



Bulletin

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FRANCE-QUEBEC EXCHANGE OF LETTERS ON SATELLITE COMMUNICATIONS

The Secretary of State for External Affairs, Mr. Mitchell Sharp, made the following announcement on January 24:

The Canadian Government has noted reports indicating that documents have been signed in Paris by representatives of the French Government and the Government of Quebec dealing with future co-operation in the field of satellite communications.

We were informed by the French Government in advance of its intentions in this regard, but we have not yet seen a text, though we had asked to be informed and consulted in sufficient time before signature.

In such circumstances, the Canadian Government naturally wishes to reserve its position with regard to these documents. It intends to study them carefully to determine whether they come within the framework of agreements concluded by Canada and France.

In any event, these documents in themselves would not constitute international agreements. Moreover, constitutional responsibility in the field of telecommunications devolves upon the Government of Canada, which would mean that every project carried out in this field will involve action on the part of the Canadian Government. It is, therefore, clear that all international co-operation concerning satellite communications requires the concurrence and full co-operation of the Canadian Government.

Canada is in the vanguard in the field of satellite communications, as much from the technical point of view as in the efforts which it is making to give practical expression to the interests of the country, of the provinces and of all Canadians.

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Before the end of 1971, as one of the first in the field, Canada will have an important communications satellite network which it will use in accordance with its policy of promoting bilingualism, to provide Canadians with radio and television broadcasts in both official languages. It intends, thereby, to ensure the expansion of French culture throughout the whole country. The Government is also engaged in exploring and defining possibilities for co-operation in the field of satellite communications both with international organizations and, on a bilateral basis, with other countries including France, with a view to keeping Canada in touch with the mainstream of world culture, including obviously, French culture.

In the course of the past years, we have entered into mutual arrangements in the space field with a number of countries, including France. As far as the French Government is concerned, last year we proposed a programme of co-operation to them designed to expand existing exchange arrangements and, to promote jointly ventures into new areas. Discussions are being pursued. Within the context of

these proposals, the Government of Canada intends to expand its consultation and co-operation with interested provinces, notably Quebec. The Canadian Government is convinced that it is in this spirit that effective co-operation can be undertaken, in which it has an essential role to play. It is also the only way which will guarantee, in a field where technology progresses at such a rapid pace, truly efficient utilization of the financial resources of the governments concerned towards their common objectives, without duplication of effort or expenditure.

GOOD WISHES TO PRESIDENT NIXON

Prime Minister Trudeau sent the following message to President Nixon upon his inauguration on January 20:

As you assume the Presidency of your country, I extend to you and Mrs. Nixon the best wishes of the Canadian Government and your Canadian friends and neighbours. I look forward to working with you for the benefit of both our countries and for peace and justice in the world.

FAREWELL TO MR. JOHNSON

The Prime Minister also sent a message of appreciation and farewell to President Johnson prior to his leaving office:

As you relinquish the heavy responsibilities of the Presidency, I want to express to you, on behalf of the Canadian Government, our deep appreciation for the friendship and understanding for our country which you have shown during your service as President.

We remember in particular your visits to both our West and East coasts as well as to Ottawa and Montreal.

Canadians join in wishing you and Mrs. Johnson much happiness and satisfaction in the new endeavours on which you are now embarking.

WELFARE COUNCIL REPORT

An adequate guaranteed annual income is regarded by the Canadian Welfare Council as the social right of all Canadians: it should be instituted "as rapidly as possible", according to the Council's statement, *Social Policies for Canada*, released on January 29 to federal and provincial ministers, Members of Parliament and provincial legislatures, and appropriate officials at all levels of government. The statement is also being distributed to individuals and social agencies in every region of Canada.

The Council's views, with 38 recommendations, are contained in a 78-page printed document prepared by a special project committee under the chairmanship of a former president, B.M. Alexandor of Ottawa. The project received substantial financial support from the Department of National Health and Welfare.

Among the recommendations of the special two-year study were:

Old age security payments should be related to the rising standard of living.

There should be substantial increases in family and youth allowances.

Insurance for interruption of income owing to sickness or childbirth should be mandatory.

The provinces should develop a "basic network" of social welfare services.

Canada should create a disaster-services unit which could respond to natural and man-made disasters abroad.

HUMAN RIGHTS FOR JUST SOCIETY

The entire statement reflects the growing acceptance of the view that human rights are basic to a just society. Its contention is that people are entitled to certain benefits and conditions of living as a matter of right, rather than as an uncertain privilege bestowed by others.

