

Canada Weekly

Ottawa
Canada

Volume 13, No. 11
March 13, 1985

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First ministers' conference on Canada's economy

Prime Minister Brian Mulroney and Canada's ten provincial premiers met in Regina, Saskatchewan, February 14-15 for a first ministers' economic conference, Mr. Mulroney's first such meeting since he became prime minister. Items included on the agenda were: attracting new investment for job-creation; training and retraining of workers; regional economic development; and improved international trade.

At the close of the talks, Mr. Mulroney was optimistic about the climate of co-operation between the federal and provincial governments. He said the country's first ministers had succeeded in setting an economic agenda that would assure investors of a period of stability and growth.

After two days of discussions about jobs, debt, regional development, trade, training and investment, the first ministers projected "an appearance of stability in the major economic direction that will be taken by both levels of government", he added.

Mr. Mulroney also announced that the

11 leaders had agreed to meet at least once a year for the next five years, beginning this autumn.

Jobs program

On the first day Mr. Mulroney announced the allocation of \$695 million to training and employment programs for the fiscal year beginning April 1.

The funds for these programs will be in addition to the \$205 million which the government allocated for Challenge '85, the package for summer employment programs, bringing the total allocation for training and employment to \$900 million.

Details of the programs are to be worked out with the provinces and the private sector over the next few months and the programs may be applied quite differently from province to province. Employment Minister Flora MacDonald estimated that about 400 000 people would benefit from the new programs.

The major elements of the new strategy are: \$125 million to help women and young



Peter Bregg

Canada's provincial premiers with Prime Minister Brian Mulroney are: (From left, back row) James M. Lee, Prince Edward Island; Howard Pawley, Manitoba; John Buchanan, Nova Scotia; Richard Hatfield, New Brunswick; William Bennett, British Columbia; Grant Devine, Saskatchewan; (From left, front row) Peter Lougheed, Alberta; Frank Miller, Ontario; Mr. Mulroney; René Lévesque, Quebec; Brian Peckford, Newfoundland.



External Affairs
Canada

Affaires extérieures
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people enter the labour market; \$350 million to create jobs for the long-term unemployed with much of this money to be spent on joint programs with the provinces; \$80 million to help workers whose jobs are threatened by technological change to learn new skills; \$40 million for declining communities; and \$100 million for pilot studies and experimental programs.

Miss MacDonald said the programs represented an attempt to combine training with job creation, so that people would learn useful skills that they could use to find permanent employment.

Trade with the US

Another major concern discussed by the ministers was freer trade. At the close of the meeting, Mr. Mulroney said the message he took from the premiers was one of encouragement to press on for freer trade, but with caution, in his March 17 meeting with US President Ronald Reagan.

"I construe the discussion as an indication of the provinces and the population wanting to take the process ahead, as I will with President Reagan on the seventeenth, but with prudence. We're going to examine this very carefully," he said.

Mr. Mulroney announced that the 11 premiers had agreed to launch an export promotion drive.

He said that Canada's share of world exports declined to 4 per cent in 1983 from 4.5 per cent in 1970, costing the country thousands of potential jobs. He added that, if Canada could regain its half-percentage-point share, 160 000 new jobs would be created.

The new export promotion program will include: a computerized central information exchange covering federal and provincial trade fairs and missions abroad; clear directions to Canadian trade missions abroad to reflect provincial, as well as federal, trade goals; and seminars in 18 Canadian cities that will give companies a chance to talk to Canadian trade commissioners about sales prospects.

Canadian satellite launched in Brazil

Brasilsat, Brazil's first domestic communications satellite that was built by Spar Aerospace Limited of Canada, was recently launched. It is the first of two satellites built by Spar for Embratel, Brazil's national and international telecommunications carrier.

Congratulating Brazil on the launch, Communications Minister Marcel Masse said that "Brasilsat is also a milestone for the Canadian space industry as the first international sale of a communications satellite system by a Canadian firm".

Challenge '85

Employment Minister Flora MacDonald announced a \$205-million program on February 6 to create 95 000 jobs for students this summer. The scheme, Challenge '85, which will be aimed at creating jobs that relate to students' studies and offer experience to help them find a job after graduation, relies heavily on the private sector to hire students in return for government subsidies.

Main components of the program are:

- Summer Employment/Experience Development (SEED), with \$163 million in wage subsidies for business, municipalities and community groups to create career-related jobs;
- Student Entrepreneurs, with up to \$30 million in loans and loan guarantees available for students to start summer businesses. The net cost of the program is expected to be \$7.5 million, which will come from SEED funds;
- Federal Career Related Jobs for Students, with federal departments and agencies receiving \$10 million to create jobs for students from within their existing budgets, the National Defence Department receiving \$13 million for its cadet and reserve training programs, and the RCMP receiving \$1.2 million to hire students as special peace officers under its Supernumerary Special Constable Program;
- Business Drive for Jobs, where the government will spend \$1.3 million to encourage leading corporations and business organizations to promote the hiring of students; and
- Work Orientation Workshops to be established by business and community organizations for \$.5 million. Canada Employment Centres for Students will receive \$13.6 million and the Native Internship Program will receive \$2.4 million.

