that now exists is in fact a source of security rather than insecurity among nations, so long as no one state is able to place itself in a position of preponderance. Nuclear weapons, in particular, are thought to be an effective preservative of peace; and the balance of nuclear power between the Western alliance and the Soviet Union is thought to have about it a quality of permanent stalemate such as is proof against decisive upset by either side. The conclusion towards which the doctrine of the balance of power points is that disarmament, by removing the kinds and levels of military force upon which the peace of the world is said to have rested in the postwar world, would defeat its own purposes.

According to this doctrine international security is better served either by an attitude of *laissez-faire*—or abandonment of arms control in the relief that the arms race itself will preserve the nuclear stalemate and hence the peace; or by a pursuit of measures of arms control that would be designed not so much to abolish or reduce military force as to stabilise the balance of power, and in particular the nuclear stalemate. Those who have embraced this latter conclusion have been led to distinguish those departments of the arms race that threaten to undermine the nuclear stalemate (for example, the development of the capacity to cripple the opponent's nuclear retaliatory forces in a first strike; and the attempt, through measures of civil defence or of military defence, such as the anti-missile missile programme, to provide effective defence against nuclear attack) from those departments of it which have the effect of further confirming or strengthening the nuclear stalemate (for example, the development of invulnerable retaliatory forces). They have argued that it should be the object of arms control to prohibit the former, "de-stabilising" tendencies, while tolerating or even encouraging the latter "stabilising" tendencies.

The starting-point of many advocates of a world government or world police force is also that disarmament in the sense of the complete elimination of military force is unattainable; and that the objective of reducing armaments to the lowest quantitative and qualitative levels, while leaving them in the hands of sovereign states, is an unsatisfactory one. For these theorists, however, the solution of the problem of international security lies not in stabilising the balance of military force among states, but in removing military force from their control and placing it at the disposal of a central authority. Drastic general and comprehensive disarmament carried out in the absence of a strong central authority—such as is envisaged in the current Soviet plan for general and complete disarmament—would, according to these theorists, prove impossible to control: for states can be expected to observe the terms of a disarmament treaty only if there exists a superior authority to deter potential violators and deal effectively with actual ones. Moreover, on this view, quite apart from the question of the enforcement of the disarmament agreement, the situation resulting from the implementation of a plan such as the Soviet Union's would be that of a vacuum of power and hence of general anarchy. According to these theorists the requirements of security in international society as in domestic society are that the resort to violence should be made the legal monopoly of the community, and that the means of violence be concentrated in the hands of its central organs.

There are certain *ripostes* which the advocate of disarmament pure and simple may make to these two positions. As against the advocate of the stabilisation of the balance of power, he may object that in the nuclear age tme security promised by such a system falls short of the requirements for the survival of civilised life in the long run. The maintenance in the past of an armed balance of power may be said to have introduced an element of order into international relations, and to have contributed to the avoidance of particular wars; but it also preserved a situation in which war constantly could, and sometimes did, take place; and the question, so it is maintained, is whether in the context of present-day military technology a system of this sort can remain permanently acceptable. As against the advocate of a world police force it may be argued upon behalf of general disarmament that a world in which modern weapons are not abolished but merely placed at the disposal of a single authority is one in which the danger that these weapons will be used in anger is still present.

The advocate of disarmament may, indeed, maintain that there are certain dangers to international security to which measures of actual reduction and abolition of armaments and armed forces appear the only remedy. The existence of vast military establishments, he may argue, itself constitutes a cause of international tension and conflict, which might be reduced if armaments and armed forces or the resources devoted to them were to be cut down in size as the result of international agreements. Moreover, he may also argue, there are certain kinds of armaments which by their very nature make war more likely or more frightful if it occurs: measures of abolition of these categories—the missile, which magnifies the speed of war; the nuclear explosive which magnifies its destructiveness—might in themselves effect an improvement in security against war, even if such measures of abolition may be undone by subsequent rearmament and their effect were to have proved merely temporary.

It is not purposed here to attempt to resolve the controversies that divide the idea of security through disarmament from that of security through the balance of power on the one hand, and that of security through the concentration of power on the other. It may be observed, however, that the United States and the Soviet Union, while both embracing the idea of peace through disarmament as the official objective of their negotiations, have gone some distance towards qualifying the pure principle of disarmament out of regard

for the other two considerations. In the case of the principle of security through the balance of power, both recognised it when in their Joint Statement of Agreed Principles for Disarmament Negotiations of 20th September 1961 they laid down that: "All measures of general and complete disarmament should be balanced so that at no stage of the implementation of the treaty could any state or group of states gain military advantage and that security is ensured equally for all." This principle gained further recognition when in 1962 the Soviet Union modified its proposal for the destruction of all nuclear delivery vehicles in Stage I of the process of disarmament to allow of the retention of a limited number of intercontinental missiles by themselves and the United States until the end of Stage II. In doing so the Soviet union accepted the United States' doctrine of 'transitional deterrence', that is to say, the notion of the preservation of the nuclear stalemate to provide security during the disarmament process. As regards the doctrine of security through the concentration of power, the United States alone has sought to take account of this principle in its general and complete disarmament plans: the idea of a Peace-keeping force, whose military strength is to be augmented as that of sovereign states is reduced, vague and ambiguous though it is, suggests that the United States is feeling its way towards espousing the objective of world government.

The Political Practicability of Disarmament and Arms Control

However desirable disarmament and arms control may be, they cannot come about unless the major powers recognise them to be desirable and earnestly pursue them. Every major power is officially in favour of disarmament and arms control; even France and China, who alone among the major powers refused to sign the limited nuclear test ban treaty, make alternative arms control proposals of their own. But this not to say that every state that takes part in arms control negotiations is engaged in the earnest pursuit of arms control.

Disarmament and arms control negotiations are in fact susceptible of three sorts of interpretation. First, there is the view that they are a form of strategic manoeuvre: an attempt, on the part of each state to improve its relative military position by hoodwinking its opponents into accepting proposals that are injurious to their interests. Thus it is pointed out that the current Soviet proposals include the abolition of foreign military bases in the first stage of general and complete disarmament, a proposal which would weaken the United States and her allies very much more than it would the Soviet Union. The United States, it is remarked, places great emphasis on adequate inspection of the Soviet Union, a policy which reflects the fact that in the field of military intelligence the United States has more to gain than the Soviet Union from a lowering of barriers to the passage of information. And it is noticed that the proposal upon which France at present places most emphasis is for the abolition of delivery vehicles for nuclear weapons; since France at present possesses no effective means of delivering nuclear weapons, whereas the other three nuclear powers do, this proposal would change the distribution of power in France's favour. On this view of arms control negotiations, each state does seriously pursue an agreement, but only one that would confer a unilateral advantage upon itself—an agreement, that is to say, which is unlikely to prove acceptable to other states, unless they are mistaken as to what their true strategic interests are.

Secondly, there is the view that arms control negotiations are an exercise in propaganda or public relations. On this view each participant in the negoti-

ations is concerned to demonstrate its own greater willingness to disarm, whilst at the same time inserting what has been called a "joker" into its proposals, to ensure their inacceptability to the other side. If this view of arms control negotiations is correct, an agreement is never a serious possibility; if one side calls the other's bluff by accepting its proposals, the latter side will recoil in confusion and change its position, as the United States did when the Soviet apparently accepted the Anglo-French plan in May, 1955.

Thirdly, there is the view that arms control negotiations are in fact what they purport to be: a process of diplomacy or bargaining and a search for appropriate methods or techniques, in which the parties seek to discover what common interests they may have in military restraints, and how these interests may best be advanced.

Clearly, it is only when arms control negotiations approximate to this third view, when the parties are engaged in a genuine exploration of the common ground between them, that the conditions are present for the conclusion of arms control agreements. Are these conditions present now? It is not open to serious doubt that the major powers are in earnest in the attempt to reach agreement in *some* areas of arms control. Indeed, a number of modest agreements already exist. As noted above, the arms race is moderated by a series of informal agreements. And in the sphere of formal agreements, there exist the Antarctica Treaty of 1959, the Hot Lines Agreement of 1963, and the limited nuclear test ban treaty of the same year. It is, however, a matter of controversy as to whether or not the major powers are seriously pursuing an agreement for general and complete disarmament.

The Soviet Union, it may be argued, displays such hostility and suspicion towards the non-Communist world in all its behavior outside the disarmament conference chamber, that it is difficult to credit it with any serious expectation that one day the socialist lamb will lie down beside the capitalist wolf. Quite apart from its distrust of Western intentions towards the Communist world, the Soviet Union is dependent upon armed force for the maintenance of its present position in eastern Europe, and for the further extension of the communist system. The impression that the chief Soviet objective in negotiations for general and complete disarmament is to score propaganda victories at the expense of the Western powers is heightened by the fact that Soviet general and complete disarmament plans are of a quite flippant character, betraying little sign of a serious attempt to come to grips with the problems involved.

In the case of the United States, especially in recent years, the plans that have been put forward for general and complete disarmament quite clearly reflect detailed consideration of the subject. It can be shown, moreover, that many people in the United States, not least those responsible for the conduct of arms control negotiations, would be prepared to accept complete disarmament, if adequate guarantees of security were to be forthcoming. As in the case of the Soviet Union, however, United States policy outside the disarmament conference chamber does not seem to display any real expectation that measures of drastic disarmament are likely to come about; defence policy and economic policy are conducted as if the United States military establishment were a more or less permanent fixture of national life; the chief preoccupations of United States planners and policymakers seem to be with a future radically different from that assumed in plans for general and complete disarmament.

Those who contend that negotiations for general and complete disarmament are chiefly a strategic manoeuvre or a public relations exercise on both sides, sometimes conclude that the Western powers should cease to participate in talks of this kind, and seek to restrict negotiations to those other areas of arms

control in which the two sides really believe themselves to have an interest. There is, however, a contrary argument. This is that even if general and complete disarmament should at present appear politically impracticable, negotiations directed towards it should be persisted in, because they are themselves a possible means of making it more practicable. If the major powers now have only a tentative and exploratory commitment to the idea of general and complete disarmament, the continuation of a conversation among them on this subject may help to harden this commitment, to mobilize those forces in the various countries involved that are in favour of radical changes in the present position. It may also assist the development of a common doctrine as to how general and complete disarmament may be carried out, and as to how to deal with the various new problems to which the completion of that process would give rise. In the present pronouncements made by the major powers on general and complete disarmament there is perhaps an element of deception, including self-deception, as to the real difficulties of the problem: a failure of governments to be entirely honest, either with themselves or with their respective publics, as to the unreality of the plans on which the light of publicity is focussed. On the other hand the distinction between illusion and reality is often a very fine one; illusions become realities, if sufficient people believe them; and so the case for continuing to talk as if general and complete disarmament were practicable might still be a strong one even if a static view of the matter suggested that it were not.

The Direct vs. The Indirect Approach

Given that disarmament and arms control are desirable from the point of view of international security, and that in certain forms at least they are sufficiently sought by the major powers to be politically practicable, the question arises how they may best be achieved.

One view of the problem is that states are not locked in political conflict because they are armed, but on the contrary are armed because they find themselves politically divided; that while they remain politically divided, they cannot be expected to accept restrictions on their military policies, whereas once the political divisions among them are removed, disamament would follow more or less automatically. Those who take this view consider that the "direct approach" to arms control, that of holding conversations on disarmament and arms control itself, is doomed to failure; and that instead, efforts should be concentrated upon the "indirect approach", the attempt to settle the political disputes from which the arms race arises. The proper approach to disarmament, on this view, is by way of a solution of the German problem, the problem of Berlin and other political issues.

Advocates of the "direct approach", on the other hand, take as their starting point the fact that armaments, as well as being the result of international tensions, are themselves the cause of further tensions; it is the military power that is now available to modern states that causes fear and distrust among them, and not merely their conflicting ambitions. Disarmament, on this view, can only be achieved if the major states confront the problem of disarmament itself; moreover, once this is solved, political tensions themselves are likely to subside. As the advocates of the indirect approach maintain, the United States and Soviet Union must remain reluctant to accept restraint on their military policies, let alone to abandon their armaments altogether, while they are locked in a series of political conflicts. On the other hand, it may be said on behalf of the direct approach that it is precisely because these states are divided by serious political disputes that the search for arms control agreements between them is necessary and relevant. Where the level of political tension among states is low and they do not make military preparations against one another, as in the case of relations now

existing among the United States, Great Britain and Canada, arms control arrangements can serve no purpose. Moreover, if disarmament and arms control negotiations between the Western alliance and the Soviet bloc were to be postponed until after the political disputes dividing them had been settled, this would mean living indefinitely with the dangers of the arms race, without doing anything to diminish them. Indeed, since political conflict is the normal condition of international relations, such an approach to disarmament and arms control suggests that the latter are enterprises to be undertaken in some other world, not in this one. The proper concern of arms control, it may be argued, is to identify those military restraints which are consistent with the perceived interests of both sides, even while the political conflicts among them continue.

The Unilateral vs. The Multilateral Approach

Given that even while political tensions persist in the world the direct attempt to advance disarmament and arms control may be of some value, another important disagreement of method which arises is that between advocates of unilateral and of multilateral action.

The basis of the multilateral approach is that states are more likely to practise restraint in their military policies if they are able to exact assurances from other states that they will do likewise. Thus, on this view, the major powers are at present most likely to disarm if they can arrive at agreement binding them all to disarm simultaneously. Such an agreement would facilitate the individual disarmament of states by providing not merely that all states would disarm, but that they would do so in such a way as to preserve the existing distribution of military power in the world, to enable the parties to verify one another's observance of the undertakings, and to have recourse to a system of enforcement in the event that the undertakings were not being observed. In respect of measures of drastic disarmament at least, the preferred approach of all governments is, of course the multilateral one.

The unilateral approach to arms control embraces a number of distinct viewpoints, all of which have in common the belief that particular states may advance arms control without waiting for the agreements of others; together with a certain pessimism about the outcome of multilateral negotiations, or impatience with their progress so far. One form of unilateralism is the idea of unilateral disarmament, as represented by the view of the Campaign for Nuclear Disarmament in Great Britain that that country should unconditionally dispense with nuclear weapons. A second form of unilateralism is the view maintained by some writers in the United States that that country, without going so far as to engage in drastic unconditional disarmament, should engage in limited measures of "lowering its guard", in the hope of provoking a similar response in the Soviet Union, and so transforming the vicious circle of the arms race into a virtuous circle of increasing mutual trust and confidence. This variety of unilateral approach is in a sense multilateral; it substitutes for the negotiation of formal agreements by discussion the negotiation of tacit agreements by concrete actions. A third form of unilateral action is that which already forms an important part of United States military thinking, and was noted above; the taking of certain steps, as for example to lessen the danger of war arising from a technical accident or failure of command and control, not simply in the hope of provoking some response in the Soviet Union that would be of value, but in the belief that the steps themselves are in the interests of both sides, whether this is appreciated by the Soviet Union or not.

