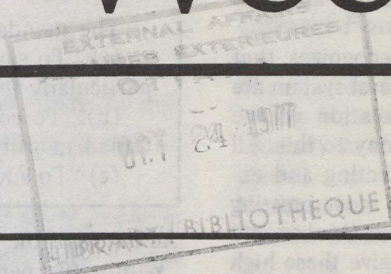


# Canada Weekly

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- Task Force on Canadian Unity gets under way, 1
- International science co-operation, 2
- Public Service official languages policies revised, 3
- Chinese Foreign Minister visits, 3
- New fighter aircraft sought, 3
- U.S.S.R. buys more Canadian wheat, 4
- IDRC President to World Bank, 4
- Drilling season deadlines, 4
- New federal financing idea for social service contributions, 5
- Sweden/Canada nuclear agreement, 5
- Passport to retirement, 5
- Bird/aircraft risk reduced, 6
- News of the arts — glass exhibition, ballet, 7
- Federal fisheries exhibit, 8
- Potential energy crop, 8
- News briefs, 8

### Members of the task force

Besides co-chairmen Pepin and Robarts the following are members of the Task Force on Canadian Unity: Richard Cashin, Atlantic provinces; Mrs. Solange Chaput-Rolland and Gerald A. Beaudoin, Quebec; Dr. John Evans, Ontario; Muriel Kovitz, Prairies and N.W.T.; and Ross Marks, Western Region and Yukon.

### Task Force on Canadian Unity gets under way

Jean-Luc Pepin, former Cabinet minister, and John Robarts, former Ontario premier, co-chairmen of the Task Force on Canadian Unity, announced that its members would visit 14 centres across Canada in each of the ten provinces and two territories from now until January 1978, to obtain the views of all Canadians and stimulate a national debate on the future of this country.

The centres are: Halifax, Nova Scotia; Moncton, New Brunswick; Winnipeg, Manitoba; St. John's, Newfoundland; Montreal, Quebec; Edmonton and Calgary, Alberta; Yellowknife, North West Territories; Whitehorse, Yukon; other cities in Quebec; Vancouver, British Columbia; Regina, Saskatchewan; Toronto, Ontario; and Charlottetown, Prince Edward Island.

Mrs. Solange Chaput-Rolland, one of the two task force members from Quebec, began a tour of the Sherbrooke area from September 26 to 28. It was the first of a series of visits by Mrs. Chaput-

Rolland throughout the province to hear residents' views on Canadian unity.

### Theme questions

In meeting with the public, members of the task force ask:

(1) "The Government of Quebec is now proposing a fundamental change in the status of Quebec in relation to the rest of Canada. Do you believe that Canada needs to make substantial modifications to its social, political and constitutional arrangements? If so, what changes are needed? Are you personally willing to accept such changes?"

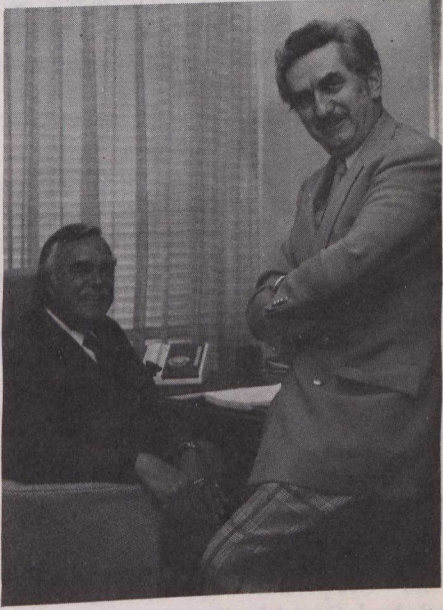
(2) "In your opinion, which, if any, of the major economic, social and political problems facing Canada today result primarily from an inappropriate distribution of powers and an unsuitable sharing of resources between the Federal Government and provincial governments or among the various regions and provinces? Which of these problems are the result of policies which are insufficiently sensitive to regional needs. What solutions would you propose to rectify these problems? Do you feel that such solutions would be acceptable to other entities which would be affected by them?"

(3) "What positive features do you see in our current political, economic and social arrangements and what methods would you propose for strengthening and improving them?"

### The task force's role

The following statement was issued by the co-chairmen of the task force on September 1:

"The task force is committed to a Canadian federation, a system with the authority of the state shared by two orders of government, each sovereign and at the same time committed to co-operative association with the other, under a constitution. We believe that such a system is the one best suited to the diversity of our founding peoples and to the



John Robarts (left) and Jean-Luc Pepin, co-chairmen of the Task Force on Canadian Unity.