Spar Aerospace Limited of Toronto and Montreal is the prime contractor for the \$160-million space project which includes the two domestic communications satellites and related ground equipment.

The Brasilsat spacecraft was assembled, integrated and tested by Spar in the Department of Communications' David Florida Laboratory, Canada's facility for environmental testing of complete spacecraft, ground and space subsystems and components. The second satellite, currently undergoing tests

at the David Florida Laboratory near Ottawa, is scheduled for launch in August 1985.

The two spacecraft, similar to Telesat Canada's *Anik D*, have an expected ten-year lifespan, operate in the 6/4 gigahertz (GHz) frequency band and will distribute voice, data and television services throughout Brazil. Each spacecraft can carry up to 16 000 two-way voice channels or 24 TV channels.

Other Canadian firms associated with Spar Aerospace in the project are: SED Systems of Saskatoon for supply of ground control equipment; and ComDev Limited of Cambridge, Ontario and Fleet Manufacturing of Fort Erie, Ontario, major sub-contractors for the supply of input/output filters, spacecraft structures and other items. Telesat Canada has provided training courses and consulting and management services.

SED Systems Limited's ground control facilities include a satellite control centre; a telemetry, tracking and control earth station; and a communications operation and control centre located in Guaratiba, near Rio de Janeiro. The Guaratiba installation, officially inaugurated on November 28, 1984, has already participated in the US NASA/Hughes shuttle mission to recover the Palapa and Westar satellites.

Extension for illegal migrants

Employment and Immigration Minister Flora MacDonald recently announced that the Long-term Illegal Migrants Review will be extended until July 3, 1985.

"This extension will provide extra time for these people to regularize their situation in Canada. I can assure them that they will continue to receive fair and sympathetic consideration," said Miss MacDonald.

The criteria that is being used in the case-by-case evaluation include: length of time the person has remained illegally in Canada; absence of convictions for serious offences; nature of circumstances that led to the decision to become illegal and to continue in that status; present and future capacity for successful establishment and integration into Canadian society; presence of immediate, extended and *de facto* family ties in Canada; and the situation in the applicant's home country.

Miss MacDonald noted that many of the people who have come forward under this program to date have lived in Canada for more than ten years. Some illegal migrants are married to Canadians and have children born in Canada, and others have made significant contributions to the economic and social life of the country. Of the 3 000 cases reviewed, approximately 90 per cent have received a favourable decision.

Global access through Sharp software and services

I.P. Sharp Associates, the Toronto-based international software company that offers a comprehensive range of computer products and services, has experienced rapid growth since it was formed in 1964 by Ian Sharp and seven colleagues.

Celebrating its twentieth anniversary in 1984, the company had expanded to support a diverse international user base with offices located in 55 cities in 22 countries. With exports accounting for more than 60 per cent of the company's business I.P. Sharp Associates has wholly owned subsidiaries in Australia, Austria, Belgium, Denmark, France, the Federal Republic of Germany, Hong Kong, Italy, The Netherlands, Norway, Singapore, Sweden, Switzerland, the United States, and in Britain which has offices in England, Ireland and Spain. The company also has representative agencies in Finland, Italy, Mexico, Korea and Japan.

Advanced timesharing system

Company officials attribute the developments of SHARP APL, a high-performance time sharing system, and IPSANET, the company's own packet-switching network, as two of the main factors for the firm's rapid growth.

Established in 1969, the SHARP APL is based on a computer facility which now supports the largest APL time-sharing operation in the world. SHARP APL, the company's major software product, is a concise and flexible programming language with powerful built-in functions and debugging aids.

Local access to the mainframe computers

of the I.P. Sharp time-sharing or distributed systems is available via IPSANET, I.P. Sharp's own communications network, from Canada, United States, Europe, Australia, Hong Kong and Singapore. In 1976, the company introduced its own internally developed packet-switching network with 47 cities on the network. At present, the network contains some 180 communications computers, called nodes, that are linked together providing a continuous network that includes most major cities.

The network also interconnects directly with many major public data networks including Datapac, Datex-P, PSS, Telenet, Telepac, Transpac and Tymnet. Through the local access cities of these networks, together with their interconnections to other public data networks throughout the world, access is provided by a local phone call in more than 600 places in 46 countries. The interconnection with the Telex network provides a means of access from any other location not served by IPSANET or public data networks.

Software

I.P. Sharp offers an extensive library of application software including packages for data base management, project planning and control, financial planning and consolidation, electronic mail, forecasting, business graphics, time series analysis and reporting, actuarial applications, econometric analysis, and survey analysis. These packages are flexible and designed to work together. In addition APL

programmer tools to assist in model building, to build graphics applications, and to maintain and document systems are available and customized software can be developed.