The document contains sections on the practical implementation of the philosophy of social rights. It proposes legislative and administrative procedures to safeguard the principle of social rights. As such rights relate to social security (specifically income security), the guaranteed income is seen as the first line of defence against poverty, though the statement also deals with other current forms of income maintenance, some of which (e.g. flat-rate family allowances and wage-related social insurance) should be changed or enlarged.

IRAN'S CROWN JEWELS STUDIED

The Crown jewels of Iran – the world's most valuable collection of gems – were the subject of an illustrated lecture at the National Museum of Natural Sciences recently, when Dr. Victor B. Meen, chief mineralogist at the Royal Ontario Museum, a member of the ROM team invited to study the collection, showed slides of many of its pieces. There were pictures of the world's largest ruby-red spinel, five emeralds weighing over 300 carats each, seven of the 14 diamonds in the world that weigh over 100 carats, ropes of magnificent oriental pearls and gem-encrusted paraphernalia of the Royal Court.

Dr. Meen and Dr. A.D. Tushingham, chief archaeologist of the ROM, headed a seven-member team that went to Iran in 1966 to carry out the first scientific study of the collection and to catalogue it.

This task was entrusted to the Royal Ontario Museum by custodians of the collection, the Central Bank of Iran. The project was sponsored by the Birks Family Foundation and the team included two documentation assistants, a photographer and a research assistant in gemmology. As well, the services of E.B. Tiffany, chief gemmologist for Henry Birks and Sons, were made available for the last month of the three-month study.

NEW PASSPORT REGULATIONS

Changes in passport requirements for the purpose of strengthening the security of Canadian passports have been announced by Mr. Mitchell Sharp, Secretary of State for External Affairs.

The following are some of the changes:

PROOF OF CANADIAN CITIZENSHIP

All applicants for passports residing in Canada must provide documentary evidence of their claim to Canadian citizenship.

Birth certificates or certificates of proof of Canadian citizenship must be presented by applicants who claim they were born in Canada.

Applicants not born in Canada must provide evidence of Canadian citizenship in the form of certificates of naturalization in Canada, certificates of Canadian citizenship or certificates of registration of birth abroad.

PASSPORT RENEWALS ABOLISHED

The steady increase in the number of passports reported lost or stolen by Canadian travellers, the majority of which are lost outside Canada, has reached a level where steps must be taken to reduce the security hazard of unrecovered documents. Because of this hazard, the Government has decided that the renewal of Canadian passports should be eliminated and the life of the passport limited to a single five-year term.

Passports already issued may not be renewed

on the expiry of the original five-year period. Passports issued originally for five years and since renewed for a further period of up to five years will continue to be valid until the expiry date shown in the passport.

DECENTRALIZATION OF ISSUANCE

The Department of External Affairs hopes to decentralize the issuance of passports by opening branch offices at the major international air terminals from which travellers depart, often on short notice on direct overseas flights. It is hoped that offices will be established in Montreal, Toronto and Vancouver in 12 months, as soon as staff resources permit; a small office is to be opened later in the Maritimes.

Future decentralization will be undertaken in relation to the establishment of further major international airports and the volume of passport applications emanating from these, which would be necessary to justify the expenses involved.

NEW FEES

For the past 43 years, Canadian passports have cost \$5.00 each. The Government has now found it necessary to introduce a new fee schedule that will increase the cost of a regular Canadian passport to \$10.00 and the businessman's passport to \$12.00.

The new fees and the new passport requirements became effective on January 22.

WATER-RESEARCH CENTRE

The Federal Government is going ahead with the construction of a major water-research centre, which will be known as the Canada Centre for Inland Waters, at Burlington, Ontario. The building complex, first announced in 1967, will cost \$23 million.

"This project," Energy, Mines and Resources Minister J.J. Greene said, "emphasizes the Government's concern over water pollution and other problems affecting the international waters of the Great Lakes System."

Besides pollution and the quality of water, the centre will study such problems as current and circulation of the lakes, changing water-levels, flooding, shore erosion, sedimentation, ice-formation, and biological factors, along with their economic and social effects.

Chemists, biologists, engineers, physicists, geologists, economists, sociologists and other specialists will be working together at the centre, the facilities of which will also be used by universities and the private sector.

Three federal agencies are developing the centre: the Department of Energy, Mines and Resources, the Fisheries Research Board and the Department of National Health and Welfare. The first

has the main co-ordinating role and responsibility for the operation of the centre.