It is not proposed here to explore these issues any further in general terms, except to note that there is no necessary conflict between the multilateral and

the unilateral approaches; and that all three forms of the latter approach mentioned, can be reasonably adopted in certain circumstances.

The Comprehensive vs. The Partial Approach

A further controversy concerns whether, if arms control is to be advanced by seeking international agreements, these agreements should be general and comprehensive in scope, or local and partial.

The advocates of arms agreements that are general in the sense that they impose restrictions on all militarily significant powers, and comprehensive in the sense that they limit all categories of armaments and armed forces, take as their starting-point the observation that the arena of international military competition is general and comprehensive in character. That is to say, because the growth of strategic mobility in land sea and air power has made states that are geographically remote capable of making war against one another, the level at which any one state fixes its military power is relative to that of all the other states in the international system. Although there are local military competitions as between Nato and the Warsaw Pact in Europe, between Israel and the Arab states, or between India, Pakistan and China, these competitions are not isolated from one another but together form part of a military competition which is *general*. At the same time military competitions like that between the Western alliance and the Soviet Union embrace a great many kinds of armed power: land, sea and air; nuclear and non-nuclear; numbers of troops and types of equipment and so on. The level at which the United States determines, say, the number of I.C.B.M's it disposes, is relative not merely to the number of I.C.B.M's it believes the Soviet Union to possess, but to the whole range of Soviet armaments and armed forces. In this sense the military competition between the two states is *comprehensive*.

According to the advocates of general and comprehensive arms agreements, any treaty which is merely local in effect (as e.g. the creation of a non-nuclear zone in Europe) or merely partial (as e.g. a nuclear test ban treaty), cannot halt the arms race. It merely closes one department of the arms race, and channels it into other directions. Thus an agreement which prohibited nuclear weapons only in a certain area of Europe might be expected to lead to increased competition in the deployment of weapons outside Europe. Or to take another example, the conclusion of a nuclear test ban treaty might be expected to intensify competition in delivery systems for nuclear weapons, or in nuclear weapons that do not require testing, or in chemical and biological weapons. This is an interpretation for which the past history of arms agreements provides some support. Thus the limitation of battleships and aircraft carriers in the Washington Naval Treaty of 1922 led to increased competition in cruisers. The conclusion to which this doctrine points is that no agreement can halt the arms race which does less than embrace all important states and all kinds of armaments.

The logic of this argument is impeccable. Nevertheless, partial and local arms agreements may be defended on two grounds. In the first place, it may be argued, there cannot be such a thing as an arms agreement that is truly general and comprehensive; the draft treaties to which this name is applied are in effect partial treaties; and thus the objections that are made against partial systems, although they are true, apply to the so-called general and comprehensive treaties also. The reason for this is that there is no clear and absolute dividing line between what constitutes "armaments and armed forces" and what does not. The more things that are specified in a treaty prescribing military force, the more things not specified take on military significance. Thus if nuclear weapons are proscribed, chemical and biological weapons become more important; if these too are prohibited, "conventional" armaments become

more decisive; if these too, the ability to adapt civil assets such as commercial aircraft, nuclear and chemical industries, etc., to military purposes, become the decisive element in international military competition. It may be argued, therefore, that the net can never be cast wide enough to embrace all possible ingredients in military power, and that therefore all possible arms control systems are partial systems.

Secondly, it may be said on behalf of partial agreements that arms control may serve other useful functions than that of imposing a straitjacket upon the arms race. The removal of weapons from particular areas of the world, or the closure of the arms race in a particular area such as the test explosion of nuclear weapons or the militarisation of outer space, may contribute to international security in itself, even if it does not prevent the continuation of the arms race in other parts of the world and other kinds of armament.

The Drastic vs. The Modest Approach

Whether or not agreements are possible that are truly general and comprehensive, another disagreement concerns whether arms control should take drastic changes in the present position as its objective, or modest ones. In the Western world, this is the most important difference of opinion among those who have devoted their attention to arms control. On the one hand there are those who consider that the whole value of arms control lies in the prospect that it will lead to an agreement for general and complete disarmament or for something closely approximating to it. They look forward to a single, dramatic step that would produce vast changes in a relatively short time; and they consider that modest measures, such as the limited nuclear test ban treaty, are valuable not so much in themselves as for the promise they seem to contain that a great transformation may be undertaken some time in the future. On the other hand there are those who consider that general and complete disarmament is a goal that cannot be reached, at all events in the present world; and that it serves only to distract attention from the modest steps that are in fact within the reach of statemanship. Limited agreements. in the view of these latter authorities, should be assessed not in terms of the more drastic agreements that they might lead to, but on their own merits.

The basis of the case for pursuing drastic measures is the feeling that the present system of international relations is bound in the long run to give rise to disaster, even if modest measures can stave it off for a few more years; that time is running out, and that all efforts should be bent to alter the system while the opportunity to do so still exists, however slender the hope may be that these efforts will meet with success.

Those who favour the modest approach consider that however desirable a drastic change in the international system may be it cannot be legislated in a single, sweeping step. They consider that a world in which states are determined to retain substantial military force in their own hands must be taken as a given in any approach to arms control at the present time. The problem of arms control, as they see it, is to achieve the maximum of international security in such a world as that, at the same time hoping that the cumulative effect of the measures that are undertaken will be gradually to produce changes of a fundamental character in the long run. Insistence on general and complete disarmament now, they consider, is a frivolous distraction from the main business in hand: the identification and pursuit of those measures of arms control that are consistent with the perceived interests of states here and now.

It is sometimes argued on behalf of the drastic approach that, whether it is feasible or not, no other approach is possible since it is only this approach that public opinion will stand for. This is not the only reason why the western governments now officially pursue the drastic approach; but undoubtedly a major

reason why they do so is the feeling they have that drastic disarmament is a difficult thing to appear to be against.

The advocates of the modest approach reply that in the field of arms control governments have a duty to educate public opinion as to the actual position, if they believe it to be mistaken, rather than to follow it blindly. It is pointed out also that public opinion in Western countries has become more sophisticated about arms control, less ready to be impressed by simple slogans; and that the time may now be ripe for greater frankness on the part of Western governments in the public presentation of their policies.

III—GENERAL AND COMPLETE DISARMAMENT

The current positions of the United States and the Soviet Union on the question of general and complete disarmament are stated in the Revised Soviet Draft Treaty on General and Complete Disarmament Under Strict International Control, of 24th September 1962, and the United States' Outline of Basic Provisions of a Treaty on General and Complete Disarmament in a Peaceful World, of 18th April 1962. Here an attempt will be made to state briefly the resemblances and differences between these proposals, and to comment on some of the outstanding problems they raise.

Points of Agreement

The formal resemblances between the two plans are considerable and reflect attention on both sides at least to the letter of the Joint Statement by the United States and the U.S.S.R. of Agreed Principles for Disarmament Negotiations of 20th September 1961 (the McCloy-Zorin Statement). These principles may be summarised as follows:

1. The goal of negotiations is the general and complete disarmament of states, accompanied by the establishment of reliable procedures for the peaceful settlement of disputes and effective arrangements for the maintenance of peace.

2. States will nevertheless retain those non-nuclear armaments and forces necessary for internal security purposes, and shall support and provide agreed manpower for a United Nations peace force.

3. To this end the programme shall provide for abolition of armed forces, military establishments and military production, and their conversion to peaceful uses; elimination of all stockpiles of nuclear, chemical, bacteriological and other weapons of mass destruction; elimination of all means of delivery of such weapons; abolition of military organisation and training; and discontinuance of military expenditures.

4. The disarmament programme shall be implemented by stages, transition to a subsequent stage being conditional upon agreement that the previous stage has been completed and that verification arrangements for the next stage are ready to operate.

5. All measures of general and complete disarmament should be balanced so that at no stage of the implementation of the treaty could any state or group of states gain military advantage and that security is assured equally for all.

6. All disarmament measures should be implemented from beginning to end under strict international control; this control to be carried out by an International Disarmament Organisation created within the framework of the United Nations, whose inspectors should be assured unrestricted access without veto to all places necessary for the purpose of effectvie verification.

7. Progress in disarmament should be accompanied by measures to strengthen institutions for maintaining peace and the settlement of disputes by peaceful means.

8. States participating in the negotiations should seek to achieve and implement the widest possible agreement at the earliest possible date.

In accordance with these principles both the plans referred to provide for the general and complete disarmament of sovereign states, subject to the retention of internal security forces and to the provision of manpower for a U.N. peace force. Both lay down that this will be achieved in three stages. Both accept the principle of inspection in all stages by an International Disarmament Organisation. And both accept also the idea of enforcement of the agreement of a U.N. authority.

Points of Disagreement

However, the two great powers place such different interpretations upon the agreed principles as to create a wide gap between the two plans:

(a) *Time Limits*

The Soviet plan sets a time limit of five years upon the whole process. The treaty could come into force six months after signature; completion of the first stage would take eighteen months; completion of the second stage a further twenty-four months; and completion of the third stage a further one year. The United States, by contrast, sets no time limit upon the process as a whole. In the United States' plan, the treaty would come into force three months after signature; completion of the first stage would take three years; completion of the second stage a further three years; and completion of the third stage "within an agreed period of time, as promptly as possible".

(b) *Measures of Disarmament*

There are sharp divergences in the actual measures of disarmament stipulated in the three stages. Broadly, the Soviet plan provides for very drastic measures of disarmament in the first and second stages, whereas the United States plan leaves these to the third stage. In the first stage both plans provide for a number of measures to reduce the risk of war, such as a nuclear test ban treaty, an agreement on the non-dissemination of nuclear weapons and on the demilitarisation of outer space. However, in the nuclear field the Soviet plan provides for so drastic a measure as the abolition of all means of delivering nuclear weapons, including all rockets, aircraft, ships and artillery systems adapted to this purpose—apart from an agreed number of intercontinental missiles, anti-missile and anti-aircraft missiles to be preserved (as a "minimum deterrent") until the end of the second stage. The United States' plan by contrast provides merely for a 30 per cent reduction in the means of delivering nuclear weapons, and for the cessation of further production of fissionable material for use in nuclear weapons. In the conventional field, the Soviet plan calls for the drastic step of the abolition of all foreign military bases and removal of all troops from alien territory; along with the reduction of United States and Soviet troop levels to 1.7 million each, and "proportionate" reduction of conventional armaments and military expenditure. The United States' plan, by contrast, makes no mention of foreign bases or troops stationed abroad in this stage, and calls for troop levels of 2.1 million for each of the two major powers, and a 30 per cent reduction in conventional armaments.

In the second stage the Soviet plan calls for the elimination of all nuclear weapons and other weapons of mass destruction, together with that of the residual number of nuclear delivery systems permitted in the first stage. The

United States' plan, by contrast, requires no measures of reduction of nuclear weapons at this stage, but requires a 50 per cent reduction of the nuclear delivery systems that remain after the 30 per cent reduction carried out in the first stage. In tre conventional field, the Soviet plan calls for reduction of Soviet and United States troop levels to 1 million each at this stage, together with "proportionate" reductions in conventional armaments; while the United States' plan requires a 50 per cent reduction in the troop levels and armaments existing at the end of the first stage.

In the third stage each plan calls for the remaining measures necessary to achieve the general and complete disarmament of states.

(c) *Verification*

There are two fundamental differences between the United States and the Soviet Union in the arrangements they specify for verification; one concerning the kind of inspection that is to be carried out; and the other the nature of the machinery that is to direct and administer the inspection process.

The United States' plan insists that inspection should check not merely that measures of reduction of armaments and armed forces that have been agreed should be carried out ('verification of disarmament'), but also that what is reduced or abolished is not replaced ('verification of non-replacement'), that the levels which exist after reductions and abolitions have taken place are what they are stated to be ('verification of remainders') and that armaments are not illicitly concealed ('verification of non-concealment'). The Soviet Union, however, always makes clear in negotiation that the only sort of inspection it is prepared to tolerate is the first kind, 'verification of disarmament'. It is hard to escape the conclusion that this makes nonsense of the Soviet Union's claim that it accepts the principle of inspection.

Both plans provide that verification be the responsibility of an International Disarmament Organisation, to consist of a conference of all the signatory states, a control council of a smaller number of them, and an internationally recruited staff. However, whereas the United States envisages that the actual direction of verification be in the hands of a single administrator, empowered to report to the control council as to whether or not implementation of agreed measures has been carried out, the Soviet Union's proposals leave it uncertain as to whether or not the 'troika' principle of the concurrence of representatives of all three major political groupings of the world will be a condition of any action the administrative staff takes.

(d) *Enforcement*

Perhaps the most cardinal difference between the two plans, however, lies in their respective provisions for the enforcement of the disarmament agreement. Both recognise the principle that sanctions will be provided by a central international authority; but whereas the Soviet Union apparently envisages an authority which is at most a modification of the existing machinery of the United Nations, the United States clearly has in mind something very much more powerful.

The Soviet Plan provides that in the third stage states undertake to place contingents of their police forces at the disposal of the Security Council, in accordance with Article 43 of the United Nations Charter. In the Soviet Plan, therefore, the international force is made up of national contingents. The forces, moreover, are without nuclear weapons, since another part of the plan specifies that they be equipped "with light firearms". The use to which they would be put is subject to the veto exercised by the five permanent members of the Security Council. And the command of the units making up the force

is to be subject to agreement among representatives of "the three principal groups of states existing in the world".

The United States' plan, by contrast, provides for a United Nations Peace Force which would be studied in the first stage, established in the second stage, and in the third stage progressively strengthened "until it has sufficient armed forces and armaments so that no state could challenge it." It is not stated that the force would be equipped with nuclear weapons, but there is nothing in the United States' plan that would exclude this. The plan is not specific as to the composition or controlling authority of the force. It does, however, clearly associate the progressive weakening of the military power of sovereign states with that of the progressive strengthening of the peace force. Moreover, the United States' plan, unlike the Soviet plan, ranges outside the field of disarmament arrangements themselves to take into account some of the problems which disarmament might be likely to create for the structure of international society. Thus it provides for the acceptance of new obligations to refrain from the threat or use of force; for the codification of rules of international conduct related to disarmament; for the study of measures assuring states against indirect aggression and subversion; for the development of peaceful methods of settling disputes—including acceptance in the second stage of the compulsory jurisdiction of the International Court of Justice; and for a United Nations Peace Observation Corps, to be established in the first stage.