The company combines the use of its software and its network for managing its day-to-day activities in the use of its electronic mail system, MAILBOX. For over ten years I.P. Sharp Associates has been operating almost totally free of memos, telephones and telex, as MAILBOX is used to co-ordinate daily operations and nearly all management interaction.

Specialized systems

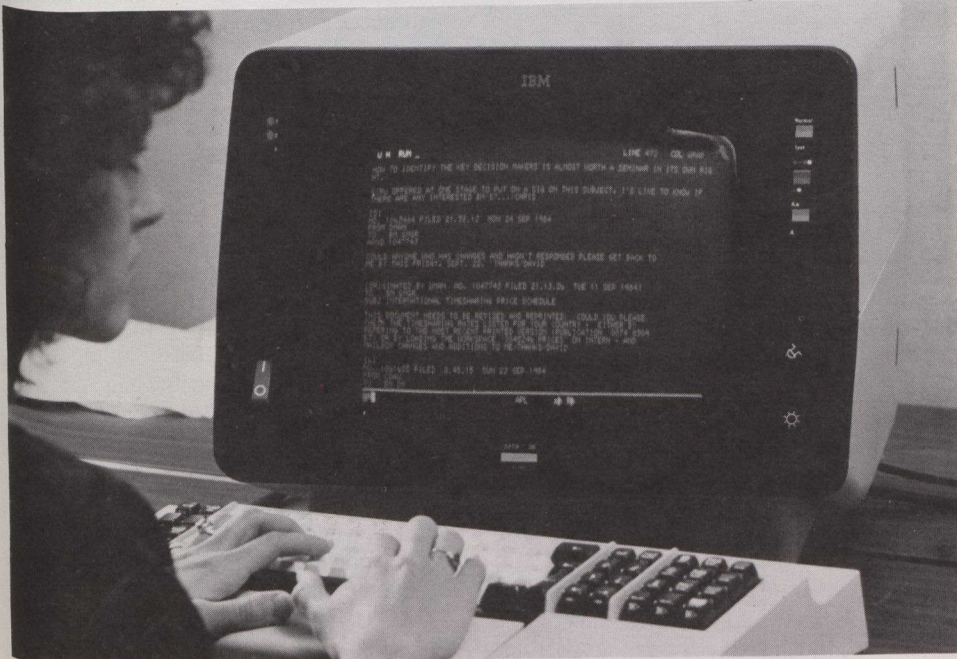
The Special Systems Division of the company has been involved in implementing on-site computer systems for a variety of applications including defence, air traffic control, nuclear reactor control, police information, stock exchange and brokerage, microfilm retrieval, and data communications. The company has specialized in developing real-time and on-line systems for manufacturing, including facilities monitoring, process control, conveyor control, computer aided manufacturing, production and inventory planning and control, and business information systems.

Research and development projects for both the Canadian Department of National Defence and the US Department of Defense, have been undertaken in radar signal processing, secure language processors and the security of operating systems. More recently, the group has begun production of software packages available under licence, for process management of semiconductors, and for police dispatch and information systems.

Continued expansion

Combining both network services and software has allowed the company to develop integrated computer technologies for mainframes and personal computers on a world-wide basis. This integrated approach or *Global Information Centre*, led to the development of systems like the Electronic Markets and Information System (EMIS) in 1983 to provide a worldwide oil and petrochemical trading and information system.

During the past year, I.P. Sharp has expanded further in the international banking community by developing a comprehensive range of products including the Global Limits Control System which permits multinational banks to monitor and control their exposure in international money markets. The company has also recently become a supplier of computing services to the International Institute of Finance and will provide member banks with a country reporting system and private data base.



Employee at I.P. Sharp uses the company's own electronic messaging system, MAILBOX, to communicate with colleagues throughout the world.

Discussion paper on export markets

Minister for International Trade James Kelleher has released a new federal government discussion paper on trade, *How to Secure and Enhance Canadian Access to Export Markets*.

This consultative document was prepared because of the importance of trade in the Canadian economy and the need to assess the most effective means to promote it. Exports now account for almost one-third of Canada's gross domestic product and more than three million jobs. Every \$1 billion of additional exports means 16 000 jobs in Canada.

For growth in economy

The discussion paper, which is one of the consultation initiatives being undertaken by the government to promote economic growth, addresses the issue of access to export markets. It is intended to provide a focus for consultations with the private sector and the provinces and is meant to elicit views on the principal market access problems facing Canadian exporters, and on matters relating to access to the Canadian market.