Besides the necessary marine facilities and service buildings, plans call for construction of a main research laboratory, a hydraulics laboratory, common-user facilities and a water-quality pilot plant. The pilot plant will be used for studies aimed at improving treatment methods for industrial wastes and sewage.

The Burlington site, in the shadow of the Skyway Bridge, was chosen, among other reasons, because of its strategic location on the lower Great Lakes and its proximity to major sources of water pollution from industrial and urban complexes on both sides of the international boundary.

The project should be completed in autumn 1972.

ESKIMO BOOK PROGRAMME

Two copies of the first in a series of Eskimo books have been presented to the National Library by Indian Affairs and Northern Development Minister Jean Chrétien.

The volume, entitled *The Autobiography of John Ayaruaq*, is written in syllabics, a script that

has been used by Eskimos of the Eastern Arctic since 1877.

After the official presentation, Mr. Ayaruaq, who had flown in from his home at Rankin Inlet, autographed copies of his book for guests, among whom were 35 young Eskimos attending school in Ottawa.

The Eskimo staff of Mr. Chrétien's department chose Mr. Ayaruaq's autobiography from a number of manuscripts to launch the literature series because they believed the story — an adventure tale spanning three generations — would appeal to readers of all ages. The book has been distributed free to learned institutes in Canada and abroad.

The second book in the series, a novel, tentatively planned for release next year, will be published in Eskimo syllabics and English.

ALBERTA'S BRAINY DINOSAUR

The bones of perhaps the most intelligent dinosaur that ever lived have been discovered in Alberta and identified by a scientist of the National Museum of Natural Sciences.

Dr. Dale A. Russell, acting head of the paleontology Division of the museum, identified some of the fossil bones of the ancient reptile *Sauromithoides*, a creature eight feet long, which roamed Western Canada about 75 million years ago.

Dr. Russell believes *Sauromithoides* — a meat-eating reptile — probably preyed on primitive mammals, including the ancestors of man, which were tiny shrew-like creatures at that time.

Although the dinosaur did not have the intelligence of a dog or even a parrot, a bird of relative intelligence, it was probably more intelligent than ostriches and other large birds. Dr. Russell says the brain was "about seven times larger than any living reptile of comparable body weight". He believes *Sauromithoides* weighed about 100 pounds.

Some of the bones uncovered last summer in Alberta belong to the "skull-cap", a piece missing in two other specimens found previously — one in outer Mongolia and the other in Alberta. Discovery of this cap showed the brain capacity to be much larger than dinosaurs many times as large.

Scientists believe most dinosaurs were very stupid creatures with small brains.

The skull-cap being capable of holding a larger brain shows that dinosaurs could have become intelligent, had they had more time to evolve further.

Sauromithoides had a thin skin and walked on two legs, with front limbs free to grasp objects. The hips and hind limbs show that the pelvic muscles were very powerfully developed. This feature, along with the proportions of the bony elements of the hind limbs, indicates that the animal must have been very swift. The hands were also extremely supple.

Its eyes were large, about twice the size of those of a human, giving it very keen vision. They faced rather strongly forward, so that the animal must have also possessed stereoscopic vision.

Sauromithoides lived in fairly recent times in terms of dinosaurs, some of which date back as far as 220 million years. All dinosaurs are believed to have died out about 63 million years ago. It was 61 million years later that the ancestors of man became recognizably human.

ATOMIC DATA FOR JAPAN

Atomic Energy of Canada Limited has made a commercial agreement to supply the Power Reactor and Nuclear Fuel Development Corporation of Japan with "packages" of technical information on aspects of the Canadian nuclear-power system. AECL will receive about \$500,000 in payment.

The Power Reactor and Nuclear Fuel Development Corporation, a national organization, has as a major project, the development of an advanced thermal nuclear reactor for the generation of electric power. The information being purchased from AECL is intended for use in this project.

The "packages" include reports on primary coolant experiments and test results, evaluation of zirconium-2.5 per cent niobium alloy for pressure tube use, and evaluation of connecting methods between zirconium alloy pressure tubes and stainless steel tubes.

WINTER EMPLOYMENT

Recently, in reply to questions in the House of Commons as to what substitutes were to be provided for the winter works programme that was discontinued last year, Manpower and Immigration Minister Allan J. MacEachen said that the Government intended to concentrate on programmes that would increase not only winter employment but employment in general. The Federal Government would, he said, spend \$197 million during 1969 — an increase of \$47 million over last year's figure — to train and re-train adult workers. Last winter, the federal expenditure on municipal winter works was about \$25 million.