John Evans

Oct. 2/77

nature of our geographic, social and economic environments.

"The task force also recognizes that Canada and its present federal system are under great stress. The creation of the task force is itself a testimony to this. All regions of Canada are reflecting and expressing this malaise. The most pressing questions are being raised in Quebec and the task force intends to give these high priority. Nevertheless, the concerns of other regions are vitally important and will be given our full attention.

"The task force has been given a clear mandate by the Government to develop its own initiatives and ideas and we intend to do this. It is our intention to assemble concepts and policies which could constitute some of the elements of a third option for Canada. The members of the task force do not feel bound by existing legislation and practices nor are they committed to views of any federal or provincial political party. Our mandate required us to advise the Government and we will do so but we will also make our views public, not seeking conflict with any groups, but aware that our autonomy is essential to our credibility and usefulness.

"We intend to function in a spirit of receptiveness and conciliation. We will work closely with the Canadian people. Throughout the period of our mandate, we intend to carry on a conversation with citizens of all regions and with experts in all disciplines, listening, attempting to understand, discussing both old and new concepts. We will be mindful of and will solicit the views of the federal and all provincial governments.

"In accordance with our mandate, we intend to listen to and provide a forum for those associations of all kinds which are specifically searching for the terms of a better Canada. Such efforts represent a spontaneous and generous spirit which must be encouraged and which can provide Canadians with a very useful instrument for the consideration of our problems.

"The task force will learn a great deal from these organizations and will give particular encouragement to those who wish to think about changes which can improve our political, social and economic systems. We will encourage such policy formation in every way and particularly through the provision of speakers and publications which might stimulate discussion.

The mandate of the Task Force on Canadian Unity has three basic elements:

- (a) "To support, encourage and publicize the efforts of the general public and particularly those of (voluntary) organizations, with regard to Canadian unity.
- (b) "To contribute the initiatives and views of the commissioners concerning Canadian unity.
- (c) "To advise the Government (of Canada) on unity issues."

#### Activities of the task force

"Within the period of our mandate and within the over-all framework of a dialogue with the Canadian people, we intend to do four things. To some extent, these activities will be taking place concurrently.

"First, we intend to listen and attempt to understand the real concerns of all Canadians on the functioning of our social, economic and political institutions as they relate to our mandate.

"Secondly, while we recognize the existence of tensions and the need for reforms, we intend to point out the positive aspects of the Canadian experience, both material and emotional, its flexibility and its potential for improvement under the pressure of enlightened public awareness.

"Thirdly, we hope to be able to inform the Canadian people effectively about the complex issues at stake in creating a more satisfying country. We propose to clarify the options available and the advantages and disadvantages related to them.

"Fourthly, we intend to make recommendations for changes in structures, concepts and attitudes which are required in order to make our Canadian institutions more consistent with the needs of our times.

#### Timetable

"During the early months of the life of the task force, the emphasis will be on listening. We intend to visit centres in all the Canadian provinces to discuss the

issues, face to face, with the public. In this way, we will acquire a greater sensitivity to the current opinions and feelings of Canadians. Concurrently, the staff of the task force will be studying and analyzing the key issues in the unity debate in order to prepare background papers on some major aspects of our current problems and the range of possible improvements which might be made.

"During the second phase of the task force's work the emphasis will be on study and consultation with specialists. The task force and its staff will discuss the issues in an attempt to assemble concepts and policies which will provide Canadians with some new directions. Concurrently with this period of study, the task force intends to publish information papers on important issues for the Canadian people, outlining the options which are available.

"During the third and final period of the task force's life, the members plan to integrate their views and propose objectives and policies to the Government of Canada and to the Canadian people for their consideration.

"The task force expects, in the months ahead, to make a contribution to a better understanding and resolution of our current problems. Where these problems are more perceived than real, we intend to promote understanding. Where they are more real than perceived, we intend to promote change.

"And we earnestly ask for the understanding and support of our fellow citizens."

#### International science co-operation

In a statement to the first conference of ministers responsible for science policy of member countries of the Agency for Technical and Cultural Co-operation held in Luxembourg on September 23, Jeanne Sauvé, head of the Canadian delegation and vice-president of the conference, pledged Canada's "unqualified support" for the proposal for intensified scientific co-operation between member countries

of the Agency.

Mrs. Sauvé proposed several ideas to define a specific role for the Agency in this area as well as suggesting the Agency's share for scientific co-operation be increased within the general budget.