The difference between the Soviet and the United States' conceptions of the enforcement of disarmament is rooted in a fundamental disagreement about the kind of international order which it should be the purpose of the plans ultimately to create. The Soviet plan is based squarely on the idea of the maximum possible disarmament, without providing for any other changes of a far-reaching sort in the organisation of international relations. The United States plan attempts to link the disarmament of states with the concentration of military power in the hands of a central authority, and to regard both as inseparable from changes in the organisation of international relations that involve much more than disarmament itself and that are unlikely to be capable of compression into a timetable laid down in a treaty.

Outstanding Problems

The negotiation of any agreement on arms control presents three classic problems. First, there is 'the problem of the ratio', the problem of determining what measures of reduction or limitation are to be agreed upon, and consequently what ratio of military power among the parties the treaty will produce. Secondly, there is the problem of establishing adequate verification that the measures of reduction or limitation will be carried out. And thirdly there is the problem of enforcement or sanctions.

The present position of the Soviet Union falls far short of the conditions which the United States and Great Britain consider adequate on all three of these points. As regards the 'problem of the ratio', the Soviet plan includes measures which in the Western view would swing the present balance of power in favour of the Soviet Union. Most notable of these is the proposal for abolition of foreign bases and withdrawal of foreign troops in the first stage. This would have the effect of leaving the allies of the United States exposed to the superior land power which the Soviet Union could bring to bear upon Europe, even after its forces had first been withdrawn to Soviet territory. At the same time the proposal for abolition of means of delivering nuclear weapons would eliminate one department of military competition in which the United States now has a marked superiority.

As regards the problem of verification, the Soviet insistence that inspection be of the process of disarmament only, leaving parties to the agreement

without means of determining what armaments or forces are retained, replaced or concealed, is tantamount to rejection of the whole principle of inspection. In such circumstances the Western powers can conclude agreements with the Soviet Union only in those areas where, as in the case of the prohibition of nuclear test explosions in the atmosphere, under water and in outer space, adequate verification is possible without on-site inspection.

As regards the problem of enforcement, the Soviet view is at loggerheads with the Western view, at least where drastic disarmament is concerned. In the case of modest agreements—as e.g. the measures proposed in the first stage of the United States' plan—the western powers have shown themselves willing to do without any powerful central authority to provide sanctions, leaving enforcement as in the Soviet plan simply to the action of particular states and to the machinery of the United Nations. But where drastic measures of disarmament are concerned, of the sort proposed in the third stage of the United States' plan and in all stages of the Soviet plan, the Western view is that no existing machinery for the enforcement of international agreements provides adequate protection. A state which successfully violated a nuclear disarmament agreement that had been carried out by all other states, for example, could not be dealt with by particular other disarmed states, equipped "with light firearms", not by a veto-bound Security Council controlling a force composed of national contingents armed in this manner.

It would seem, therefore, that progress is not likely to take place on general and complete disarmament until there is a change in the Soviet position on these questions. In addition, two other uncertainties should be mentioned.

The first is that the seriousness of the United States in the proposals it has put forward has not yet been put to the test. The atmosphere in which United States' plans have been put forward in recent years has been one in which it has always seemed improbable that the Soviet Union would accept them. If Soviet agreement were in fact to be forthcoming, the United States Congress would then have for the first time to ask itself seriously whether it was prepared to accept the risks and penalties which its own plan incurs.

The second is that before any plan for general and complete disarmament could be implemented the agreement of powers other than the United States and the Soviet Union would have first to be secured. The whole emphasis of disarmament discussions since 1945 has been on achieving an agreement between the two leading powers. However, these two states have never been in a position to impose a bilateral agreement on the rest of the world, and their ability to do so is perhaps further declining. China has never participated in the disarmament negotiations; France at present absents herself; such important states as Western Germany and Japan, although through no fault of their own, have never taken part. Although a number of neutral states participate in the present Eighteen Nation disarmament conference they have sought simply to bring the two great powers together, and have not yet faced the problem of negotiating the arms limitations that they themselves are prepared to accept. A truly general disarmament treaty presupposes vast multilateral negotiations of a sort that have not yet even begun.

IV—LOCAL AND PARTIAL MEASURES

As was stated at the outset, the field of arms control embraces a great deal more than the pursuit of general and complete disarmament; it embraces agreements for local or partial disarmament; agreements which do not involve disarmament; and certain sorts of unilateral action. The United States and the Soviet Union are committed by the eighth of the McCloy-Zorin principles (see above, page 34) to seek the widest possible agreement at the earliest

possible time: that is to say, not to use the long-term pursuit of drastic measures as a means of circumventing modest agreements that may be feasible at once, while at the same time not to use the latter as a means of distracting from the ultimate goal of general and complete disarmament.

In the field of more modest measures, unlike that of general and complete disarmament, some important agreements have already been achieved; the Antarctica agreement of 1959; the Hot lines Agreement of June 1963; the limited nuclear test ban treaty of September 1963; and the declaration by the United States, the United Kingdom and the Soviet Union on the placing of weapons on orbital vehicles, of 1964; and the unilateral reductions announced by these same three powers in the production of fissionable material for use in nuclear weapons. The gathering momentum of these agreements over the last twelve months, together with the atmosphere of political detente which these agreements express and confirm, suggests the possibility of further progress along these lines.

Among the measures in which the Soviet Union has recently expressed interest are the following list which that country submitted to the General Assembly in September 1961: Freezing the military budgets of states; renunciation of the use of nuclear weapons; prohibition of war propaganda; conclusion of a non-agression pact between the NATO countries and the Warsaw Treaty countries; withdrawal of troops from foreign territory; measures to prevent the further spread of nuclear weapons; establishment of nuclear-free zones; and steps to decrease the danger of surprise attack.

A number of these measures have failed to arouse interest among the Western powers, and indeed are unlikely to be accepted by them, unless in return for some *quid pro quo*. The freezing of the military budgets of states, for example, would seem to injure the Western states, with their greatly superior economic resources, more than it would the Soviet Union, while raising the question of inspection which has proved the stumbling block of so many attempts to arrive at agreement between the two parties. The idea of renunciation of the use of nuclear weapons would seem to undermine the present Western policy of deterrence, while in return providing the Western powers with nothing more than a formal assurance of Soviet intentions. The idea of a non-aggression pact between the NATO and Warsaw Pact nations would merely re-assert obligations which are already laid down in the United Nations Charter. The withdrawal of troops from foreign territory, as was noted in connection with the inclusion of this provision in the Soviet general and complete disarmament plan, imposes special disadvantages on the West.

Among measures which the United States has recently put forward as subjects of separate negotiation are a 'cut-off' in the production of fissionable material for nuclear weapons; a freeze in the production of new quantities and types of nuclear delivery vehicles; notification and pre-launch inspection of space vehicles and missiles; a comprehensive nuclear test ban treaty; and an agreement on non-dissemination of nuclear weapons. Again, certain of these agreements have evoked no response in the other side. The idea of a 'cut-off' in nuclear weapons production, for example, requires the Soviet Union to accept on-site inspection without securing for itself any actual disarmament in return, a principle to which it has always been opposed; in addition, it may be seen as imposing a unilateral disadvantage upon the Soviet Union, inasmuch as the existing balance of nuclear stockpiles which such an agreement would freeze is favourable to the United States. Broadly the same objections apply also, from a Soviet point of view, to the proposed freeze on missile construction.

Of the possible agreements in which both sides have expressed *prima facie* interest and which, if achieved, would be of some significance, three may be singled out for mention; a comprehensive nuclear test ban treaty; an agreement on the non-dissemination of nuclear weapons; and a regional arms control agreement in Central Europe.

A Comprehensive Nuclear Test Ban Treaty

If the present limited nuclear test ban treaty were to be extended to cover tests underground, the purposes of arms control might be advanced in three ways: a more drastic measure of restraint on Soviet-American military competition would have been imposed than now exists; a more serious obstacle than the present treaty would be placed in the way of intending nuclear powers (always supposing that they are signatories of the treaty; France and China, of course, did not sign the Moscow Treaty); and a working system of control by international inspection would have been set up.

The United States and Great Britain at one time maintained that on-site international inspection was necessary to verify any sort of test ban treaty. However, by 1962 research had convinced them that a three elements test ban could be monitored by national systems alone, and that it was only in relation to underground nuclear tests that on-site inspection was necessary. By the end of 1962 Western scientific advisors were maintaining that after all known methods for distinguishing earthquakes from explosions had been employed there would still be about thirty events a year due to shallow earthquakes in the Soviet Union which could not be distinguished from nuclear explosions. Consequently United States and British negotiators demanded seven or perhaps fewer annual veto-free on-site inspections in the Soviet Union, as the price of a comprehensive ban.

The Soviet Union for three years admitted the principle of international inspection. They accepted three veto-free on-site inspections a year, and fifteen permanent control posts on Soviet territory, involving the presence of about two hundred foreign observers. However in November 1961, after resuming nuclear testing, the Soviet Union repudiated the principle of control posts and on-site inspection in the Soviet Union, and insisted that national monitoring alone provided sufficient verification of a comprehensive test ban, accusing the Western powers of seeking inspection of Soviet territory for purposes of espionage. This remains the Soviet position.

A Non-Dissemination Agreement

A number of measures of arms control are already in operation inhibiting the spread of nuclear weapons. One is the limited nuclear test ban treaty which requires non-nuclear signatories not to test nuclear weapons in the three elements specified, the nuclear signatories not to assist them to do so. Another is the practice of nuclear states, in assisting non-nuclear states to develop nuclear industries for peaceful purposes of insisting on controls to ensure that the industries so established are not used for military purposes. Another is the unilateral policy adopted by the United States and the Soviet Union, although not carried out entirely consistently by either of them, of refraining from assisting their allies to acquire nuclear weapons (the Soviet Union, according to Chinese statements, agreed to assist the Chinese nuclear programme in 1957 but abrogated the agreement in 1959; the United States has assisted Great Britain, especially since the revision of the McMahon Act in 1958.)

However, the inhibition of the spread of nuclear weapons might be greatly strengthened were formal agreements to be entered upon, by the Have states not to assist the Have Not states to enter the nuclear club, and by the Have Not

states to refrain from attempting to do so. In 1961 the United Nations General Assembly unanimously passed the Irish resolution calling for agreements along these lines, if possible subject to inspection and control. The United States and the Soviet Union both include these agreements in the first stages of their respective general and complete disarmament plans.

The stumbling-block to Soviet-American agreement on this proposal is the United States' proposal for a Nato Multilateral Nuclear Force. The Soviet negotiators maintain that this proposal has the effect of transferring control of nuclear weapons to Western Germany, the potential Nth country which perhaps more than any other she is anxious to exclude from the nuclear club. The Western powers maintain that on the contrary the M.L.F. does not have this effect, but is designed to prevent the spread of nuclear weapons to Western Germany and other potential nuclear powers in Nato.

These Soviet objections raise the question of the place of arms control objectives in Western unilateral policy in its acutest form. On the one hand the United States, in order to dissuade her European allies from persisting in national nuclear programmes and at the same time retain their adhesion to the Atlantic alliance, tends to stress that the M.L.F. will provide European participants in it with a wide measure of control. On the other hand, if she is to move towards agreement with the Soviet Union on non-dissemination, she must demonstrate that it extends to them very little control. If the Soviet Union proves to be unshakable in its contention that the price of a non-dissemination agreement is the abandonment of the M.L.F. scheme, the question with which Western policy must come to grips is which of these objectives of policy is the more important.

A Regional Agreement in Central Europe

Central Europe more than any other part of the world has been the subject of proposals for regional systems of arms control. There are perhaps two reasons for this. In the first place it is here that the chief military confrontation between the two blocs takes place, and that is the most likely source of friction that could give rise to war. In the second place the political impotence, until recently, of eastern Europe in relation to the Soviet Union, and of continental Western Europe, and especially the Federal German Republic, in relation to the United States, provided an atmosphere in which it seemed easier to secure acceptance for arms control schemes which imposed restrictions only in the European area than for schemes which related also to the two superpowers outside this area. The great change that has overtaken the discussion of central European arms control schemes in the last few years results from the growing political strength of Western Germany and continental Western Europe generally in Nato, and to a much lesser extent the new-formed political independence of certain of the satellite countries within the Warsaw Treaty framework. The United States and the Soviet Union must now pay much closer attention, in discussing European arms control schemes, to the views of their allies within the region, who are sensitive to restrictions that seem to discriminate against them or to suggest a weakening of their major ally's commitment to their defence.

Two proposals at present enjoy a significant degree of support among the states concerned. One is the idea of a nuclear-free zone (which has been entertained also in relation to Latin America, Africa and the Pacific). The other is the proposal for mutual inspection against surprise attack.

The most prominent proposal for a nuclear free zone in central Europe is the Rapacki Plan, first advanced by the Polish Foreign Secretary in October 1957, and repeated a number of times since then. Those who favour this and analogous proposals stress one or the other of two advantages. In the first place

a nuclear-free zone may be an approach to the problem of arresting the spread of nuclear weapons. The Polish proposal, for example, would prohibit nuclear weapons in the two Germanies, Poland and Czechoslovakia, and would thus exclude the possibility of the acquisition of nuclear weapons by these states (unless they were to maintain them at sea or in outer space). This seems to be the Polish object in advancing the proposal; since East Germany, Poland and Czechoslovakia have no prospect of acquiring nuclear weapons in the foreseeable future, whereas Western Germany has, the practical effect of the plan would relate to Western Germany alone. The other purpose which such a zone might serve is to reduce the danger of nuclear war by escalation. If no nuclear weapons were stationed in the area, then the danger that a conventional war might inadvertently grow into a nuclear one, because of some technical accident or breakdown in command and control, would be the less.

The Soviet Union and Poland support the idea of a nuclear free zone in central Europe; but in the Western alliance, although certain groups favour it, most notably the British Labour Party, all governments are at present unfriendly to the idea. Western Germany is strongly opposed to the scheme, partly because it smacks of discrimination against her within Nato, reasserting as it does the existing obligations which the Federal Republic has not to manufacture nuclear weapons under the 1954 Paris Agreements, and adding to them a prohibition of foreign-controlled or jointly-controlled nuclear weapons on her soil; partly because of a desire to preserve the maximum of deterrence of war initiated by the Soviet Union, and ensure an effective forward defence if deterrence should fail; and partly because of a fear that an arms agreement of this sort would have the effect of sanctifying the political status quo and in particular the division of Germany. The other Western governments oppose the Rapacki plan either because they share the Federal Government's misgivings, or because they do not wish to cause it offence.