MOBILITY GRANTS

This year, the Minister said, various "mobility grants" amounting to some \$4 million, would be given to about 30,000 workers. Counselling and placement services of the Canada Manpower Centres throughout the country had been extended and improved.

"The Government feels that its new and modified manpower programmes are much broader in scope and more effective in application than the Municipal Workers' Incentive Programme was," Mr. MacEachen stated.

Canadian participation in the United Nations action to restore peace in Korea was commemorated by two Korean stamps issued in 1951.

A NEW LOOK AT THE GROUP OF SEVEN

Governor-General Roland Michener opened an exhibition of the MacCallum and Jackman gift collections of paintings by Tom Thomson and the Group of Seven at the National Gallery of Canada on January 23. The display will be on view until February 23.

Neither the MacCallum nor Jackman collection has been shown before as a whole. The bequest of Dr. James M. MacCallum of Toronto was made to the Gallery in 1943.

The gift of Mr. and Mrs. H.R. Jackman of Toronto, of the panels from West Wind Cottage in Georgian Bay, complements the MacCallum bequest. The murals, by Tom Thomson and members of the Group of Seven, were commissioned by Dr. MacCallum and installed in the cottage in 1916 as a birthday surprise for his wife. Mr. Jackman bought the cottage in 1945 and completed its original owner's project with panels painted by A.Y. Jackson in 1953. When Mr. Jackman became concerned about the condition of the panels, which could freeze in winter and became damp in summer, he approached Miss Jean Sutherland Boggs, Director of the National Gallery, about presenting them to the national collection. Last summer they were dismantled from the cottage; 21 of them are included in the exhibition.

By exhibiting as a collection the 134 paintings comprising the bequest, the Gallery is fulfilling a longstanding promise, although some individual works such as Tom Thomson's "Pine Island", have been on view and are well-known. Others, such as the Jackman murals, are being displayed publicly for the first time.

BIRTH OF THE GROUP

In the exhibition catalogue, Dr. MacCallum, the patron of Tom Thomson and the Group of Seven, is described as the son of a Methodist minister who developed an early love of art and a love of the North, spending his summers in Muskoka and Georgian Bay. He met Lawren Harris, Arthur Lismer and

J.E.H. MacDonald through the newly formed Arts & Letter Club in Toronto. F.H. Varley, and later A.Y. Jackson, also lived in Toronto. It wasn't until 1912 that Dr. MacCallum met Tom Thomson, by whom he was much impressed. Dr. MacCallum and Lawren Harris conceived the idea of building a studio, which was completed in 1914 and soon filled with busy painters, one of them Thomson, whom Dr. MacCallum had persuaded to give up his job and paint full-time. The doctor offered Thomson, as he had offered Jackson, guaranteed sales for a year and space in the new studio building.

The First World War dispersed members of the group, who were never to meet again as a group. Thomson was found drowned in Algonquin Park in 1917. The following year Harris, MacDonald and Johnston went on the first of their famous box-car sketching trips to the north shore of Lake Superior, in which Dr. MacCallum joined them. In May 1920, the first Group of Seven exhibition was held.

ROLE OF DR. MACCALLUM

The catalogue says of Dr. MacCallum's role with the Group of Seven: "The doctor's interest in art was of a particularly personal sort, and his support was in the nature of a patron rather than of a collector....His particular attachment to the members of the Group of Seven and Tom Thomson grew from his great love of the North and particularly of the Georgian Bay region, and his desire to find someone who would share that love and be able to express its nature. He obviously felt great sympathy for their anti-establishment stance, and, particularly with someone like Thomson, their complete disavowal of all meaningless social forms and consequent appearance of rough but deep and true naturalness. The doctor wished to identify with this quality and with this social stand, and though he couldn't paint (he once tried to learn) he was evidently very involved in the thrill of creation through his camaraderies with the painters....There was no question in his mind that Thomson was the natural and lasting talent."

ROCKET PROBE OF 1970 ECLIPSE

Canadian scientists will launch a series of high-altitude sounding rockets from a temporary launching-site on the southeast coast of Nova Scotia during the 1970 total eclipse of the sun.

This will be the first time that sounding rockets have been fired into the upper atmosphere from a site in Eastern Canada. All other rockets for upper-atmosphere research have been launched from the National Research Council's Churchill Research Range at Churchill, Manitoba, from Cold Lake, Alberta, or from a site at Resolute on Cornwallis Island in the Arctic.