The document is divided into three sections. Part I discusses the importance of trade to Canada's economic growth and the international trade environment in terms of market opportunities and challenges facing Canadian exporters. Part II considers the implications of a new round of multilateral trade negotiations, with a view to establishing Canadian objectives and priorities for such negotiations. And, Part III addresses possible bilateral approaches with the US, reflecting the importance of that market and the associated vulnerability of Canadian exports to protectionist threats.

In the first section, Mr. Kelleher said that the general international conditions affect the specific interests of Canadian producers in world markets and at home and the government wants "to learn more about what those

interests are and how they are affected: what specific market access problems hinder Canadian producers and how the government can best assist in overcoming them".

Province	Domestic exports (per cent of total)	Exports to the US (per cent of total)	Principal exports to the US (per cent of total)
Newfoundland	12.4	53.4	fish (72)
Prince Edward Island	8.5	61.3	fish (43) vegetables (30)
Nova Scotia	12.6	59.5	fish (34) transportation (29) wood and paper (25)
New Brunswick	24.3	62.5	wood and paper (40) energy (37)
Quebec	17.8	62.7	wood and paper (40) energy (37)
Ontario	26.7	90.3	transportation (59)
Manitoba	7.7	82.5	transportation (16) energy (14) wood and paper (11)
Saskatchewan	11.5	95.0	energy (57) chemicals (26)
Alberta	14.4	87.8	energy (81)
British Columbia	26.7	36.1	wood and paper (58) energy (15)

Source: Statistics Canada

With respect to multilateral trade negotiations, the paper is designed to obtain input from the provinces and the private sector to prepare for the next round of multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT). Mr. Kelleher stated that Canada remains committed to the GATT but also wishes to examine possible bilateral arrangements with the United States which could complement and reinforce efforts being sought through multilateral trade negotiations.

Largest market

"Canadians need to explore urgently and with the greatest care how best to secure and enhance access to the United States, our single biggest market which represents three-quarters of our exports," said Mr. Kelleher.

The discussion paper sets out four possible options for Canada-US trade relations:

- We could continue as we have in the past;
- Canada and the United States could initiate negotiations toward either sectoral or non-tariff arrangements;
- Canada and the United States could initiate negotiations aimed to achieve a comprehensive bilateral trade arrangement; or
- Canada and the United States could establish a framework agreement.

"The choice for Canada is not between multilateral and bilateral approaches to trade, but how both avenues can be pursued in a mutually reinforcing manner," Mr. Kelleher said. "The objectives of our government are to secure and improve access for Canadian exporters, promote increased competitiveness in our domestic market and ensure a positive climate for investment and access to technology," he added.

Record trade surplus

Statistics Canada reports that Canada exported a record \$20.8 billion more in goods than it imported in 1984. This is up from the 1983 surplus of \$17.7 billion and \$3 billion higher than the record set in 1982. Merchandise exports totalled \$112.5 billion, compared with \$91.7 billion in imports.

Chief contributors to the surplus were forest products, with a positive trade balance of \$14.7 billion, and energy-related products, with a positive balance of \$8.7 billion.

Trade surpluses were also shown by industrial goods and materials (\$4.8 billion), agricultural products (\$5.1 billion), and automotive products (\$3.7 billion).

The US remains Canada's most important trading partner with purchases of \$85.9 billion or 76.3 per cent of Canadian exports and imports of \$66 billion or 72 per cent.

YEAR	Exports		Imports		Balance
	\$ billion	per cent of total	\$ billion	per cent of total	\$ billion
1980	48.2	63.3	48.6	70.2	-0.4
1981	55.5	66.2	54.5	68.6	+1.0
1982	57.7	68.2	47.9	70.5	+9.8
1983	66.3	72.9	54.1	71.6	+12.2
1984 (Jan-Sept.)	63.2	75.6	51.6	71.8	+11.6

Source: Statistics Canada

Lithoprobe provides portrait of lithosphere

The findings of the first phase of Lithoprobe, one of the most ambitious deep-earth studies ever undertaken in Canada, were recently outlined by Minister of State for Mines Robert Layton.

The findings confirm the suspicion that Vancouver Island had originated far from the Canadian landmass and profoundly alter scientific concepts on the origins of the continents. They are considered by scientists as a revolutionary breakthrough in the scientific understanding of the structural evolution of the earth. They are also expected to have important economic implications with the improvement of existing strategies of mineral exploration as scientists increase their understanding of the origin of certain kinds of mineral deposits, and how and where they form. In addition, they are expected to shed new light on the nature and origin of earthquakes and other natural hazards.

In the announcement, Mr. Layton said "Lithoprobe will help refine our model of how the world works".

Initial study

Lithoprobe, sponsored by the Department of Energy, Mines and Resources and the Natural Sciences and Engineering Research Council of Canada, began last year on Vancouver Island as part of the five-year project to obtain a three-dimensional picture of part of the Canadian continental lithosphere, which consists of the earth's crust and part of its upper mantle. The lithosphere

varies in thickness from 70 to 100 kilometres. It is not a uniform mass but more like a jigsaw puzzle, made up of gigantic plates that press upon each other.