Another version of the nuclear free zone idea would relate to a narrower area than that specified in the Rapacki plan, and would constitute simply a widening and formalisation of the *de facto* non-nuclear zone which already exists for a few kilometres on either side of the Iron Curtain. If it did not embrace the whole of West German territory, it would not be open to the objection that it discriminates against a particular ally. Although it would not serve the purpose in itself of arresting the spread of nationally controlled nuclear forces, it would serve that of providing a firebreak against escalation. Whether tactical nuclear weapons should be placed as far forward as possible, or held in reserve, is a matter on which disagreement exists within Nato; and this would have to be resolved before the idea of a nuclear free zone of (say) one hundred kilometres on either side of the Iron Curtain could become acceptable to the West; however, the proposal is mentioned here as one enjoying the support of some authorities.

The other important European arms control proposal is for inspection against surprise attack. This concerns the danger of a local surprise attack, whether involving nuclear weapons or, as would seem more likely, conventional forces only. The Soviet Union in the Eighteen Nation Disarmament Conference proposed the setting up of land control posts at railway junctions and major ports and of motor roads, to ensure that dangerous concentrations of armed forces and military equipment did not take place. The Western powers expressed willingness to consider this proposal, and it does seem one which is in principle negotiable.

V—ARMS CONTROL AND THE CHANGING PATTERN OF INTERNATIONAL POLITICS

The problem of arms control since 1945, like all international politics, has been dominated by the relations of two powers, the United States and the Soviet

Union. It is in the conflict between these states that the dangers have chiefly been identified which measures of arms control have been intended to alleviate; and it is in the conclusion of agreements between the two giants that hopes of advancing arms control have been thought to lie.

In the last few years a certain measure of progress has been registered towards arms control of this sort, symbolised above all by the 1963 Moscow Treaty. Underlying it is the measure of political detente which grew up between the two great powers in the wake of the 1962 Cuban crisis; and the stabilisation of the arms race that resulted from the acquisition of large numbers of invulnerable nuclear missiles on each side, and from the achievement by Nato of a conventional capability in Europe approaching parity with that of the Soviet Union.

However, simultaneously with this movement towards rapprochement between the two great powers, there has occurred a widening split between each of them and certain of its allies. It is arguable that the drawing together of the United States and the Soviet Union is a cause of the Franco-American and Sino-Soviet disputes or that it results from them; but it can scarcely be contended that these two phenomena occurred quite independently of one another. Questions of arms control are at the heart of the issues which have tended to unite the two great powers and divide them from certain of their allies. The United States and the Soviet Union have shown themselves to be sensitive of two common interests in the field of arms control, above all: the reduction of the risk of war by accident or miscalculation; and the prevention or inhibition of the spread of nuclear weapons. These are interests which, it may be argued, are not exclusively those of the two great powers, but are shared by them with all other states. Nevertheless, the attempt to place obstacles in the path of intending nuclear powers has brought the United States into conflict with France and the Soviet Union into conflict with China. And the attempt to reduce the risk of war by accident or miscalculation has brought the United States into conflict with Western Germany, and to some extent with her other European allies also; as it has provided a further source of discussion between the Soviet Union and China.

Thus in the field of general and complete disarmament the United States has advanced a plan which enjoys the general support of the United Kingdom and some other western governments; but France has clearly dissented from it to the extent of absenting herself from the negotiations, and Western Germany plays no part in the discussions from which the United States' plan emerges. In the field of local and partial measures, to use only the examples that were considered in this paper, the United States is in a position of having to choose between agreement with the Soviet Union and the maintenance of good relations with France and Germany. Agreement on a comprehensive nuclear test ban can be purchased only at the price of a breach with France; agreement on a non-dissemination pact only at the price of a breach with both France and Germany; and agreement on a non-nuclear zone in Europe at the latter price also. Finally, in the field of unilateral arms control policy, the United States embarked on a policy of 'flexible response' from which Western Germany, France and even Great Britain dissent in some degree.

These developments raise the question whether the chiefly bilateral approach to arms control, the assumption that it is the dangers of Soviet-American relations that must be allayed, and that it is Soviet-American agreement that must above all be striven for, is any longer adequate to the military dangers that now exist in the world. If the ability of the two great powers to speak for their allies or to determine their policies is on the decline, this would seem to suggest that agreements reached by the United States and the Soviet Union without the consent of France, Western Germany and China are of

limited value. Moreover, if the conflict between the United States and the Soviet Union is not the only serious one in the world, if the new rifts that are complicating the pattern of international politics grow wider and produce military dangers of their own, then arms control policies aimed simply at moderating the bilateral conflict of the two great powers may become increasingly irrelevant. An important question at the present juncture is whether, if the arms control thinking that emerged in the bilateral or bipolar world of the 1950s is to remain relevant in the next few years, it must not be re-formulated so as to be appropriate to the multilateral or multipolar world that is now emerging.

ARMAMENT AND MODERN WEAPONS

By: Department of National Defence

April, 1965

Introduction

1. This paper was prepared on the instructions of the Chairman, Defence Research Board at the request of the Special Committee on Defence of the House of Commons primarily for the use of that Committee. It is, of course, impossible to describe in detail all aspects of modern armaments within the limits of a short paper; the most that can be done is to outline some of the more important developments. Attention has been focused upon those developments in modern armaments which appear to be of greatest significance to Canada.

2. At the outset it is desirable to call attention to the modern concept of a weapons system. A weapons system may be defined as the entire complex of men and machines required for the performance of a particular military task. A major weapons system typically includes a number of sub-systems for such functions as intelligence gathering, information processing and exercise of operational control as well as the more obvious function of warhead delivery. These ancillary functions are vital to the performance of the military task and determine to an important degree the operational characteristics and capabilities of the system. Use of the systems concept may be extended to complexes of weapons. For example, one may think of an infantry division as a major system comprising a variety of weapons which are, in effect, sub-systems. This wider conception of a weapons system can be intended to comprehend many items of equipment, such as transport aircraft or landing craft, which are not normally regarded as weapons but which have an important bearing upon military operational capabilities.

3. In order to discuss the operational capabilities of weapons systems, one must pay some attention to the situations in which these weapons might be used. One must therefore call attention to the very wide spectrum of circumstances in which military operations might conceivably occur. One extreme is all-out nuclear war, that is war waged with nuclear weapons without restriction as to targets or weapons. At the other end of the spectrum are peace-keeping activities and the maintenance of civil order which may involve no more than a limited display of force. Between these two extremes there are many other possibilities.

4. One should observe that modern weapons systems are subject to continuing evolution as a result of research and development. Changes may come about owing not only to improvements in weapons, but through improvements in sensors, data processing, means of control, and other ancillary sub-systems. This process of continuing innovation is not fortuitous, it is the result of the very large resources in manpower, money, and intelligence currently being devoted to military research and development by all of the principal nations of the world. It is interesting to note that during most of the nineteenth century the total military expenditures of major European nations typically amounted to between one and two percent of the Gross National Product. At the present time this is roughly the fraction of the national resources which major powers are devoting to military research and engineering.

ORGANIZATION OF THE PAPER

5. For the purposes of discussion, it is convenient to divide contemporary weapons system into two groups, strategic and tactical. This division is somewhat arbitrary but represents a distinction with regard to the nature of modern weapons systems and the purposes for which they might be employed. Strategic weapons may be defined as those weapons, both offensive and defensive, which are capable of affecting directly the outcome of a long-range nuclear exchange. All other weapons systems are tactical including short-ranged nuclear delivery systems which are designed for use against military targets.

6. It is, however, necessary to give some attention to strategic offensive weapons since these are dominant weapons of the contemporary period and determine, to a very large extent, the political and strategic environment in which Canadian defence programs, as well as those of other nations, must be conceived.

7. The category of tactical weapons embraces a very wide spectrum and within this general category many systems of further classification could be employed. For the purposes of the present paper, the most suitable system of categories seems to be this conventional one of land, sea and air. One should observe, however, that there is a very evident tendency towards the closer integration of land, sea and air operations. Consequently, if one were concerned with operations rather than with weapons the conventional system of categories would not be satisfactory. Even in the case of weapons there are a number of important "overlaps" such as that between interceptor aircraft and land-based air defences.

8. The present paper is therefore divided into the following sections:

I Strategic weapons systems
II Weapons systems employed by ground forces
III Weapons systems employed by theatre air forces
IV Weapons systems employed by naval and maritime forces
V Biological and chemical weapons

I—STRATEGIC WEAPONS SYSTEMS

9. For the purposes of the present paper, a strategic weapons system may be defined as one involving weapons which are capable of:

(*a*) Direct attack on centres of population or industry; or
(*b*) Attack on enemy weapons systems which are capable of delivery of nuclear warheads at long range; or
(*c*) Direct defence against enemy long-ranged nuclear delivery systems.

The distinguishing characteristics of strategic weapons systems is that they are capable of deciding the outcome of a war almost independently of the results of combat between conventional land, sea and air forces. Somewhat comparable methods of warfare have existed in the past in the form of siege operations or naval blockade. However, these older methods had the characteristics that they were in most cases not available in the same degree to both opponents, and involved lengthy operations lasting many months or even years. The great change introduced by nuclear weapons is that it is now technically feasible to produce devastating damage within a very short space of time. Furthermore, these weapons are available to both of the two superpowers. Although the United States continues to possess a very substantial superiority in strategic nuclear weapons and delivery systems, the U.S.A. is

severely constrained in the use which it can make of this superiority. This situation can appropriately be described as one of impasse. It cannot be described as a stalemate since the relationship is dynamic, and under some circumstances—such as Cuba—the U.S. superiority is a useable resource of American policy.

10. Although the nuclear warhead is the heart of a strategic weapons system, there are other important elements which contribute to strategic nuclear capabilities. These include delivery systems, intelligence gathering and targeting, command and control systems, warning systems, and defence systems.

Nuclear Warheads

11. Nuclear warheads are usually described in terms of the total energy released, measured in terms of the amount of T.N.T. required to produce an equivalent release of energy. Thus a kiloton warhead releases energy equivalent to the explosion of 1,000 tons of T.N.T.; a megaton weapon is equivalent in the same sense to a million tons of T.N.T. Energy is released in the form of light, heat, blast, and ionizing radiation. Part of the ionizing radiations is released very quickly after the explosion and part is delayed. In the case of a ground-burst weapon (i.e. one in which the fireball is in contact with the ground) a portion of the delayed radiation is deposited in the vicinity of the target in the form of fall-out. The distribution of energy release varies somewhat with the size of weapon, height of explosion and the details of weapons design. In general, the distribution of energy tends to be about 50% in the form of blast and shock, 35% in the form of heat, 5% in the form of prompt ionizing radiation, and 10% in the form of delayed ionizing radiation. For many cases, energy released by delayed ionizing radiation is neglected in stating the T.N.T.-equivalent of the weapon.

12. Technically, nuclear warheads are of two types—fission and fusion. In the case of fission weapons, the energy release is achieved by splitting the atoms of certain isotopes of heavy elements, either plutonium 239 or uranium 235. In the case of fusion weapons, the principal energy release is achieved by joining together the atoms of light elements, mainly heavy hydrogen. A fusion weapon requires a fission weapon as a trigger and is therefore correctly described as a fission-fusion weapon. Most very large weapons contain a so-called third stage consisting of U238. This isotope of uranium is not spontaneously fissionable but can be fissioned by the very high speed neutrons produced by a fusion reaction. Weapons of this latter type are described in fission-fusion-fission.

13. It is not possible to describe in detail the effects of nuclear weapons in this paper. The relative importance of the different effects depends strongly upon yield and height of burst and to a lesser extent upon atmospheric conditions. A comprehensive description is contained in an unclassified publication prepared jointly by the U.S. Defence Department and the U.S. Atomic Energy Commission under the title "The Effect of Nuclear Weapons". The latest edition of this publication appeared in April 1962. As an example, a ten megaton bomb will produce severe damage to buildings and severe casualties within a radius of about 9 miles. The corresponding radius for a one megaton burst is about 4 miles. Even a one megaton weapon is sufficient to devastate any city except the very largest.

14. Very large weapons up to 100 megatons can now be produced and there appears to be no natural limit from a purely technical point of view. There is, however, no significant military advantage in the use of such superbombs. The U.S. Secretary of Defense has announced that the U.S. does not propose to enter the superbomb field, and indeed has put considerable

emphasis on developing small yield weapons, down to a fraction of a kiloton, for tactical use. It is not possible to rebuild cities underground or give them significant protection against megaton bombs by hardening. However, where targets are small and can be hardened, for example, ballistic missiles in underground silos, the radius of damage even of very large weapons can be drastically reduced.

Delivery Vehicles

15. The function of the delivery vehicle is to convey the warhead to its intended target. The chief delivery systems are aircraft and missiles. Delivery systems may operate from a home base, as in the case of long range bombers and intercontinental ballistic missiles, or from an advanced base such as an aircraft carrier, or a Polaris-type submarine. In order to carry out their intended function, delivery vehicles must be able to survive the journey to the target and to hit the target. From the point of vulnerability in transit, the missile has, for the present, a clear advantage over the bomber. Both bombers and missiles have ample accuracy for attack on population centres in view of the large damage radius associated with the warhead. The bomber has an advantage in accuracy against small hardened targets, although it is possible that missile accuracy can ultimately be improved to a comparable level. The bomber also has an advantage against targets whose location is not precisely known.

16. To some considerable extent the missile has supplanted the bomber as the principal intercontinental delivery system. Nevertheless, the intrinsic advantages of the bomber are sufficiently great that bombers are likely to be retained in considerable numbers by the two super-powers for the more or less indefinite future. Whether or not there will be another generation of manned bombers to replace existing bomber aircraft is an important question which is for the present unresolved. From a technical point of view, several possibilities are available ranging from a hyper-performance very high altitude aircraft to relatively low performance aircraft designed for very long endurance.

17. An important element in present aircraft delivery systems is the stand-off weapon, which enables the bomber to attack the target without coming within range of local air defences. The use of stand-off weapons, however, implies a loss of accuracy which may be significant in the case of hardened targets. For some types of targets it is feasible to employ a homing system in the stand-off weapon. Stand-off weapons are in essence pilotless aircraft and, generally speaking, they can be effectively engaged by existing air defences.

18. It is also at least theoretically possible to launch a ballistic missile from an aircraft although the U.S.A. cancelled the SKY BOLT program owing to excessive costs of development and the apparently inadequate advantages of the system. In such a hybrid system the purpose of the aircraft is to serve as a mobile launch platform for ballistic missiles.