The Minister also emphasized the determining role of science and technology in the economic, social and cultural development of member countries of the Agency, particularly those of the developing countries.

## Public Service official languages policies revised

*As a result of the review of the official languages policy in the federal Public Service, undertaken a year ago by the Government, a number of revisions were announced by Robert Andras, President of the Treasury Board, on September 30.*

*The three basic principles will continue to guide the policy – service to the public in both English and French; equal opportunities for employees to work in the official language of their choice; and equal participation of both English- and French-speaking communities in the Public Service. However, the Government feels that its target of establishing an “irreversible” bilingual Public Service by 1978 will be achieved.*

*Highlights of the revisions to the official languages policies follow:*

- The progress in achieving a Public Service working in both official languages is such that it is possible to terminate the system of conditional appointments of unilinguals to bilingual positions and the general provision of basic language training at the end of 1983.
- However, the Government intends to retain programs for the provision of specialized language training after 1983, as part of its professional training programs.
- A general bilingualism bonus plan will be introduced on October 15, 1977, and retroactive to November 1, 1976, under which an annual, flat-rate amount of \$800 will be provided to the large majority of qualified employees in bilingual positions. The bilingualism bonus plan will terminate on December 31, 1983.
- The establishment of bilingual districts will cease.
- Opportunities for *francophones* to work in French will be expanded by placing greater emphasis on the use of unilingual French positions.
- Units working primarily in French will be retained but the decision as to where

such units will be organized will rest with individual departments or agencies.

- Greater emphasis will be placed on the use of unilingual positions. Bilingual positions will be identified only where required for the effective delivery of services.
- Managers will determine the language proficiency required in bilingual positions for each skill (reading, writing, listening and speaking).
- Subject to the concurrence of the Public Service Commission, deputy ministers will be able to decide under certain circumstances that a bilingual position will be staffed on an “imperative” basis, with an appointee who fully meets the language requirements at the time of appointment.
- A willing unilingual appointee to a “non-imperative” bilingual position will no longer be required to commence language training immediately and will be allowed two years from the effective date of the appointment to the position to attain the required language proficiency.
- Future language-training programs will permit greater flexibility in the timing and duration of courses.
- Unilingual employees having long service in the Public Service and unilingual employees age 55 or over on October 31, 1977, will be eligible to compete for and be appointed to any “non-imperative” bilingual position, while remaining unilingual.
- Departments and agencies will submit an annual official languages plan to Treasury Board for review and approval, which will be available to the public from the time of submission to the Treasury Board.
- Crown corporations and agencies will also be subject to the Government’s official languages policies.



Cavouk

Treasury Board President Robert Andras.

## Chinese Foreign Minister visits

The visit to Canada of Foreign Minister Huang Hua of the People’s Republic of China from October 4-6, was his first trip abroad since his appointment as Foreign Minister last year. It is the first time a Chinese Minister has come to Canada in five years.

Mr. Huang Hua’s stay in Ottawa provided an excellent opportunity to discuss world problems and further develop Canada’s good bilateral relations with the People’s Republic of China. Two sessions of formal talks between the Foreign Minister and the Secretary of State for External Affairs were on the agenda as well as a meeting with the Prime Minister.

Mr. Huang Hua was China’s first Ambassador to Canada in 1971.

## New fighter aircraft sought

Formal requests for proposal have recently been issued to manufacturers whose new fighter aircraft are being considered as replacements for Canada’s existing *CF 104*, *CF 101* and *CF 5’s*.

Manufacturers in several countries have received invitations to submit proposals. The *Tornado* aircraft of Panavia MRCA, a consortium of the aerospace industries in Britain, Germany and Italy, and France’s *Mirage*, a product of Dassault Brequet, have been suggested as possible replacements. Four companies in the United States have received invitations: Grumman for the *F14*, McDonnell-Douglas for the *F15* and *F18A*, General Dynamics for the *F16* and Northrop for the *F18L*.

The Government is compiling a range of options which will permit the selection of a multi-role combat aircraft capable of performing the widely divergent roles and commitments of the Canadian Armed Forces.

The closing date for the receipt of proposals is scheduled for early in 1978, enabling options and recommendations to be presented for Cabinet consideration by mid-1978. In addition to the ability of the aircraft to fulfil requirements of the Canadian Armed Forces, other factors considered in the evaluation will be total cost, including cost of ownership, and the industrial, technological and economic benefits proposed by the companies.