Traditional techniques have provided precise data on the composition of the earth to a depth of two kilometres, but Lithoprobe will obtain a picture of the earth's crust to depths of 20 kilometres or more. Surveys at such depths are quite complex and costly. As a result, the locations selected across Canada are expected to provide the most information on the origins of the Canadian landmass.

Because of the mystery shrouding the origins of Vancouver Island and the movement of two enormous crustal plates located off the coast of British Columbia, scientists selected this area of the west coast for the first phase of Lithoprobe. It was conducted near Bamfield on the west coast of Vancouver Island.

Heavy trucks equipped with hydraulic jacks were used to obtain information from the depths of the earth. Each vehicle had a metal plate that could be pressed on the ground. The plates were vibrated by means of a compressed-air system, transmitting shock waves into the ground. These shock waves passed into the depths of the earth and were then picked up by geophones positioned along a line several kilometres long.

A device in each truck and the geophones were connected to a central computer that controlled the sequence of vibrations. Since the speed at which waves are

propagated depends on the density and elasticity of the rock, the data from these seismic surveys was used to obtain a three-dimensional profile of the subsurface.

Further projects

Over the next few years, seismic surveys similar to the ones conducted on Vancouver Island will be carried out at the other designated locations including the Kapuskasing Belt, the Abitibi Belt, the Sudbury Basin, the Rocky Mountains, Newfoundland, the Williston Basin in the prairies and possibly other locations.

In these studies, specialists will also use other techniques, such as seismic refraction studies and geomagnetic and electromagnetic surveys. Drilling is planned for the last phase in order to obtain core samples which will provide very precise information.

The Lithoprobe project is part of a wide-ranging study of the lithosphere being carried out on a world scale. Scientists in the United States, Britain, France, the Union of Soviet Socialist Republics and other countries are currently conducting experiments similar to those being done in the Lithoprobe project.

Software scores in France

PUCE Inc., a small Montreal, Quebec manufacturer of computer software recently received the 1984 Golden Apple prize awarded by Apple France in Paris for the best software of the year.

The program which won the award was Photo, a creative and computerized way to learn the basics of photography.

Puce Inc. is primarily a supplier of educational software. The initials stand for Programmation Utilisée et Conçue pour l'Enseignement (Programs Uniquely Conceived for Education).

The word *puce* in French means flea and also means computer chip, a recent addition to that language.

PUCE was launched two years ago by five former employees of a textbook firm. The company also uses the talents of more than 40 Montreal-area teachers who develop programs as a sideline.

More than a dozen of its own software titles are now offered in Puce's winter 1985 catalogue for Apple, IBM and Commodore equipment.

Company president Jean-François Desautels says the company has been successful internationally and its products are distributed in the United States, France, Belgium, Switzerland, Spain and West Germany.



Heavy vehicle used in Lithoprobe study with metal plate that was pressed on the ground and vibrated to transmit shock waves into the ground.

Ontario moose turned loose in Michigan

The province of Ontario, Canada and the US state of Michigan have exchanged 30 moose from the province for 150 wild turkeys from the state as part of the joint agreement to enable Michigan to re-establish a moose herd in the Upper Peninsula where they were once plentiful.

The exchange, which has been under consideration for ten years, was described by scientists as the largest wildlife exchange between Canada and the United States.

The ten bull moose and 20 cows were selected from Algonquin Provincial Park, northeast of Toronto, where there are an estimated 4 000 moose. All of the cows except one, were pregnant. It is hoped that these moose and their descendants will breed up to 1 000 moose by the year 2000 in the Upper Peninsula area.

Although moose are native to the Upper Peninsula, they nearly vanished about the turn of the century because of uncontrolled hunting and an expanding deer herd that carried a brainworm lethal to moose. There are few deer in the area where the moose are being freed.

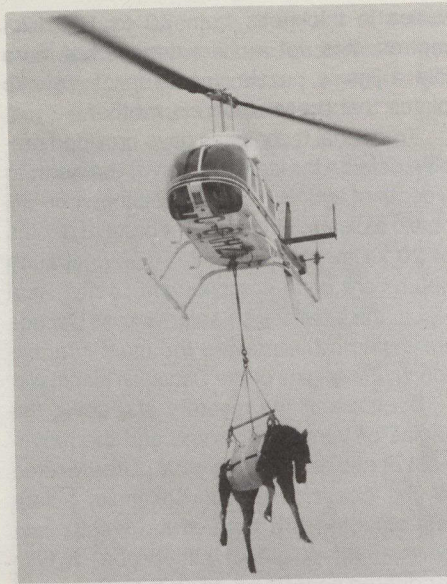
Flying moose

Financed by the Michigan government, a team of about 20, including pilots, veterinarians, biologists, technicians and truck drivers worked around the clock during the ten-day operation in Algonquin Park to capture the moose.