19. The significance of the term 'ballistic missile' is that after a short period of acceleration the trajectory of the vehicle is ballistic; the trajectory is determined almost solely by inertial and gravitational forces. During the greater part of its trajectory a long-range ballistic missile travels above the sensible atmosphere at speeds of up to five miles per second. Between any single launch point and target there are an infinite number of trajectories involving different angles of launch and different launch velocities. A so-called minimum energy trajectory, which involves the maximum range for

a given total thrust, involves a departure angle and an arrival angle of approximately 45 degrees. The essential components of a missile system are:

(*a*) The warhead including fuzing arrangements. Although it is possible to employ an HE warhead in a ballistic missile, this would be an extremely expensive way of delivering a comparatively small weight of high explosive.

(*b*) The re-entry vehicle. The purpose of this re-entry vehicle is to enable the warhead to survive the extreme heating which occurs upon re-entry into the earth's atmosphere. In practice, the warhead, fuzing system and re-entry vehicle are designed as a single weapons package.

(*c*) The guidance system. The purpose of the guidance system is to steer the missile, during the propulsion phase of the flight, onto a trajectory which, following the cessation of propulsion, will cause it to impact upon the target.

(*d*) The propulsion system. This consists of one or more rocket motors which impart to the warhead sufficient velocity to enable it to reach the target. In the case of very long-range missiles there are nearly always several rocket motors arranged in stages. This means that motors are ignited successively, the earlier stages being discarded after exhaustion in order to reduce the mass which must be accelerated to very high velocity.

20. The first generation of ballistic missiles, such as the earlier models of the U.S. ATLAS, employed low temperature liquid fuels and radio guidance. The use of these fuels involves very severe problems in handling such materials as liquid oxygen. Radio guidance demanded an elaborate and quite expensive system of ground facilities. Second generation missiles, such as the U.S. MINUTEMAN and POLARIS, employ solid fuels and all-inertial guidance. In effect, once the necessary target has been programmed into the on-board guidance system, the missile is on its own from the moment of launch. Solid fuels and all-inertial guidance have made possible a tremendous simplification, especially in ground handling facilities, and also very great savings in capital and operating costs. It has become possible, in the case of MINUTEMAN, to place the missiles underground in silos which afford a high level of protection against nuclear effects, and, in the case of POLARIS, to mount the missile in submarines.

21. Further improvements in the reliability, accuracy and efficiency of missile systems are possible. A relevant point is that reductions in the weight-to-yield ratios of nuclear warheads tends to increase the military efficiency of missile systems since it becomes possible to exploit the saving in warhead weight in a variety of ways. It is, however, doubtful if there is likely to be within the near future an order-of-magnitude improvement in missile systems comparable to the improvement of MINUTEMAN over ATLAS.

Intelligence Gathering and Targeting

22. The standard of surveying and mapping over the whole world is such that the distance between a launch point and a city target can be obtained to within a mile or so from available maps. There is therefore no particular problem in acquiring intelligence for attack on cities. Military targets are another matter; their locations are often in doubt and, if they are hardened, a higher order of accuracy in location may be required. As a general rule, locations of U.S. military installations are normally made public, but those of the USSR are not; this puts the West at a considerable disadvantage and creates a

greater need for reconnaissance systems. The next few years may see sufficient improvement in sensors, data processing, and data transmission so that nearly all small fixed military installations can be located and identified from satellites. Mobile systems would, of course, be much less vulnerable to detection and localization by satellites. There is also the possibility of concealment, camouflage and deception.

Defence Systems: Anti-Bomber

23. In the mid-fifties the manned bomber was the only vehicle capable of delivering nuclear warheads at intercontinental distances. In North America substantial defences were planned against it, consisting of early warning lines located at several hours flying time from the expected targets, an extensive radar network to locate and track the bombers, area defences consisting of manned interceptors and long-range guided missiles, and point defences around important targets consisting of shorter range guided missiles. This was an expensive system to set up and maintain, both in terms of cost and use of manpower, but there is little doubt that it was capable of providing a substantial level of defence against manned bomber attack.

24. The introduction of the intercontinental missile has changed the situation by providing an alternative means of attack against which there is, for the present, no defence. At the same time strategic missile forces placed in underground silos are less vulnerable to attack and this fact has tended to reduce the need for defence. As a result there have been some reductions in North American air defence programs. However, the intrinsic advantages of the manned bomber remain sufficiently great that both the U.S. and the USSR are continuing to maintain fleets of bombers as well as air defences.

25. In the event that a new generation of strategic bombers is introduced into service by the USSR, many possibilities exist for improved radars, data-processing systems, communications, interceptors, air-to-air armament and ground based missile systems. Such systems would be essentially improvements upon existing systems.

Defence Systems: Ballistic Missiles

26. The United States has developed and deployed three large radars, known as the Ballistic Missile Early Warning Systems (BMEWS), which are capable of providing warning of Soviet ICBMs launched from Soviet territory over north polar trajectories together with a prediction as to where they will fall. A system could be produced capable of providing warning for ballistic missiles launched from submarines or following south polar trajectories from launch sites in the USSR. Up to the present it has not been considered necessary to deploy such systems.

27. In spite of substantial efforts expended over the past few years by the U.S., no operational defence against ballistic missiles has as yet been deployed. This is primarily a matter of cost. The American Nike Zeus system can detect, track, and intercept an isolated object moving at ballistic missile speeds. The problem to which up to the present no sufficiently economical solution has been found is that of saturation, that is, a situation in which the attacker presents a very large number of possible targets under a short period of time. The attacker may be able to produce saturation by the use of decoys which simulate the characteristics of the missile warhead. Saturation may also be produced by the use of multiple warheads or, more expensively by simultaneous missile attacks. Having regard to this problem, the cost of producing an effective defence against long-range missiles has up to the present

appeared to be excessively high, but it is possible that improvements in sensors, data processing and missile guidance may render an AICBM defence economically feasible. The U.S. is pursuing investigations with considerable urgency and the USSR has set up some form of AICBM defence.

28. Up to present all practical schemes for defence against ballistic missiles have involved radar in order to detect and track the incoming warhead and a guided missile in order to intercept and destroy it. Many schemes have been considered for other forms of defence, but it is not clear that any will prove to be worthwhile.

Command and Control

29. Any use of strategic nuclear striking forces, whether limited or otherwise, carries the risk of destruction of the nation. It follows that strategic nuclear forces must be subjected to effective control by the proper political authorities. To ensure that control requirements can be maintained, the command and control system must be reliable, not subject to breakdown, and virtually immune to errors or mistakes. During the past several years the U.S. has invested many hundred of millions in command and control systems.

Future Developments

30. Although many developments are possible in the field of strategic weapons systems, there is in prospect no single development which seems likely to change the general strategic situation in the same degree as the introduction of nuclear weapons or the long-range ballistic missile. Warheads of greater yield, more accurate missiles, and new delivery systems, for example, the use of satellites as bombing platforms, are possible, but none appears likely to produce, in itself, a gross disturbance in the strategic balance. The effects of a development of an effective defence represents a more complex question. As noted above, this is primarily a matter of cost rather than of technical performance. The development of a truly "effective" defence could alter the strategic balance very substantially. However, effectiveness is a relative matter. It seems, however, somewhat improbable that any defence system which is deployed in the next several years will affect the balance between the two super-powers in any drastic way. The effect upon the position of other nuclear powers might be important.

31. The single development in military technology which could have the most far-reaching consequences is almost certainly one which would bring nuclear weapons within reach of many countries. This would be, almost by definition, some development which would reduce the investment and overheads associated with the production of nuclear weapons. Such a development is not impossible although it does not appear, for the present, to be an immediate prospect. Even if such a development were to occur, aspiring nuclear powers would be faced with the problem of acquiring delivery vehicles, and experience has shown that those are even more expensive and technically demanding than are nuclear warheads.

II—LAND FORCES

32. The existence of a state of partial impasse at the level of strategic nuclear deterrent forces imposes considerable restraint on the activities of the great powers. This has tended to transfer the level of military confrontation from strategic deterrent forces to more conventional kinds of military operations.

33. The variety of situations in which conventional forces may become involved is very large and this is especially true of land forces. Such situations range from general war to peace-keeping activities and other forms of military action below the level of overt hostilities. In most situations considerable importance is attached to quick reaction—that is, the ability to respond promptly with forces in being. In this way situations which might otherwise become unmanageable can be kept under control. Fast reaction demands either deployed forces in the immediate vicinity of the trouble area or rapid means of transportation. Strategic mobility has therefore tended to become an increasingly important consideration.

34. The basic formation of modern armies is the division. The division contains a balanced outfit of weapons which render it capable of independent operations. However, a division is usually reinforced from corps and army resources with respect to artillery and specialized troops. A few very large and relatively immobile systems such as large ballistic missiles are employed at only corps and higher levels. In the Canadian Army at the present time the basic formation of all arms is the brigade group. The same is true of the British Army and of certain other comparatively small armies.

35. Divisions are characterized as infantry, mechanized or armoured. Infantry divisions tend to contain a relatively small number of tanks and are often not fully motorized. Mechanized divisions tend to contain a higher proportion of tanks, artillery is usually self-propelled and the infantry is mounted on wheeled or tracked vehicles. Armoured divisions are "heavy" in tanks; the infantry is usually mounted on tracked carriers and artillery is almost always self-propelled.

36. Some divisions are characterized as air-borne or air-transportable. An air-borne division is, in essence, an infantry division which possesses equipment suitable for air delivery. When employed in an airborne role, such a division has comparatively few vehicles and no medium tanks. It is substantially weaker than a normal infantry division in heavy support weapons. Consequently it has only a limited sustained fighting capability against more normally equipped forces. An air-transportable division is a normal infantry division stripped of certain heavy equipment and a portion of its administrative transport in order to facilitate movement by large transport aircraft The most important deletion is medium tanks which cannot be carried by existing transport aircraft.

37. Divisions vary somewhat in size and composition. Western divisions tend to contain around 15,000 men. Soviet divisions are somewhat smaller. However, divisions of all modern armies contain much the same general weapon types, and are surprisingly similar in basic organization. The major weapons groups are:

Small arms	—	rifles, pistols, machine guns
Tanks	—	light, medium and heavy
Anti-tank weapons	—	grenades, recoilless weapons, anti-tank guided missiles
H.E. support weapons	—	artillery, mortars, recoilless rifles, rockets
A.A. weapons	—	guns, missile systems
Miscellaneous weapons	—	flame throwers, grenades

38. A recent addition to these weapons groups is that of divisional nuclear support weapons. In the U.S. forces these include nuclear shells for the 8-inch howitzer, and the 762 mm nuclear rocket (or surface-to-surface missile). A small ballistic missile suitable for this role is under development. Smaller and lighter nuclear weapon launchers such as the "Davy Crockett" weapon exist but are not on general issue even to U.S. forces.

Small Arms

39. There have been three main trends in the development of small arms. The first is towards standardization of ammunition, not only between weapons but between countries. This eases supply problems both within a nation's own forces and between the forces of different nations operating as part of an allied group. It also tends to make future changes more difficult. Another trend is towards increased rate of fire. Nearly all modern armies are now equipped with some form of fully automatic or semi-automatic rifle. The third trend is towards reduced calibre. This has resulted in some reduction in nominal range but has made possible reductions in the weight of weapons and ammunition. There are under investigation several novel weapons which may, during the next decade, provide the individual soldier or the rifle section with a much improved capability for "area" fire at close range.

Tanks

40. Since the Second World War there has been a substantial improvement in the capability of anti-tank weapons. Nevertheless, it is generally agreed that the medium tank remains, in most theatres of war and in most operational circumstances, a crucially important weapons system. Owing to its combination of battlefield mobility, firepower, and protection, the tank is well suited to a wide range of warfare. Even in theatres of war which are not intrinsically suited to the employment of armoured formations, tanks are likely to be employed in significant numbers.

41. The general trend in tank design since the Second World War has been towards increased weight of armour and increased power and calibre of armament. The British CENTURION which is employed by the Canadian Army is generally typical of this trend. The main battle tank of most modern armies tends to weigh between 40-50 tons. This compares with 25-35 tons at the end of the Second World War. The increasing weight of medium armour carries with it severe problems in the crossing of obstacles. This is offset in part—but only in part—by improvements in military bridging equipments and methods.

42. There are, however, certain contrary tendencies. The very heavy tank, such as the British CONQUEROR, is tending to disappear. Light tanks of an essentially conventional design, i.e. with full rotating turrets and gun armament, have been produced by a number of countries including the United States. These vehicles have not, however, been markedly successful. The reductions in armament and armour involve a reduction in 'fighting' capability which is not off-set by the consequent gain in mobility. It seems to be generally accepted that light tanks of this type are generally unsuitable except in theatres of operations where they are not likely to encounter enemy medium armour.

43. There are indications that the trend towards greater weight in medium armour is in the process of being reversed. The next generation of main battle tanks seems likely to weigh between 35-40 tons. These reductions in weight have been made possible by improved designs, improvements in metallurgy, more compact components and improvements in fire control equipment.

44. There are a number of tank-like vehicles in the weight range 10-25 tons. Such vehicles have been produced by France, Sweden and the United States. These vehicles tend to involve unconventional design (the absence of a rotating turret) and, in some cases unconventional armament. One example is the American ONTOS which mounts a number of recoilless rifles. It has been claimed for most of these vehicles that they are a full substitute for the main battle tank. The weight of professional judgment, based on trials, exercises and analytical studies, is that whatever may be the case in the future, vehicles of this nature available today lack the versatility and all-round performance of the medium tank of essentially conventional design. In general, such vehicles must be regarded as special-purpose for use in reconnaissance, airborne operations or amphibious operations, or in theatres in which enemy medium tanks are not likely to be encountered in significant numbers.

45. Looking towards the more distant future, a number of unconventional vehicles are under investigation which may eventually displace the medium tank as the heavy cavalry of modern armies. These include such radical alternatives as the large scale use of light aircraft or ground effect vehicles. Consequently the future of the medium tank continues to involve very lively controversy—which has been true of the mounted arm of modern armies since the beginning of the present century.

Anti-Tank Weapons

46. For the most part, the development of so-called conventional weapons since the Second World War has been evolutionary rather than revolutionary. Anti-tank armament is a conspicuous exception. During the Second World War the principal specialized anti-tank weapon was the towed high velocity gun. At the present time specialized anti-tank armament consists mainly of rockets, recoilless weapons and anti-tank guided missiles. The high velocity gun, usually on a light, self-propelled mounting, is still found in some modern armies, but the towed high velocity anti-tank weapon is tending to disappear.