The eclipse of the sun, which will occur during the early afternoon of March 7, 1970, will travel along the east coast of Nova Scotia, across Cape Breton Island and on to Newfoundland. The path of totality will be about 75 miles wide, will cover about half the province and will extend well out to sea.

Scientists from the National Research Council and the Defence Research Telecommunications Establishment will fire four Canadian-built *Black Brant III* rockets into the upper atmosphere prior to and during the eclipse. The rockets will carry scientific instruments to an altitude of 100 miles to measure changes that occur in the ionization of the

upper atmosphere when the sun's radiation is cut off by the moon.

Information obtained from the rocket-borne instruments will be augmented by radio wave propagation measurements taken from ground stations. One of these will be at the launching site and others at the Defence Research Telecommunications Establishment in Ottawa.

The reason that the launch site will be located in the Port Dufferin area is that it is on about the same parallel of latitude as Ottawa, making it possible to correlate the measurements taken in the two areas.

Preparation of the site will begin in the summer of 1969. All arrangements for the launchings are being made by NRC's Space Research Facilities Branch.

WORLD POST FOR NRC PR MAN

Ralph E. McBurney, Chief of the National Research Council's Technical Information Service, has been elected President of the International Federation for Documentation (FID) for a term of three years. Dr. Jack E. Brown, Chief Librarian of NRC's National Science Library, was re-elected to the FID Council for a term of four years.

The elections took place during the thirty-fourth FID Conference held in The Hague in December. The two Vice-Presidents, who were elected at the meeting are Professor A.I. Mikhailov, Director of Russia's Institute for Scientific Information, and Dr. H. Arntz, Chairman of the Society for Documentation in West Germany.

The International Federation for Documentation, founded in 1895, is the oldest and major international non-governmental organization dealing with all aspects of scientific and technical information and documentation. The membership of FID consists of national scientific documentation and information organizations and individuals in 43 countries.

The organization's prime concern is to promote the development of new ideas and techniques which will facilitate the processing and dissemination of information at both the national and international level.

LABOUR FORCE

Both the Canadian labour force and employment in Canada showed larger declines than usual for the season from November to December. The labour force decreased by 75,000 to 7,940,000, while employment declined by 110,000 to 7,567,000. Unemployment increased by 35,000 to 373,000, as is usual for that time of year.

The labour force was higher by 243,000, or 3.2 per cent, than in December 1967. Employment rose by 223,000, or 3.0 per cent; unemployment was up by 20,000.

EMPLOYMENT

Farm employment decreased by 56,000 during the month. Non-farm employment declined by 54,000. An increase of 36,000 in employment, transportation, communication and other utilities was more than offset by decreases in construction (34,000), public administration (21,000) and manufacturing (17,000).

With the exception of British Columbia, where employment increased slightly, all regions contributed to the decline in total employment from November to December. The largest decrease took place in Ontario (53,000), followed by Quebec (31,000), the Prairie Provinces (23,000), and the Atlantic Provinces (14,000).

Compared to that recorded a year earlier, farm employment went down by 20,000, and non-farm employment increased by 243,000. By far the largest gain in non-farm employment occurred in community, business and personal service (104,000). Smaller gains were registered in manufacturing (53,000), trade (27,000), public administration (23,000), transportation, communication and other utilities (18,000), construction (14,000), and finance, insurance and real estate (12,000).

The year-over-year increase in employment was shared by all regions except the Atlantic region, where there was little change. The largest increase took place in Ontario (103,000), followed by the Prairie Provinces (60,000), British Columbia (43,000), and Quebec (25,000).

UNEMPLOYMENT

Unemployment increased by 35,000 from November to December. Compared to December 1967 figures, unemployment was up by 20,000.

Of the 373,000 unemployed in December, 38 per cent had been unemployed for less than one month, 38 per cent for one to three months, and 24 per cent for four months or more.

Unemployment in December represented 4.7 per cent of the labour force, compared to 4.6 per cent in December 1967, and 3.6 per cent in December 1966. The seasonally-adjusted unemployment rate in December 1968 was 4.8 per cent.

SAFETY COUNCIL CONFERENCE

The first annual conference of the Canada Safety Council will be opened in Ottawa on May 4 by Governor-General Roland Michener.

The CSC came into being last September with the merger of the Canadian Highway Safety Council, the National Safety League and the Canadian Industrial Safety Association.

There will be 15 workshops on various aspects of safety, embracing the areas of activity formerly divided among the three constituent groups. General sessions will concentrate on topics such as medical aspects of safety, communication, and voluntary compliance with safety rules and practices.