Every morning, Michigan's wildlife veterinarian, Steve Schmitt, and a pilot boarded a helicopter with a tranquillizer gun, vials of the powerful narcotic carfentanil, muscle relaxants and antidotes to reverse the effects of the tranquillizer. On a typical flight, they would stay close to a lake where it was easier to shoot a moose and land the helicopter.

After a moose was shot with a four-inch tranquillizer dart in the large muscle of its hip, it would collapse on the ice within seven minutes. The dart wound was then treated and the animal's temperature taken. Foam rubber was put in the ears and ointment rubbed on the eyes to protect them from the cold wind during the flight back to the base. Also a hood was draped over the moose's head in case it revived while in the air.

With the arrival of another helicopter, the moose was wrapped in the sling that carried it to the base at Mew Lake campground. Within minutes, the moose was airborne, dangling in the sling suspended from the helicopter. Travelling at speeds between 112 to 120 kilometres per hour, the team tried to make sure the trip was



A moose dangles in a sling suspended from a helicopter that took it from Opeongo Lake to Mew Lake in Algonquin Park.

no longer than 13 kilometres.

At the base camp the ground crew took the temperature, blood pressure, and blood samples and injected drugs to reverse the tranquillizer in each moose. Veterinarians also tested for tuberculosis and brucellosis, a bacterial disease that causes recurrent fever, as well as pregnancy tests on the cows.

The body measurements and weights were an important part of the program as it was the first time scientists have gathered data on live moose. One of the most surprising findings was that each moose weighed between 800 to 1 200 pounds. This was about 200 pounds more than expected.

Once the tests were complete, each moose was given a final injection and then loaded into a specially-designed crate for an 18-hour truck trip to Michigan.

Oil drilling intensified

The Cold Lake, Alberta oil sands development project undertaken by Esso Resources Canada Limited of Calgary could enter the fifth and sixth stages four years ahead of schedule.

With lower construction costs and a strong export market, Esso, the exploration and production sector of Imperial Oil Limited of Toronto, has applied to the Alberta Energy Resources Conservation Board to have the schedule pushed forward. If approved, Esso spokesman Kasandra Milne said the drilling of additional wells should begin by June.

The project, which began in mid 1983,

was for Esso to develop two phases at a time, each totalling about 19 000 barrels a day, with six phases completed by 1990. The company got permission last June to start the third and fourth phases, pushing the schedule forward three years to 1987.

Mr. Milne said the latest acceleration will allow completion of the fifth and sixth phases by the end of 1986, when the project's total bitumen production will reach about 57 000 barrels a day.

Cartilage repair technique

A surgical technique developed at the University of Saskatchewan in Saskatoon may make it possible to repair torn knee cartilage, a serious injury incurred by 200 000 North Americans every year.

Dr. Feroze Ghadially, a pathologist at the university, first proposed the treatment. He has studied knee-cartilage injuries for about 20 years and during examinations of human cartilage samples with an electron microscope he noticed healing activity in some cells. He theorized that the healing must have occurred when tissue from a membrane that surrounds the knee joint came in contact with the cartilage.

Dr. John Wedge, head of the university's department of orthopedics, developed a procedure for cutting a flap from the membrane to match the tear on the cartilage. The flap, which remains attached to the membrane, is then stiched into the injury. A material that resembles cartilage develops to heal the tear.

Further research

Dr. Wedge has used the procedure to heal torn knee cartilages in sheep. Before the method is used on patients, however, Dr. Ghadially wants to conduct further research to determine whether the healed cartilage will last.

The meniscus, a crescent-shaped cartilage, is frequently torn by athletes who rotate their bodies on one foot without lifting their heel from the ground. It causes the knee to lock, effectively crippling the victim unless the cartilage is removed. Unlike many other body tissues, damaged cartilage does not regenerate to heal itself.

Arthroscopy, a close-circuit television technique that allows surgeons to perform knee surgery through a quarter-inch incision, is now frequently used to remove torn cartilage.

But about 50 per cent of patients who have their knee cartilage removed develop severe arthritis within five to ten years, and another 40 per cent will usually develop milder cases of arthritis.

Paul Latour, The Citizen

Variety of artistic styles reflected in books exhibit

The fourth display in the series *Made in Canada*, which opened at the National Library of Canada in Ottawa on November 30, 1984 and will be on view until March 24, 1985, reflects the various styles and techniques used by the artists. They include lithography, engraving, etching, dry-point, wood

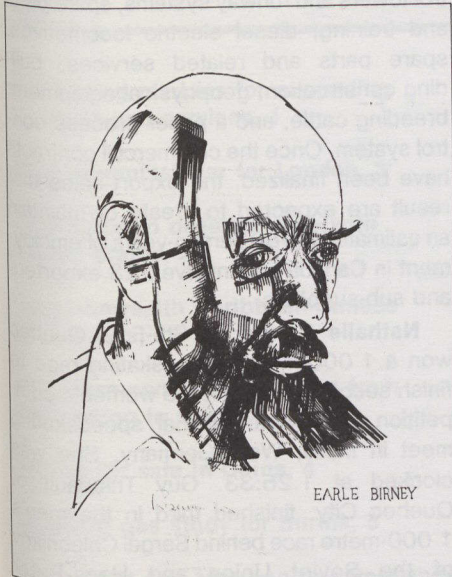
engraving, woodcut, and silkscreen.