47. Most modern anti-tank weapons employ the principle of the shaped charge which, by focussing the force of an explosion into a high velocity jet, can achieve very great penetration of armour using only a small weight of high explosive. The penetration achieved by a shaped charge weapon does not depend on impact velocity, consequently it has been possible to develop small anti-tank weapons which are highly effective at short range. An example of such a weapon is the Canadian 3.2 inch rocket launcher (HELLER) used as the platoon anti-tank weapon. Both launcher and ammunition can easily be man carried and the weapon is effective at ranges up to a few hundred yards or more. At battalion level, the high velocity gun has been replaced by the recoiless rifle which is very much lighter and handier.

48. A novel type of anti-tank weapon which has been developed since the Second World War is the wire-guided anti-tank missile. The weapon is guided (in effect, flown) to the target by the operator using an optical aiming device. This weapon can be mounted on wheeled or tracked vehicles and even on light aircraft. Radio-controlled anti-tank missiles have been developed but tend to be more complex, more expensive, and less operationally satisfactory than the wire-guided types

49. There is no doubt that these new weapons represent a material improvement in anti-tank defence and especially under conditions of open warfare where mobility and ease of handling are important. However, it is quite wrong to believe that they have made the tank obsolete or that they are likely to do so.

High Explosive Support Weapons

50. In the past, field and medium artillery have been the principal means of providing H.E. support. Effective concentrations of artillery fire have been a key factor in attack and scarcely less important in defence. Nuclear weapons, if employed, are a partial substitute for conventional artillery concentrations but are not likely to be available in such numbers as to represent a complete substitute. If tactical nuclear weapons are available to the enemy, it would be necessary in future to avoid large gun concentrations such as were used in the Second World War since these would represent extremely lucrative targets for tactical nuclear weapons and ones which could very easily be located.

51. Since the Second World War, there have been improvements in the accuracy, effectiveness and range of artillery. There is a trend towards a greater employment of self-propelled artillery which, during the Second World War, was confined mainly to armoured divisions. The self-propelled gun has the advantages of greater mobility and better protection to the gun crews under conditions of open warfare. There is also a tendency towards larger calibres. In this respect a key consideration is greater range thus permitting flexible concentrations of fire from dispersed batteries.

52. At the lower end of the scale there have been considerable improvements in the range and accuracy of mortars. For fire at short range, mortars have the advantage of high lethality in relation to the total number of men required to man them. It is possible that in the future the combination of medium guns and mortars will tend to replace the standard field gun of the First and Second World Wars.

Anti-Aircraft Weapons

53. Since the Second World War there have been marked improvements in anti-aircraft weapons. An important factor has been radar. No less important is the development of surface-to-air guided missiles which have tended to replace medium and heavy anti-aircraft guns. The first anti-aircraft missiles were large and cumbersome and were unsuitable for deployment with the field army. Smaller solid fuelled missiles have made possible mobile systems suitable for use in the battle area. An example of a modern field AA system is the HAWK. HAWK involves a single stage solid propellant missile, it possesses semi-active radar homing and is fired from a mobile launcher. The system employs continuous wave doppler radar which permits coverage virtually down to ground level. Because the system is mobile it can be deployed close to front line troops and can protect them against all but very low flying aircraft. Protection of forward troops against very low flying aircraft can be provided in some degree by the REDEYE missile, which is a small portable weapon equipped with infrared homing, shoulder fired from a disposable container. A more advanced mobile AA missile system still in process of development is the MAULER.

54. Existing weapons are sufficiently effective to have forced tactical air forces into flying at very low altitude in order to penetrate such defences. Should present development objectives for future systems be achieved there will be a very real doubt as to the ability of tactical aircraft to operate in the vicinity of such defences. A partial answer may be found, however, in a combination of countermeasures and countertactics.

Miscellaneous Equipment

55. Since the Second World War many items of equipment have been introduced which would not usually be regarded as weapons but which have

had an important effect upon the organization, capabilities and tactics of land forces. One example is the armoured personnel carrier. There is a trend in nearly all modern armies towards the complete mechanization of the infantry for operations in theatres where such equipment can be employed to advantage. Another example is the introduction of the helicopter and a wider use of light aircraft within army formations. Other examples include the development of improved communications equipment, navigational aids and data processing equipment—all of which reflect contemporary developments in electronics.

56. A development which calls for specific comment is the introduction of devices for what is known as battlefield surveillance. These include a large number of devices employing radar, infrared, television and photography which have as their object the more rapid acquisition and processing of tactical intelligence. In total these devices have extended the range and speed of intelligence acquisition especially at night and under conditions of impaired visibility. They offer some promise of overcoming the enormous discrepancy between the firepower of modern armies and the ability to employ this firepower with maximum effectiveness.

III—THEATRE AIR OPERATIONS

57. Traditionally the functions of air forces in a theatre of war have been the following:

(i) Maintenance of air superiority. This includes the ability to attack and destroy enemy aircraft in the air and on the ground, or to render them ineffective by destroying their support and control facilities. It is commonly held that the attainment of a substantial measure of air superiority is a necessary prerequisite for the satisfactory performance of other air roles;

(ii) Interdiction. This involves attacks on enemy communications, support units and supply facilities to distances extending far behind his forward troops. The object of interdiction is to isolate the tactical battlefield, to deprive the enemy of supplies and reinforcements, and to destroy his mobility;

(iii) Close air support of ground forces. This involves direct attack upon the enemy's forward troops in order to cause casualties and to reduce their fighting efficiency;

(iv) Reconnaissance. This involves the provision of information regarding enemy strength, movements and positions;

(v) Miscellaneous support activities. These include local supply, casualty evacuation, communication flying, provision of observation platforms, and other miscellaneous transport activities.

58. Contemporary developments have called for not only a re-evaluation of the means of achieving these objectives but, to some extent, a reconsideration of the feasibility and appropriateness of the objectives themselves. The main factors forcing this re-evaluation are the following:

(i) The threat of the use of nuclear weapons, especially against airfields, which are very obvious targets;

(ii) The high effectiveness of surface to air missiles against aircraft flying at high and medium levels;

(iii) An increasing need for rapid and flexible fire support especially under conditions of mobile warfare.

Air Superiority

59. Until quite recently, air superiority was believed to call mainly for high performance interceptor aircraft, particularly all weather aircraft capable of operating by day and night. Modern aircraft of this type tend to be comparatively large, technically complex and expensive. Such aircraft require rapid climb and an intricate air-to-air weapons system. They demand elaborate technical support and a sophisticated ground environment. Where there is an immediate confrontation between opposing forces, as in Central Europe, there is some doubt whether even very high performance interceptors could provide any effective defence of the forward battle area and especially so if enemy attacks were carried out at low altitude. There is therefore a trend towards reliance on surface-to-air missiles, which have considerably shorter reaction time for protection of targets in the forward area. However interceptors still have a role in the defence of rear areas where speed of response is less critical and the intrinsic flexibility of the interceptor can be more effectively exploited.

60. Another factor is that large airfields are easily located and are very vulnerable both to nuclear and conventional attack. Protection for a limited number of aircraft can be provided by the use of blastproof shelters and by placing a portion of the force on airborne alert. These measures are, however, relatively expensive and have operational disadvantages. This problem has led to the present interest in short and vertical take-off and landing aircraft (STOL and VTOL, or jointly V/STOL). The STOL aircraft can operate from a makeshift runway a few hundred feet in length, VTOL aircraft can operate from a small clearing. Aircraft of both types can be dispersed singly at improvised strips or launch areas well away from main airfields and other possible targets, thus allowing a high probability of survival.

61. It may be that in future war, air superiority, in the sense of the ability of one side to operate aircraft at any level over the land battle area virtually unhindered will be unattainable. Nevertheless, the advantages of even a limited measure of air superiority are considerable so that both sides will probably strive to achieve it. Air superiority in the sense of being able to carry out the necessary functions of theatre air and to prevent or hinder the enemy from comparable activities, may require, on the one hand, aircraft capable of operating at low or very low altitudes, and, on the other, aircraft capable of operating from improvised landing strips or, as in the vase of VTOL, without prepared landing fields. It must be said, however, that it is not yet clear that the advantages of VTOL over STOL will warrant the increased costs and technical complexity.

Interdiction

62. Interdiction may involve attack on predetermined enemy targets deep in enemy territory, such as airfields, missile sites, communication centres, and supply centres, or attack on targets of opportunity. To survive on a deep penetration mission against modern air defences it is almost essential for the aircraft to fly at low level. This is difficult, particularly at supersonic speeds. The aircraft must be specially stressed to withstand the buffeting that occurs in low altitude flight. This type of flying also requires special navigation equipment and auto-pilot gear to permit operations close to the surface of the earth. Difficulties of target recognition and the aero-dynamics of externally-mounted bombs necessitate subsonic flying during such an attack.

63. There appears to be some tendency for aircraft designed for interdiction to fall into a number of categories:

(*a*) For very deep penetration against highly effective defences there is probably no substitute for very high performance aircraft. It is,

however, open to doubt that such operations would be profitable unless nuclear weapons were employed.

(*b*) For more shallow penetration less complex and expensive aircraft can be employed.

(*c*) For missions which do not involve penetration of highly developed air defences still less complex aircraft can be employed. A special purpose aircraft of this type is the American counter-insurgency aircraft which is designed to carry out a wide variety of missions in theatres in which there is no high-performance ground-based anti-aircraft defence.

Close Support Aircraft

64. The function of close support aircraft is to bring fire power to bear on opposing troops for destruction or neutralization. In this role aircraft can be either a supplement or an alternative to heavy ground support weapons. Close air support is particularly valuable in difficult country where movement of ground support weapons is restricted. Close air support targets are likely to be within a few thousand yards of our own forces. Consequently aircraft attacking such targets will not in general be required to penetrate deeply into the enemy's zone of operations.

65. By operating at very low altitude such aircraft can hope to avoid the enemy's main air defences. Therefore, an aircraft designed for close support can be relatively light and manoeuvreable with a proportionately heavy weapon load. High speed is not a prime consideration, but ability to use improvised air-strips is most desirable.

Reconnaissance

66. Air reconnaissance in the face of modern air defences presents a kind of dilemma. Low flying aircraft are restricted in their field of view so it is necessary to carry out at least some reconnaissance activities at high altitude. However an aircraft at high altitude will be easily picked up by radar thus rendering the aircraft vulnerable to destruction by modern air defences. Extreme height is for the present a possible solution although this requires very sophisticated photographic equipment in the aircraft. The American U2 is an example of an aircraft designed according to this concept. Tactical reconnaissance is carried out by strike aircraft as an alternative mission. For short range reconnaissance it may be possible to use small drones which have the advantages that they are relatively cheap and do not risk the loss of a pilot.

Miscellaneous Support

67. Military operations carried out on a nuclear battlefield or under a severe nuclear threat are likely to be featured by wide dispersal, high mobility and considerable interpenetration of forces. Tactical air supply has very great attractions owing to its speed, flexibility and the freedom from dependence upon uninterrupted road communications. Increasing use is being made of helicopters in this role. In the future, STOL or VTOL transports may tend to replace the cargo helicopter.

Air-to-Surface Weapons

68. The conventional weapons for close support and interdiction include machine guns, H.E. bombs, napalm (jellied gasoline) bombs, short range air-to-surface missiles with warheads up to 1,000 lbs. which can be guided to the

target from several miles away and free flight rockets. Generally speaking, these weapons are improvements on types used in the Second World War.

Future Trends

69. It seems probable that a considerable variety of aircraft will be required for theatre operations ranging from very high performance interceptor, strike, and reconnaissance aircraft to relatively low performance close support and transport aircraft, capable of operating from improvised airstrips. This seems to be an important point. Modern war is likely to call for a considerable variety of aircraft types reflecting to some extent the variety of circumstances under which modern military forces may be required to operate.

IV—NAVAL AND MARITIME FORCES

70. Naval operations and forces can be divided into the following categories:

(*a*) Attack carrier task forces. Attack carriers are the capital ships of modern surface navies. The attack carrier is in essence a floating airfield;

(*b*) Missile-launching ships and submarines. These are an important component of strategic deterrent forces:

(*c*) Amphibious forces. These provide the floating base for an over-the-beach or helicopter-transported landing operation;

(*d*) Attack submarines. The object of attack submarine operations is to destroy enemy naval or merchant vessels and to deny the use of the seas to the opponent;

(*e*) Anti-submarine operations. The object of ASW operations is to destroy or to neutralize the threat presented by enemy attack submarines, and the forces include aircraft (both fixed wing and helicopters, carrier or land based), surface ships, and submarines;

(*f*) Operations against surface shipping by surface or air forces;

(*g*) Mining operations and mine countermeasures, including activities by divers.

71. A comprehensive review of modern naval weapons would require that all of the above should receive consideration. It is, however, almost impossible to do this in a short paper since all involve considerable technical complexity. For the purposes of the present paper it is proposed to limit consideration to ASW since this is the area which is of principal concern to Canada.

72. In order to destroy an enemy submarine certain functions must be carried out:

(*a*) Detection;

(*b*) Identification;

(*c*) Localization (i.e. establishment of position within the effective radius of the ASW weapon);

(*d*) Warhead delivery;

(*e*) Destruction.

Generally speaking, the most difficult part of the problem relates to detection, identification and localization.

Anti-Submarine Warfare

73. Anti-submarine warfare systems continue to depend almost entirely on sound for the detection and location of submerged submarines. Other means of long range detection have been investigated, but, up to the present, no true alternative to sonar has been found. Certain short-ranged methods such as magnetic anomaly detection (MAD) have proved to be useful aids to accurate location but are essentially supplements to sonar rather than alternatives. Sonar systems are of two types: passive sonar which relies upon receiving sound energy emitted by the target, and active sonar which employs its own sound source and detects the target by means of the echo returned from it. Vessels of a particular type emit characteristic sound patterns or signatures. Consequently, passive sonar has the important advantage of facilitating identification of the target. Active sonar has the advantage of being able to detect silent targets and can determine their position more accurately. The performance of sonar is extremely variable, largely owing to the variability of the sea as a medium for the propagation of sound. The path of sound waves is affected by temperature, salinity, depth, bottom reflectivity, depth of receiver and depth of target. As a result the effective range of a sonar set many vary from zero to over 100 miles against similar targets on different occasions. The development (largely in Canada) of the variable depth sonar, which can be towed at the optimum depth has given rise to a considerable improvement. Nevertheless, the variable range and uncertain reliability of sonar remains one of the most fundamental problems of ASW.