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## U.S.S.R. buys more Canadian wheat

The Canadian Wheat Board has announced the sale of 1.8 million tonnes of wheat, valued at approximately \$242.6 million, to the Soviet Union. The shipments will comprise 1.5 million tonnes of No. 1 and No. 2 Canada western red spring wheat and 300,000 tonnes of Canada western amber durum wheat.

Added to an earlier sale announced mid-summer, the latest shipments bring to 3.5 million tonnes the total Canadian wheat sales to the U.S.S.R.

Canadian wheat and flour exports during 1976-77 are estimated at 13.5 million tonnes, the largest export volume during the past four years, and another high volume of exports seems assured for 1977-78.

A decrease in planted area and lower yields because of poor weather contributed to a reduced wheat production in Canada in 1977. Production is forecast at 17.5 million tonnes compared with 23.6 million last year.

Elsewhere, increases in wheat production are expected in the U.S.S.R., the European Economic Community and Australia, while decreases are forecast for Canada, the United States, China and India. World trade in 1977-78 is expected to increase by about 10 per cent to 67.5 million



*Beneath a typical Canadian prairie sky, grain elevators stand ready to move to market the yields of the wheat fields that surround them.*

tonnes, mainly owing to expected record imports of more than 9.5 million tonnes by China. Increased feeding of wheat to livestock is expected in the United States and the U.S.S.R., contributing to an increase in use to 395 million tonnes. A

small decline in world stocks is possible by the end of 1977-78. The smaller crop in 1977 and the prospects of a still smaller crop in 1978, should result in wheat prices staying at or above current levels.

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## IDRC President to World Bank

Dr. W.D. Hopper has resigned as President of the International Development Research Centre to accept an appointment as Vice-President for South Asia with the World Bank in Washington. He will assume his new duties on January 1, 1978.

Dr. Hopper, an internationally-recognized agricultural economist, had been President of the IDRC since the Centre was established in 1970, under the chairmanship of the late Lester Pearson.

Following Dr. Hopper's resignation, the IDRC's Board of Governors established a special committee comprising: Chairman Louis Rasminsky, Vice-Chairman Dr. Roger Blais, and Maurice Strong — all of Canada — Sir John Crawford (Australia), and Rex Nettleford (Jamaica), to recommend his successor.

Under the IDRC Act, the President is appointed for a five-year term by the Governor in Council on the recommendation of the Board.



*Dr. W.D. Hopper*

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## Drilling season deadlines

Cabinet has rejected an application from Dome Petroleum to extend the drilling season at each of its three sites in the Beaufort Sea beyond the September 25 cut-off date established by Cabinet last spring. Approval was given to continue drilling at only one of these sites for a limited period beyond this date.

An evaluation of the current situation at the Nektoralik site indicated that the company had already penetrated an extensive gas zone and would not be able to reach the depth for safe discontinuation of drilling, and setting of steel casing, within the deadline.

The Nektoralik site is being drilled in 200 feet of water, approximately 100 miles northwest of the village of Tuktoyaktuk, N.W.T. Better than average ice and weather conditions in the Beaufort Sea this season previously led Cabinet to allow some flexibility on the termination date for drilling.

## New federal financing idea for social service contributions

Before becoming Minister of State for Federal-Provincial Relations in the recent Cabinet changes, former Health and Welfare Minister Marc Lalonde proposed a major change in the federal financing of social services.

In letters sent on September 15 to provincial welfare ministers and to territorial commissioners, Mr. Lalonde called for a switch to "block financing" from the cost-sharing method now used.

Under cost-sharing arrangements, contributions by the Federal Government are based on a fixed percentage (about 50 per cent) of actual program costs. This system is the present basis of the social service legislation introduced in the House of Commons in June 1977.

Since the introduction of this legislation, Mr. Lalonde said, it had become apparent that a more flexible arrangement was necessary.

Some provinces have proposed more provincial flexibility and autonomy and simpler administrative procedures than is possible under the proposed social service legislation.

"I believe it is important to respond positively to these proposals — especially at this time when new working arrangements are necessary between the federal and provincial governments," the Minister said.

He added that since federal contributions to health services were made through block financing, it had become an increasingly more attractive idea to extend the principle to social services since the two areas were so closely related.

Under the proposal, federal contributions to the provinces for social services would be based on a formula and not on actual expenditures.

If the proposal is accepted by a consensus of the provinces, the Federal Government would seek to implement the new arrangements by April 1, 1978.

For the first year the cost to the Federal Government of block funding is estimated at \$707 million.