Made in Canada IV features 31 works from the Library's collection of *livres d'artistes*, with illustrations by celebrated Canadian artists and printmakers. They vary in presentation from small limited edition books to large-print portfolios.

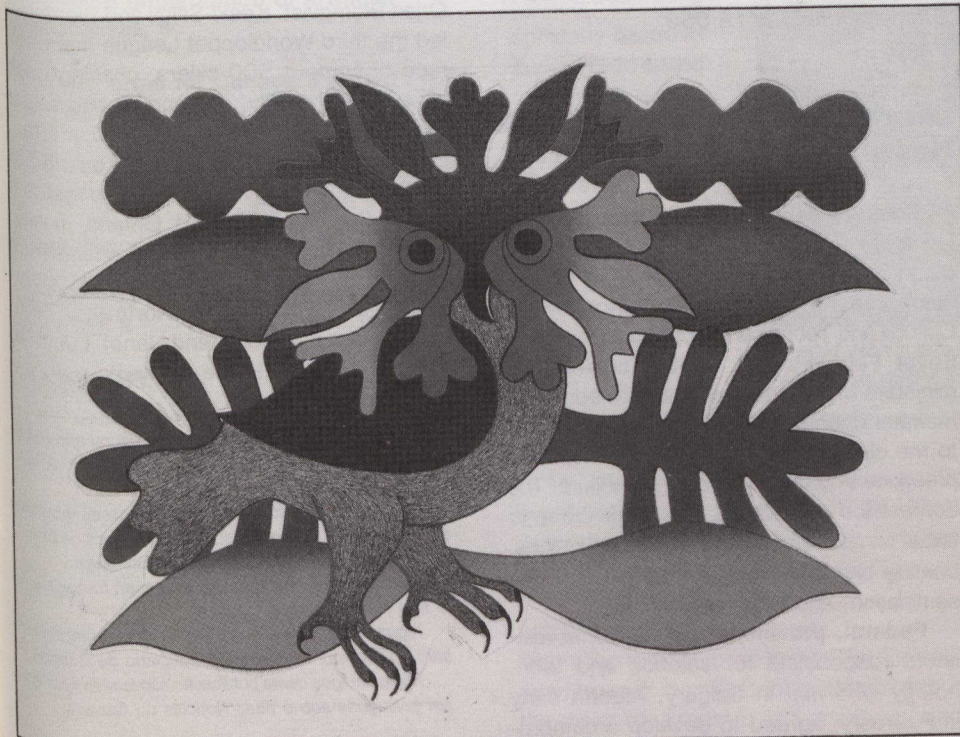
The 22 artists whose works are represented are: Luc Archambault, Patricia Askren, Léon Bellefleur, Louis-Pierre Bougie, Rita Briansky, Monique Charbonneau, Roland Giguère, Ken Danby, Carl Heywood, Kenojuak, Pitseolak, John Snow, Roslyn Swartzman, Janine Leroux-Guillaume, Henri Masson, Mario Merola, Marie-Jeanne Musiol, Indira Nair, Morton Rosengarten, Albert Rousseau, Miyuko Tanobe, and Gérard Tremblay.

Many of the bindings and portfolios are by Quebec binder Pierre Ouvrard, and the text of several books is hand printed by Montreal master printer Pierre Guillaume.

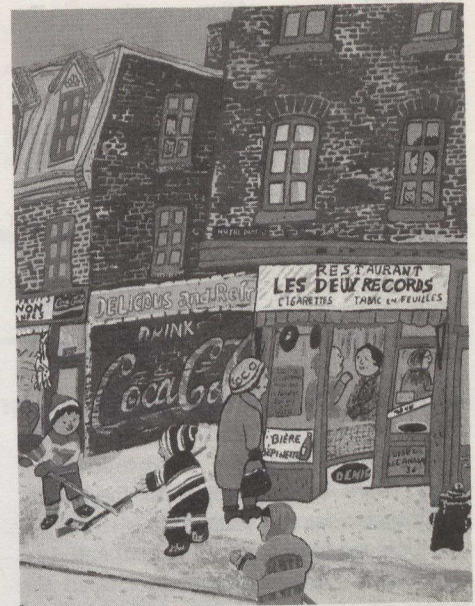
Many of the texts are by well-known writers, including poets Gaston Miron, Fernand Ouellette, and Jacques Brault. Selections from an album containing portraits of several poets, including Alden Nowlan, Earle Birney and Michael Ondaatje and their poems, are shown in the exhibition. Illustrations to two famous Canadian novels *The Tin Flute*, by Gabrielle Roy, and *Les Plouffe*, by Roger Lemelin, are also included.