74. The introduction of nuclear powered submarines has created additional problems for ASW forces. The nuclear submarine can travel faster, and also remain submerged at great depth almost indefinitely. The nuclear-powered submarine can travel submerged at speeds in excess of those of many existing surface escorts. The nuclear-powered submarine is also superior from the point of view of underwater manoeuvre. Nevertheless, the nuclear-powered submarine represents, and will continue to represent, an extremely formidable problem from the point of view of ASW defence. One should note, however, that the great majority of the present fleet of Soviet submarines are conventionally powered. This is likely to remain the case for some years to come.

75 Anti-submarine defence involves several types of operations. For surveillance and attack operations extending over large areas, the long range maritime aircraft is an important weapons system. Such aircraft can follow up distant contacts more rapidly than surface craft, they can investigate widely separated contacts on the same flight, they can search for contacts which have been temporarily lost or for suspected contacts in areas where no other means of surveillance exist. This is done by dropping and monitoring patterns of sonobuoys. Having found or renewed a contact the aircraft can locate the submarine by MAD or other means, and attack it by torpedo or depth charge. Important developments in these airborne sub-systems have occurred and others are in prospect.

76. In the role of convoy protection the principal weapons system is the escort vessel. Shore-based aircraft have an important role in convoy defence but are subject to certain limitations. The destroyer escort is a ship of the destroyer type which has been specially adapted to the ASW role. With the advent of the nuclear submarine an improvement in the detection system and weapons has become necessary. An important requirement is to increase the range possible with existing torpedoes. One solution to this problem is the anti-submarine rocket (ASROC) developed in the USA. Another solution developed by Canada is to install a helicopter platform on the destroyer escort.

The helicopter can carry a dunking sonar and a torpedo, thus providing an extension of both detection capability and weapon range.

77. The hydrofoil may ultimately provide a partial alternative to the helicopter; it has the ability to execute a high speed dash at speeds substantially in excess of that of a destroyer escort although not as fast as a helicopter. However, unlike the helicopter, the hydrofoil can remain on station for relatively long periods. Hydrofoils may involve considerable operating and maintenance problems. The severity of these problems will be clear only after some considerable experience has been gained in open-ocean operations.

78. An important weapon system for convoy escort is the ASW carrier. This is most particularly true in the case of operations carried out beyond the economical range of shore-based aircraft. The aircraft carrier can operate fixed wing aircraft which have a range and endurance much superior to helicopters. It can also, of course, operate a substantial number of aircraft.

V—BIOLOGICAL AND CHEMICAL WEAPONS

79. Although it is customary to link biological and chemical weapons for the purposes of discussion, these have from a technical military point of view little in common. There are, however, special inhibitions of a legal and moral nature attaching to the use of both types of weapons and it is the declared policy of all major governments to refrain from the use of such weapons other than in direct retaliation.

80. Chemical weapons cover a wide spectrum ranging from tear gas and other incapacitating agents to the modern nerve gases which are extremely lethal. The latter, if used against troops not equipped and trained in CW defence, would undoubtedly be devastating. Casualties would be high and the effect upon morale might be disastrous.

81. However, against troops well equipped for defence and well trained in the use of this equipment, it is unlikely that even the most lethal chemical agents would result in significantly more casualities for a given weight of munitions than would be caused by the same weight of high explosive munitions. Under certain conditions it is probable that CW would be significantly less effective than the same weight of HE. It should be said, however, that the appropriate defensive precautions would involve a considerable burden upon the troops, and this might be in itself a sufficient reason to employ CW.

82. Biological weapons are an entirely different matter. BW is, potentially, a weapon of mass destruction even more destructive than thermonuclear weapons on a per-pound or a per-dollar basis. However, for the present, biological weapons can scarcely be said to exist at all as an effective weapons system since there are unsolved problems relating to the efficient propagation of BW agents. Even if these problems were solved, biological weapons would, in comparison with nuclear weapons, suffer from two very important disadvantages; they are almost untestable and, quite possibly, almost uncontrollable. It is therefore possible that biological weapons will remain in the future, as they have been throughout the present century, a potential weapon of enormous destructive power but essentially unemployable for any rational political or military purpose. There is, of course, no assurance that this will be so, but it is worth noting that biological weapons have constituted a potential threat for almost a hundred years.

SUMMARY

83. The present paper represents a far from adequate survey of modern weapons and armaments. However, a comprehensive treatment would require a substantial treatise if not a small library. Perhaps the important point is that modern technology, which is continually being expanded by reason of the results of research and development, has enormously increased the spectrum of choice. At the same time, political and military circumstances have tended to produce an equivalent increase in the spectrum of possible military operations.

84. These facts have in themselves led to important consequences. Technical and engineering expertise have become of steadily increasing importance to modern military forces. Research and development is a constituent of national power no less important than population or productive potential. The role of the engineer and scientist in military planning has increased. As mastery of technology has become the key to military efficiency the size of national military headquarters and the proportion of effort devoted to technical establishments have increased. These developments have created major problems and especially so in the case of relatively small nations.

CONVENTIONAL AND NUCLEAR ARMAMENTS

By: JOHN GELLNER

Sections:

I. FUNDAMENTAL DIFFERENCES BETWEEN NUCLEAR AND CONVENTIONAL ARMS

II. CANADIAN NUCLEAR WEAPONS FOR NORTH AMERICAN DEFENCE

III. CANADIAN NUCLEAR WEAPONS FOR THE DEFENCE OF CENTRAL EUROPE

IV. STRATEGIC NUCLEAR WEAPONS

V. CONVENTIONAL WEAPONS

VI. REQUIREMENTS OF A CONVENTIONALLY ARMED CANADIAN FORCE

SECTION I.

FUNDAMENTAL DIFFERENCES BETWEEN NUCLEAR AND CONVENTIONAL ARMS

Any discussion of the respective uses of nuclear and conventional weapons must start with the categorical statement that there just is no comparison between the two. Statements that have been made in the past to the effect that nuclear weapons are like any others, only more effective—in Canada, this was put with somewhat frightening bonhomie that nuclear arms are simply "the best weapons for our boys"—are totally misleading.

Even the effect of comparatively small, so-called tactical or battlefield, nuclear weapons is quite different from that of conventional; the latter have controllable results and no after-effects, the former are not fully controllable and they do have after-effects. The reasons for this can, without going into technical detail, be stated as follows:

As far as we know, the fission material in small nuclear weapons is still plutonium (Pu-239), of which there must be somewhat more than ten pounds to start an explosive chain reaction. This is called the "critical mass". If all that plutonium underwent fission, there would be a blast of the equivalent power of something like 90 KT (90,000 t. of T.N.T.). In actual fact, what we may call the efficiency of a plutonium weapon is only about 20 per cent: only about two pounds of the weapon material is split and the resulting explosion amounts to 18 KT, or so. [1] The unused, as it were, portion of the plutonium, vaporized or scattered by the explosion, adds to the noxious effects of radiation (plutonium is highly toxic); it causes long-lasting contamination (the half-life of plutonium is 24,000 years).

A low-yield explosion in a battlefield nuclear weapon is achieved through a greatly accelerated, deliberately inefficient fission process. The lowest-yield warhead about which some facts and figures have been published, is that of the "Davy Crockett" atomic mortar. In it, a blast of approximately 0.1 KT

---

[1] Data from, "Policy Considerations of a Nuclear Test Ban", by D. G. Brennan and M. H. Halperin, in, "Arms Control, Disarmament and National Security" (George Brazillier, New York, 1961).

(100 t. of T.N.T.) is produced by the fission of only about one fifth of one ounce of plutonium.[2] This is an efficiency of not much more than one tenth of one per cent as against the theoretically possible yield from the same critical mass. Contamination from unused plutonium is thus relatively the greater, the lower the explosive power of the atomic weapon. In other words, tactical nuclear weapons are the "dirtiest".

This is a widely known fact. Some experts, incidentally, believe that the dreaded "neutron bomb", about which so much has been written, will actually consist of a mass of fissionable material detonated so inefficiently that it will produce only radio-toxic effects (which kill people) and practically no blast and heat (which destroy structures).

In the case of battlefield atomic weapons, the noxious effects that stem from the artificially inefficient explosion of the fissionable material are heightened by the fact that these weapons, if they are to achieve the desired results, must be detonated on the ground or close above the ground. They will thus produce patches of scorched—the better expression would perhaps be, blighted—earth which would remain scorched for many years, perhaps for a generation.

The foregoing (necessarily incomplete) discussion of the effects of tactical nuclear weapons may serve to *dispel the notion that there exist comparatively benevolent nuclear weapons, the use of which would be quite in order.* There are no such weapons. *Tactical nuclear arms have been developed, not for humanitarian reasons, but in order to make possible close-in fighting.* The "Genie" air-to-air missile, for instance, has a low-yield warhead (reportedly of 1.5 KT) so that the interceptor which carries it may come comparatively close to its target without being blown up itself. The already mentioned "Davy Crockett" fires a 0.1 KT mortar bomb so that the own infantry may exploit the nuclear blow at once and without having to make a great detour.

In sum, to paraphrase what Gertrude Stein once said about a rose, a "nuclear weapon is a nuclear weapon is a nuclear weapon", be it big or small, strategic or tactical. The political consequences of this fact are obvious. One must always keep in mind that conventional war is one thing, and war that would, or even merely could, be fought with nuclear weapons quite another.

Section II

CANADIAN NUCLEAR WEAPONS FOR NORTH AMERICAN DEFENCE

Canada has nuclear weapons carriers, and access to the nuclear weapons belonging to them, for two purposes: the aerial defence of North America, and the defence of the Central European sector of the NATO area.

As far as North America is concerned, it can, I believe, *be accepted* without much explanation *that this continent need be defended only against all-out nuclear attack.* The probability that this might happen is fortunately very slight, because *the nuclear deterrent to nuclear war works at present and is likely to work in the foreseeable future.* The deterrent, in turn, lies in the "second-strike capability" of the U.S. retaliatory forces, that is, in their capability to counter-attack with annihilating effect even after they have been struck by an enemy surprise attack.

Before the advent of ballistic missiles, the primary task of active air defence (defensive aircraft and missiles) was to protect the retaliatory forces and thereby validate the deterrent. This is no longer so. To take the retaliatory

[2] Data from, "Kleine und Kleinste Nukleare Sprengkoerper", by H. Flueckinger, in "Allgemeine Schweizer Militaerzeitschrift", May, 1962, and, "Jane's All the World's Aircraft 1963-64".

force by surprise and catch as much as possible of it on the ground, the enemy would have to lead with his missiles. His bombers could follow only after the difference of time between the moment when his ballistic missiles, and the moment when his bombers, could be detected by the various North American early-warning chains. This means that the bombers would come into range of our "Voodoo" interceptors and "Bomarc" surface-to-air missiles several hours after the first missile strike, that is, long after the portion of the retaliatory force that had remained unscathed had left for the counter-attack.

At present, then, active air defence, because it is ineffective against ballistic missiles, does not add to the deterrent by making it less vulnerable and does not protect it against actual attack. On the other hand, the enemy bombers that might come a few hours after the missile strike, would not be directed against the retaliatory force, anyway (the latter would not be there any more), but against population targets. Active air defence could in that case give some measure of protection to our cities by destroying a certain number of the attackers. By stretching the point a bit, it might even be said that active air defence even now deters to some extent, because it disabuses the potential enemy of the notion that after the initial missile strike his bombers could roam freely (the term generally used is, "have a free ride") in our air space.

Admittedly, in its present form, active North American air defence does not have too valid a raison d'être. In this paper, however, we are concerned with what is rather than with what ought or ought not to be. We can accept, then, that *under certain conditions,* which are not given now and are not likely to occur in the future, but which nevertheless could obtain at some time, *Active air defence could help to deter, and might combat after a fashion, an enemy bomber attack against North America. It could never deter or fight unless it had the use of nuclear weapons.*

The reasons for this are pretty obvious. In all-out nuclear war, every enemy bomber is a potential city-killer. Defensive means are limited, to say the least. It is essential, then, that every shot aimed at a bomber be a hit, and every hit a kill. Conventional anti-aircraft weapons are very far from being as efficient as that. In the last war, for instance, the Germans on an average destroyed one allied bomber for every 3,343 heavy A.A. shells expended.[3] That ratio was improved after the introduction of proximity fuzes, but by no means radically. Armed with conventional weapons, the kill probability that could be achieved by the 56 Canadian "Bomarc" missiles would be zero, and by the 50, odd, "Voodoos" not much better; we have no other A.A. weapons that could be used against high-flying jet bombers.

With nuclear weapons, the kill probability is very much greater. The lethal radius of the "Genie" air-to-air missile, that would be carried in the "Voodoo", is at least 1,000 feet,[4] while "Bomarc" reportedly would destroy anything within a cubic mile of air. Accuracy, which under operational conditions would be much affected by the enemy's electronic counter-measures, is thus infinitely less important in nuclear than it is in conventional A.A. weapons. The destruction of a target that came into the lethal range of a nuclear weapon would be instantaneous and complete. The "cooking" of the nuclear weapon carried in the target might be an additional benefit, but whether or not it would actually occur is open to question.

In sum, then, the chances of active North American air defence contributing much to the protection of population centers are not very great, in any case. They would be nil without defensive nuclear weapons.

---

[3] Data from, "The Bombing of Germany", by Hans Rumpf (Frederick Muller, London, 1961).

[4] Data from, "Jane's All the World's Aircraft 1963-64".

SECTION III.

CANADIAN NUCLEAR WEAPONS FOR THE DEFENCE OF CENTRAL EUROPE

In Central Europe, the Canadian nuclear weapons carriers, CF-104 tactical bombers and "Honest John" surface-to-surface missiles, have a certain deterrent effect but not operational usefulness. They add perhaps in some degree to the general deterrence of war in the area; they deter the Soviets from using their tactical nuclear weapons; and, in the unlikely case of a conventional war breaking out in Central Europe, they would force the enemy to fight in dispersal for fear of being caught by a surprise nuclear blow, and thus to forsake whatever advantage he could derive from concentrating for an attack in superior numbers. It may be added that, for the very same reasons, the Soviets also have some tactical nuclear weapons (in the main, short-range ballistic missiles on mobile launchers) with their forces in East Germany. On the other hand, it must be realized that all-out nuclear war would almost certainly ensue if one side fired off a nuclear weapon in the course of fighting in Central Europe. In fact, it is more than likely that any war in that part of the world be an all-out nuclear war. In it, CF-104's would hardly have a place, and "Honest Johns" certainly none.