The highlights of the block-funding proposal include:

— federal contribution for 1978-79 and onward would be determined by a formula and paid to the provinces independent of their actual expenditures on

social services;

— block financing is being offered for those social services and activities agreed upon in June 1976 at the Federal-Provincial Conference of the Ministers of Welfare, and subsequently included in the proposed Social Services Act;

— the existing cost-sharing arrangements in respect of the income maintenance provisions of the Canada Assistance Plan will be retained in order to continue to provide more funds to provinces with higher unemployment rates and greater assistance expenditures;

— based on current projections of the rate of growth, the national average *per capita* contribution which will be \$22 in 1977-78 would rise to a projected \$70 *per capita* in 1987-88 under the new system.

A levelling factor in the block-funding formula would determine the actual federal contribution, so that after ten years all provinces would be at the national *per capita* average.

## Sweden/Canada nuclear agreement

The Governments of Canada and Sweden recently signed a nuclear co-operation agreement in New York.

The agreement, signed at the Permanent Mission of Canada to the United Nations by Secretary of State for External Affairs Don Jamieson, on behalf of the Government of Canada, and by Minister of Foreign Affairs Karin Söder, on behalf of the Government of Sweden, will permit nuclear co-operation and trade between the two countries. The safeguards commitments in the agreement, including the application of the inspection system of the International Atomic Energy Agency (IAEA), meet international standards and Canadian and Swedish safeguards policy.

Under the terms of the accord, identified nuclear exports, including nuclear technology in physical form, shall only be authorized on the basis of an understanding between the two governments that:

"(1) the items supplied or items produced with these, including subsequent generations, will not be diverted to any non-peaceful or explosive purpose;

"(2) the retransfer of items supplied and items produced with these including subsequent generations of nuclear material only be done with the consent of the parties;

"(3) the enrichment and reprocessing of nuclear material supplied, or nuclear material produced with items supplied, only be done with the consent of the parties;

"(4) these undertakings are verified primarily through the inspection mechanisms of the International Atomic Energy Agency;

"(5) IAEA safeguards and other mechanisms of bilateral verification for aspects of guarantees where the IAEA system is not applicable, be in place for the life of the supplied item or for items subject to these guarantees, produced from these items; and

"(6) adequate guidelines providing for the physical security of materials be in place to protect the supplied items from threat of diversion."

## Passport to retirement



Miss Cécile Leclerc, an employee of the Passport Office of the Department of External Affairs, recently retired. On behalf of Prime Minister Trudeau, Under-Secretary of State for External Affairs, Allan Gotlieb presents her with a certificate acknowledging 35 years of exceptional dedication to the Public Service. Miss Leclerc, known to "thousands" of passport applicants, has issued passports to, among other well-known citizens, Governors-General Massey, Vanier, Michener, Léger, and Prime Ministers King, St. Laurent, Diefenbaker, Pearson and Trudeau.

## Bird/aircraft risk reduced

Following is an edited version of an article prepared by Sean McCutcheon for Science Dimension, Vol. 9, No. 3, 1977, a publication of the National Research Council of Canada.

Humans began flying less than a century ago, and almost immediately began colliding with birds, whose primitive ancestors took to the air millions of years ago. Consider the fate of aviation pioneer Cal Rogers, the first man to fly across North America. In 1912, five months after his transcontinental trip, he established another first. A seagull hit his aircraft, jammed his controls and caused him to crash. He became the first person to die as the result of a bird strike.

As aircraft grew in numbers and became faster and larger, the danger posed by bird collisions increased. A bird swept into the intake of a jet can bend, crack or break off fan blades which in turn tear up other engine parts in a destructive chain reaction.