NATO has put a tremendous effort—a very much greater one than has the Soviet Union—into equipping its forces with tactical nuclear weapons. In choosing this course, it has acted on the assumption, plainly erroneous, that, if need be, *a limited nuclear war could be fought.* The theory was that inferiority in conventional forces could be accepted, because the odds would be equalized by the judicious use, whenever and wherever necessary, of relatively low-yield nuclear arms. How this was to be done was worked out on paper and demonstrated in field exercises. It is rather surprising that nobody in the top NATO echelons seems to have been struck by the absurdity of that concept, not even after an exercise like "Winter Shield II." (February 2 to 8, 1961), in the course of which 74 simulated nuclear weapons were fired in a manœuvre area of approximately 1,650 square miles in Eastern Bavaria[5], or, on an average, one nuclear weapon on every 22 square miles. Defending a territory in this fashion is like saving a TV set by throwing it out of the third-storey window of a burning building.

Equally astonishing is that it took so long to realize that a limited nuclear war would be impossible, because the potential opponent never had the slightest intention to play the game. Soviet military and political spokesmen certainly have never made any bones about the fact that the Soviet Union absolutely refuses to accept any limitations once a nuclear war has broken out.[6] It stands to reason, in any case, that the Soviet Union will not—and indeed can not—consent to such restrictions. As the weaker side in a nuclear conflict, weaker in the past, now, and in the foreseeable future, it could only be expected to strike with everything it had in the first minutes or hours of such a war.

Nor were warnings heeded that came from thoughtful men in the Western camp, B. L. Liddel Hart[7] and Lord Tedder to name but two who should have carried most weight.

---

[5] Data from, "Winter Shield II.", by H. Kissel, in "Allgemeine Schweizer Militaerzeitschrift", May 1961

[6] For a clear summation, see, "Soviet Military Strategy", by Marshal V. D. Sokolovskij and ass. (Prentice-Hall, 1963). Compare also explanations given by Mr. Krushchov to Walter Lippmenn, in Schoi, April 1961 (variously reported)

[7] E.g. in his book, "Deterrent or Defence" (Praeger, 1960).

The period of pureblindness, during which the majority of NATO members, including Canada, acquired weapons systems for limited nuclear war, seems to be over now. The Americans, in any case, who were the ones who came up with the concept of limited nuclear war in the first place, have now virtually abandoned it. The present position is that most of the nuclear-armed allied tactical air forces are being clubbed together under SACEUR to provide, together with the British V-bombers and three U.S. Polaris submarines, a kind of NATO strategic deterrent (which was decided at the NATO conference in Ottawa, in May, 1963); the nuclear weapons of the ground forces are being kept where they are pending the evolution of a new concept of how to use them and for what. In this scheme of things, *the Canadian nuclear weapons carriers in NATO continue to fulfil their deterrent function*, a function *which, as things stand now, is of comparatively little consequence.*

Section IV.

STRATEGIC NUCLEAR WEAPONS

Little need to be said, here, about *the strategic nuclear weapons in the hands of the four nuclear powers. They serve solely the deterrence of nuclear war.* As far as their possessors are concerned, they inhibit any warlike action—a nuclear power has to be careful not to be drawn into a conflict in which it could be confronted by another nuclear power—,but they do not otherwise deter conventional war.

The nuclear deterrent works if it is credible and stable. The first condition requires no explanation. The more spectacular name usually given to the state of stable deterrence, as it exists today, is "balance of terror". Stability does not depend on the deterrent forces of the antagonists being more or less equal (they are not now, and never were, with the United States holding the advantage), but rather on both sides having a "second-strike capability" (See, pp 3/4). They have it if a sufficient portion of the retaliatory force can ride out a surprise attack. Such relative invulnerability is conferred by dispersal, mobility, hardening of bases, in the case of the Soviet Union also by secrecy.

The quantity of deterrence necessary for safety is also dependent on the importance of the possessor of nuclear weapons—a country like France, for instance, needs less retaliatory strength to deter nuclear attack upon it than does the United States.

The stability of the deterrent would be upset if one side grew too strong or the other too weak. This would happen if one side acquired a "first-strike capability" (i.e. the ability to destroy the retaliatory force of the other) or found reliable means of defence against nuclear attack. In that case, both the stronger and the weaker side would be tempted to strike, the former to exploit its possibly only transitory advantage, the latter to equalize the odds somewhat by getting in a surprise blow. *The danger that the "balance of terror" will be upset in the foreseeable future is, however, slight.*

Non-nuclear powers can contribute little, it anything, toward bolstering the credibility and stability of the nuclear deterrent. This applies also to Canada, which in the field of strategic deterrence can render to the United States only minor services.

Section V.

CONVENTIONAL WEAPONS

Conventional warfare of all kind has never stopped since the end of the Second World War. In fact, conflict of this nature seems to become more common than ever.

The two main characteristics of present-day conventional forces which distinguish them from those of the recent past *are their greatly enhanced mobility and flexibility. Firepower per man* is also continuously increasing as new weapons are introduced and, perhaps even more important, as lighter, smaller and handier weapons replace the heavier armaments of the past.

A very high degree of *mobility* is necessary nowadays because in modern conventional war there is no longer an opening stage during which the antagonists mobilize and deploy, and because movement is so rapid that advantages can be gained in the first hours of a conflict which a sluggish opponent may never be able to make good. The *Korean War* provides an object lesson on the role mobility plays in present-day warfare.

The North Korean army which drove across the 38th parallel on June 25, 1950, was an oldfashioned infantry force, supported by only 100 tanks. Yet even it would have finished the war victoriously in something like three or four weeks, had the United States not followed up its decision to intervene, taken on June 30, with a first movement of troops into Korea on the very next day. Even so, the North Koreans almost made it: at the beginning of August, all that was left of the Republic of Korea was the farthest north-east corner of the country defended by U.S.-South Korean formations precariously holding the "Pusan perimeter". But for the mobility of the American forces—and the obsolescence of the North Korean—,there would not have been much of a war and certainly no Republic of Korea on our side.

Just as certainly, Canada would have had no opportunity to intervene in the Korean War. The decision to send Canadian ground troops was taken on August 7—just when the U.S. and ROK troops were making their crucial stand along the "Pusan perimeter"—, an advanced party was landed on November 7, and the first combat unit, an infantry battalion, on December 18. By then, the decisive stage of the war—that in which victory or defeat hang in the balance—was over. This kind of intervention would be, of course, quite useless against a first-class adversary.

Similarly, conventional force dispatched to preserve the peace in a troubled area, can accomplish their objective only if they can move in at once, before actual warfare has broken out, or at least before it has become so intense that it is impossible to squelch.

Mobility is particularly important in a theatre of operations in which the adversary has it in his power to use nuclear weapons. The threat which they pose, even if it lurks only in the background, makes it necessary to move in wide dispersal, to concentrate and then again thin-out rapidly, so as to offer targets for a surprise nuclear blow for as short a time as possible.

Mobility depends on a number of factors; trained and fully equipped troops must be readily available at all times; all their equipment must be suited to the means of transport available; there must be a wide variety of the latter, as the requirements for long-range transportation are quite different from those for movement in the rear areas of a theatre of operations and again from those in the battle zone; the forces must be organized so as to require the least of transport for a given amount of firepower.

Here are a few explanatory notes:

A good rule-of-thumb for the calculation of weights to be moved to an area of active operations is three tons per man initially, and one ton per man per month thereafter. These figures may seem to be high, but it must be realized that they include all vehicles, fuel, and ammunition. In fact, the three ton-one ton rule is, if anything, conservative. In Exercise "Big Lift", the 2nd U.S. Armoured Division with some supporting elements, 15,358 officers and men in all, was flown in 204 transport aircraft from the United States to

Germany. There the troops drew from depots 60,000 tons of equipment.[8] This works out to four tons per man.

The total airlift capacity of the power most lavishly equipped in this respect, the United States, as of mid-1963, was 12,000 tons for 1,500 miles, or 8,500 tons for 4,000 miles.[9] This would be barely sufficient to carry one fully equipped infantry regiment across the Atlantic in a single airlift.

Long-range movement to areas where there are no friendly depots and no pre-positioned equipment must as a rule still be carried out by sea. A fast, big liner will be very good for the job, if there are proper port facilities on the other side. Specialized vessels which can discharge passengers and cargo over an open beach are preferable—some are available in the NATO navies (the Royal Navy's new, fast logistic ship "Sir Lancelot" is an outstanding example), but by far not enough. Long-range transport aircraft will still carry personnel, or even complete advance units, like an armoured reconnaissance squadron. The same applies (but not to the same degree) to air units. They can carry themselves with all essential equipment more easily than army units can be carried, but in their case too heavy support equipment will as a rule have to go by sea. It goes without saying that all fuel—and modern conventional forces consume prodigious amounts of it—must be transported in tankers.

In the rear of the battle front, equipment must be moved on its own wheels and tracks or must be airlifted in fixed-wing or rotary-wing aircraft. The former must have the capability to operate from rough and small airfields; among the latter, crane helicopters, which can lift big loads suspended externally, are becoming more and more important. Smaller types of aircraft are needed on the battlefield. Helicopters are very useful, but also highly vulnerable, Vertical-take-off aircraft (VTOL) will probably eventially take their place; they are not yet available.

All equipment must be air-transportable. This means that it must be designed as to weight, distribution of weight, and bulk, to fit into available transport aircraft. The latter, in turn, must be designed for the handling of bulky and awkward equipment, and for easy and fast loading and unloading. Because the carrying capacity of aircraft is limited, operational units and headquarters must be streamlined, that is, administrative tails must be short, so that most of the weight can be allocated to the fighting components.

Because intervention in a conventional war must be instantaneous if it is to be effective, and because the number of fully trained troops which are readily available will always be limited, armed forces must be *highly flexible*, that is, they must be capable of operating in all conditions. At one and the same time, and with very much the same kind of equipment, British troops have recently held a sector in Central Europe opposite a first-class power possessing nuclear weapons; have dealt with hostile incursions in the desert of southern Arabia and the jungles of Borneo; policed Cyprus; put down revolts in East Africa. By comparison, the Canadian experience in the Korean War has shown how utterly impractical it is to try to raise a special force for a special military task.

To achieve the kind of mobility that modern conventional war requires, and to make possible fighting in small bodies and wide dispersal, *individual firepower* had to be greatly increased. The Canadian army is far from having all the modern armament it should have, but even in it firepower has doubled in the 20 years between 1944 and 1964. The weight of fire that can be put down by a Canadian army brigade in one minute has risen from 41,700 rounds from

---

[8] Data from "Exercise Big Lift", in "Interavia", December 1963; and "The Navy at Ebb Tide", by Hanson Baldwin, in "Reporter", 30 January 1964.

[9] Data from, "Strategic Mobility", by Neville Brown (Chatto & Windus, Lonodon, 1963)

small arms, 238 anti-tank rounds, and just under seven tons of high-explosive shells, to 79,200 rounds, 504 rounds, and 15.37 tons, respectively.[10]

Even more significant is the fact that weapons have generally become simpler, smaller, lighter—and as often as not cheaper—than they were in the Second World War.

For instance, the job which was done then by the 17-pound anti-tank gun, with its towing vehicle and gun crew, is done now with greater accuracy by a single infantryman carrying a wire-guided anti-tank missile. As far as anti-aircraft artillery is concerned, the standard gun of Canadian ground troops, the 40 mm Bofors, required a crew of six, and its chance of destroying an aircraft was less than one in a thousand (the Germans fired 4,940 rounds from light anti-aircraft guns to shoot down one bomber).[11] A gun of that kind could not even be trained on a modern aircraft flying at low level and at today's speeds. By comparison, the "Redeye" anti-aircraft missile, with infra-red guidance, is served by a two-man team, can be fired from the shoulder, and has an estimated kill probability against low-flying aircraft of one in five.

In aircraft, the increase in firepower is even more pronounced, both in weight of fire and in effectiveness. The latter has been enhanced mainly by the introduction of guided air-to-air and air-to-surface missiles.

The role of *navies* in present-day conventional warfare is a lesser one than it used to be in the past. The reason for this is that the big maritime powers are also nuclear powers which, as was pointed out earlier, are likely to do anything to avoid a direct confrontation with one another. Still, as was also said earlier, navies have an important logistic function. They must be protected while performing it against air, surface and under-water attack. Ships may be required to provide fire support. They may serve as bases of helicopters and temporary airfields. Because of the communication facilities available, headquarters may in certain circumstances be best located on shipboard.

In the not too distant future, air-cushion vehicles (hovercraft) and hydrofoils should have an important place in maritime and in combined sea-land operations, with the former probably proving more useful in practice than the latter. Especially inshore, and on bigger rivers and other inland waters, they could, with their high speed, good manoeuvrability, and relatively great carrying capacity, render excellent service. Hydrofoils are also being considered as submarine chasers.

In sum, then, *modern conventional warfare requires men and matériel of extraordinarily high quality*, because mass as a rule can no longer compensate for lacking individual performance. The trend toward bigger and bigger weapons has been reversed. *The emphasis is now on providing the smallest possible team with the greatest possible firepower and with the means of operating with the least possible support.*

SECTION VI

REQUIREMENTS OF A CONVENTIONALLY ARMED CANADIAN FORCE

Very briefly, it can be stated here that *Canada has the men but not the matériel for a modern conventional force that would be capable of intervening quickly in any kind of situation in any part of the world.* We got into this position, because for years we were preoccupied with the (fortunately most unlikely) big war, but neglected to equip ourselves for the likely kind of

[10] Figures kindly supplied by Canadian Army Headquarters.

[11] Same reference as [3].

armed conflict. As a result, we have the foundation for a small-war force, but not the superstructure (in both cases, big/nuclear and small/conventional war, the terms imply deterrence as well as conduct).

The Canadian forces lack certain kinds of essential equipment completely, while they are deficient to a greater or lesser degree in respect to other items. We have no tactical aviation, at all, and no suitable sea transport. Both our naval vessels and our ground troops are virtually unprotected against air attack. We have only a very few really useful military transport aircraft (the bulk of our transport fleet, the CC-106s and CC-109s, are just passenger aircraft). Much of our matériel is not air-transportable. Our ground troops badly need modern armoured vehicles, from tanks to troop carriers (the latter are on order). There are various deficiencies in ancillary equipment.

Because of these deficiencies, every operation by Canadian forces above the level of a police action would now require a good deal of outside (allied) support. *To build up balanced conventional forces, that would be up to present-day requirements, is,* however, *not beyond our capabilities* (Sweden is the outstanding example of a middle power which has managed to do that).