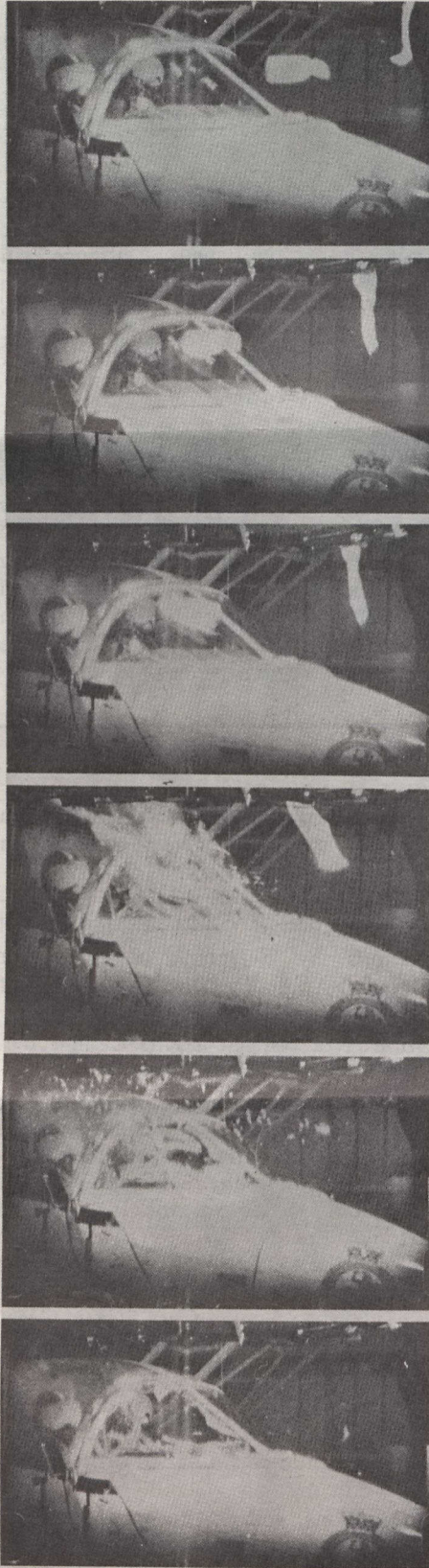
In 1960, a modern aircraft taking off from Boston ran into a flock of starlings, lost three turbine engines and crashed, killing more than 60 people. Two years later, a collision with two swans led to another crash near Washington, D.C., in which 17 people died. Such tragedies focused world attention on the danger of birds.

To generate a mechanism for dealing with the problem in Canada, the National Research Council formed a committee, known formally as the Associate Committee on Bird Hazards to Aircraft, that included representatives from the major airlines, the Royal Canadian Air Force, the Department of Transport, the Canadian Wildlife Service, the aircraft industry and other agencies.

The first solutions sought were engineering ones, such as strengthening aircraft. But the stresses involved in a bird strike can be very large. Though design standards for aircraft now demand great strength, a completely bird-proof plane would need to be as strong as a tank, making it far too heavy to operate economically.

### Some solutions found

The committee surveyed airports across Canada as well as abroad. They found abundant sources of food, water, shelter and space, all of which attract birds, and



*A dead chicken in a white bag, shot from an air-powered gun, shatters the windshield of an aircraft. Such a collision in the air could lead to a fatal crash.*

for each airport they recommended specific changes. "For instance," says Dr. Victor Solman, a biologist with the Canadian Wildlife Service and an original member of the NRC committee, "if you find a garbage dump near an airport — as we often did — you will be sure to find birds feeding there and digesting their dinners on the open spaces of the airfield." Thanks to pressure from the committee, almost all garbage dumps have been moved away from Canadian airports. Other bird-management techniques, suggested by the committee and now regularly used, include cutting down pockets of heavy vegetation, draining ponds, stopping agricultural use of airfields, improving waste disposal and driving away bird flocks with noise makers and fireworks or, at one airport, by reviving the medieval art of falconry.

### Results rewarding

It is hard to quantify the effect of these techniques. One indicator, however, is Air Canada's annual bill for repairs to aircraft damaged in bird strikes; despite a substantial increase in flying hours, it has been halved during the lifetime of the committee. Another is the fact that no one has ever been killed in a scheduled commercial flight in Canada because of a bird strike, yet Canadians fly more than almost any other people.

The bird-strike committee has published voluminously — from reports on a radar system developed at the NRC to warn air-traffic controllers of birds, to a handbook entitled, *Bird Hazards to Aircraft*. The committee has spawned mechanisms in companies and agencies involved in aviation for continuing their work. Though all the problems posed by bird strikes have not been solved, the Committee has accomplished its task. With Dr. Solman in the chair, it disbanded at the end of 1976.

"It is more than 30 years since I had my first experience with a bird strike," says Dr. Solman. "The damage done [when his small aircraft collided with a little blue-winged teal] was readily patched. Today, a hefty bird entering the engine of a 747 taking off can cause several hundred thousand dollars worth of damage and endanger the lives of more than 350 people. But thanks partly to the work of our committee, such a strike is unlikely, and its potential effect minimized. It has been a rewarding experience."

# News of the arts

## Museum exhibits history of glass

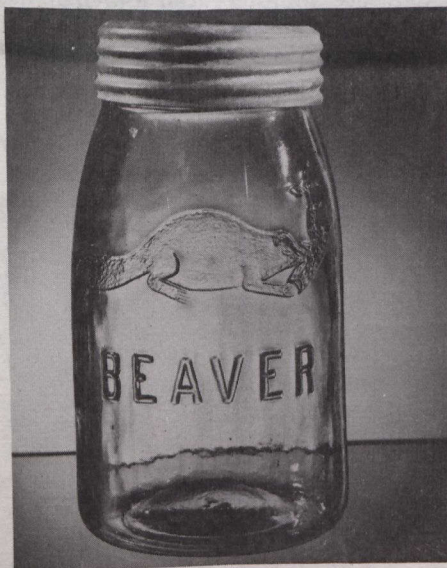
About 1,500 years before the birth of Christ, an unknown craftsman in the area now called Syria made a discovery of profound importance — ordinary sand, mixed and heated with a handful of other common materials, could be shaped into lasting items of beauty.

The basic techniques persist to this day. The Royal Ontario Museum, Toronto, provides a glimpse of this legacy in its *Gather of Glass, An Exhibition of Glass Through the Ages*, which opened on October 7 and closes December 31.

The exhibit comprises more than 500 pieces from all over the world, ranging from the time of the Pharaohs to the near-present, and drawn from the Museum's own extensive collections. The oldest man-made piece on display is a striped Egyptian perfume jar (approximately 1500 B.C.), while the newest is a pale aquamarine horse manufactured in Czechoslovakia in 1974.

The first form of glass to be worked by man was obsidian, a naturally occurring volcanic glass. It was prized by early man, mainly because it could be chipped into sharp weapons and tools and also, because its smoky transparency made it attractive as jewellery.

Much later, about 1500 B.C., the Syrian craftsman discovered the recipe for manufacturing his own glass. He



This aquamarine glass mould-blown preserve jar, called the Beaver, was produced by the Ontario Glass Company, Kingsville, Ontario, circa 1899-1902.

Royal Ontario Museum



Royal Ontario Museum

Wheel-engraved lead glass Swedish bowl, designed by Simon Gate, engraved by E. Aberg, in mid-twentieth century, shows a drinking party in honour of the god Bacchus.

found that when he dipped a metal rod into the molten glass, a portion of it would adhere to the tip of the rod. This portion or mass, known as a "gather", is the basic unit for all glass-work.

About the time of Christ, craftsmen in Imperial Rome discovered that molten glass could be blown like a bubble at the end of a hollow metal tube, and glass-making reached a peak of achievement.

The display of glass techniques includes examples of Islamic enamelled glass, lead "crystal" developed in England about 1686, and nineteenth-century American pressed glass for the masses.

Also in the show are some examples of the types of glass first brought to Canada. It was not until about 1840 that glass

began to be made here. The early Canadian glass industry made window glass and containers for medicine, liquor, snuff and shoe blacking. While much tableware and many commercial containers were produced in Canada, particularly after 1880, some of the most intriguing pieces are those that Canadian glass-makers made after their work-day, when they were free to create items that appealed to their imagination.

When the exhibition closes in December, the Royal Ontario Museum's exhibition hall will be torn down under the Museum's renovation and expansion program. The hall has housed such spectacular displays as *Gold for the Gods* in 1976 and the "Chinese exhibition" in 1974.

## Toronto opera opens with new version of "Joan of Arc"

The Canadian Opera Company will open its 1978 fall season at O'Keefe Centre with the first major North American production of Tchaikovsky's *Joan of Arc (The Maid of Orleans)*. Letfi Mansouri, general director of the company, will stage the production. A new English translation of the opera has been commissioned from American translator Richard Balthazar, through a grant from Opera America.

Mr. Balthazar, who worked with Hurok Concerts as interpreter for the Bolshoi Opera during its visits to New

York and Washington in 1975, is one of the main translators (Slavic languages) with the Berlitz Translation Service in Washington. He was formerly an instructor in Russian language and literature at the University of Michigan.

"Tchaikovsky's melodic vein, brilliant orchestral colour and strong emotional expression are all manifested in this, one of the neglected masterpieces of operatic literature," says Mansouri. "We are enormously excited to be able to present its first major North American production in Toronto."

## Federal fisheries exhibit

Methods for controlling foreign fishing within Canada's new 200-mile zone were demonstrated at the World Fishing Exhibition which opened August 31 in Halifax, Nova Scotia.

Devoted to the theme "The 200-Mile Zone — New Era for Canada's Fisheries", Canada's exhibit on the Halifax waterfront included videotape, text and photographic displays on fisheries management, ocean research, marine pollution-control and Canada's role in developing a new law of the sea.

Throughout the eight-day exhibition the Halifax staff of the Fisheries and Marine Service International Surveillance Branch carried out its normal routine of tracking movements and fishing operations of vessels of the 18 countries licensed to fish in Canada's 200-mile northwest Atlantic zone.

A computerized system, when linked to terminals in St. John's, Vancouver and Ottawa, plays a vital role in monitoring northwest Atlantic fisheries in the developing new era of the 200-mile limit. For example, an inspection officer sighting a vessel of which he has only the hull colour and the side number can obtain through the computer full information on its identification — its movements, what species it is fishing, its catch and effort quotas, date of entry into Canadian waters, expected data of departure and other pertinent details.

Other features of the exhibit included models of two Coast Guard vessels and an oceanographic research device, known as Batfish. The exhibit was sponsored by Fisheries and Environment Canada in conjunction with the Department of External Affairs and Transport Canada.

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*Ähnliche Ausgaben dieses Informationsblatts erscheinen auch in deutscher Sprache unter dem Titel Profil Kanada.*

## Potential energy crop

A native North American plant is waiting in obscurity for the day a worsening energy supply could bring it into commercial prominence. For several years, researchers at Agriculture Canada's Morden, Manitoba Research Station have been studying the Jerusalem artichoke, preparing for the time when commercial production is feasible.

The Jerusalem artichoke, which bears no resemblance or relation to the thistle-like globe artichoke plant, is a member of the sunflower family. Unlike the cultivated sunflower, it produces numerous underground tubers (once used as food by Indians and early settlers), that can be harvested in autumn or left in the ground to be dug in the spring.

Because of the high carbohydrate content, the tubers' greatest potential may be as a source of ethanol for a gasoline substitute. Scientists in many countries are studying plants, such as cassava and poplar trees, for potential sources of ethanol. Canadian researchers, Drs. B.B.

Chubey and D.G. Dorrell believe Jerusalem artichoke, with few natural enemies, its high carbohydrate content, high yields and ease of cultivation, has great potential.

Jerusalem artichoke has a high fructose content — a sugar sweeter than the common, crystalline table sugar. Fructose is difficult to crystalize, but it could be marketed in a liquid state to compete with high fructose corn syrups.

"Canada now imports most of the high fructose corn syrups used by food processors," Dr. Dorrell says. "If Jerusalem artichoke were used to make high fructose syrups we wouldn't have to rely on imported sugars and wouldn't have to convert corn, a valuable crop in its unrefined state."

The plant has been a heavy yielder in test plots — about 20 tons to the acre. On a commercial basis, it is expected to at least match the yield of sugar beets — 12 to 16 tons to the acre — and its dry pulp would be more valuable for livestock feed, having a 25 percent protein content compared with beet pulp's 10 per cent.

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## News briefs

**While in Canada to attend the general meeting** of the International Civil Aviation Organization, held in Montreal, the Minister of Transport, Posts and Telecommunications of the Central African Empire, Jean-Pierre Bouba, visited Ottawa on September 21, 1977. He met with Jean-Pierre Goyer, Minister of Supply and Services and adviser to the Secretary of State for External Affairs in *francophone* matters, Jean-Jacques Blais, Postmaster General, and Michel Dupuy, President of the Canadian International Development Agency.

**The Federal Government plans to issue Canada Savings Bonds** this autumn at an average yield of 8.06 per cent if held to maturity. The interest rate in the first year will be 7 per cent and the rate for each subsequent year until 1986 will be 8.25 per cent. Sales are limited to \$15,000 for each Canadian resident or estate of deceased persons. Corporations are not permitted to buy the bonds.

**Food prices have dropped** five-tenths of one per cent during four weeks, continuing a decline that began in late July

and early August, the Anti-Inflation Board reports. But food prices are 9.9 percent above those of a year ago, chiefly because of large price increases earlier this year.

**Finance Minister Jean Chrétien** has been appointed governor for Canada of the International Monetary Fund and World Bank, a position traditionally held by the federal Finance Minister. Mr. Chrétien visited Washington recently for the annual meetings of the two bodies.

**Canadian National Railways** wants to increase the number of bilingual positions among employees who deal with the public from an average of 30 per cent to about 50 per cent across Canada.

**Statistics Canada's seasonally-adjusted trade figures** for August reveal a surplus of \$326 million, compared with a \$270-million surplus in July. It was the ninth consecutive monthly trade surplus.

**Laval University**, the oldest university in Canada, is celebrating its one-hundred-and twenty-fifth year. On December 8, 1852, Queen Victoria presented the school, formerly a seminary, with a royal charter, acknowledging its status as a university.