Montreal artist Morton Rosengarten's portrait of Earle Birney in *The Lines of the Poet* which includes 13 poems selected and introduced by D.G. Jones and 14 portraits of the poets drawn from life.



Lithograph by Kenojuak in *Idea of North/Image du Nord*, a limited edition portfolio designed by Fred Gotthans and published in 100 copies for the Second Century Fund of the Royal Canadian Academy of Arts.



Print by Miyuki Tanobe in *Miyuki Tanobe Rediscovered the Tin Flute for the story by Gabrielle Roy*.

In addition, a collective album, *Idea of North/Image du Nord*, published for the Second Century Fund of the Royal Canadian Academy of Arts, is exhibited.

Oscar film nominations

Four Canadian films have been nominated for the annual Oscar awards, to be presented by the American Academy in Los Angeles, California, in April.

Charade, an animated film made by Jon Minnis, a student at Sheridan College in Oakville, Ontario, and *Paradise*, a National Film Board (NFB) animated film by Ishu Patel, earned nominations in the animated short film category. Jon Minnis, 34, now working for a commercial animation company in Montreal, made the four-minute film about a game of charades being played before an unseen audience at Sheridan College.

Paradise, which is a 15-minute film of a vain blackbird that tries to gain entrance to an emperor's palace, uses cutouts, colour pencil drawings and back-lit backgrounds. Mr. Patel, 42, who came to the NFB from his native India in 1970, received an Oscar nomination for *Bread Game* in 1978.

A 30-minute documentary made by the Canadian UNESCO office in Toronto, *The Children of Soong Ching Ling*, will be competing against four other entries in the documentary short subject category. The film looks at the life of a woman who educated children while travelling through post-revolutionary China.

The Painted Door, a Sinclair Ross short story broadcast as a 30-minute drama on

Global TV, was one of three nominees in the live action short film category. Set on the prairies, the story concerns a neighbour's romantic interlude with a woman left alone during a snowstorm. The film was co-produced by Toronto's Atlantis Films and the NFB.

Canadian Paul LeBlanc, currently working in Toronto, was nominated in the make-up category for his work in the film *Amadeus*.

Canadians sing for Ethiopia

Fifty-two of Canada's top popular recording artists, under the collective name Northern Lights For Africa (NLA), have recorded a song, *Tears Are Not Enough* for the benefit of Ethiopian famine victims.

Rock managers Bruce Allen and Lou Blair, who oversaw the project, said the record could raise as much as \$10 million.

The song, expressly written for the record by the Juno-winning writing team of Bryan Adams and Jim Vallance, was recorded in Toronto. The music was written by the veteran songwriter, session musician and producer David Foster of Vancouver, who was nominated for six Grammy Awards this year.

The best-known stars sing the lines in the verse, and the rest of the performers help out on the chorus. The first nine lines are sung consecutively by Gordon Lightfoot, Burton Cummings, Anne Murray, Joni Mitchell, Dan Hill, Neil Young, Bryan Adams, Mike Reno of Loverboy and Liberty Silver. All nine sing the first chorus, and the next group of singers takes its turn.

One verse is sung in French by Rachel Paiement, a founding member of the group Cano. Another verse recorded by Canadian stars of the National Hockey League in Calgary was added as well as a line by Bruce Cockburn, who could not make the taping because he was on tour in Eastern Europe.

In addition to the Bruce Allen Agency, three other companies who donated their services are CBS Records who will distribute the record; the promotion firm Concert Productions International that will shoot a video; and Global Television which has donated equipment and staff.

The NLA is a non-profit society registered in British Columbia. The eight-member board of trustees promises an "open book" policy regarding the distribution of funds raised by the record, video and sales of T-shirts, posters, calendars and pictures. There will also be a separate advisory board which will be in charge of working with other charitable organizations and the federal government.

Bernie DiMatteo, president of CBS Records said the 7-inch version should retail for \$2.49 (Cdn) and the 12-inch disc for \$5.98.

Painting for parks poster



Parks Canada

Winter Sunset Moose by Canadian wildlife artist Robert Bateman is being used by Parks Canada for a poster to mark the national parks centennial this year. The painting was released in a limited edition reproduction in September 1984. Mr. Bateman has also donated artist's proofs of seven of his limited-edition prints to the Banff Museum of Natural History. The high-quality centennial poster costs \$15 and is available at retail outlets across Canada or from the Canadian Government Publishing Centre, Ottawa, Ontario, K1A 0S9.

News briefs

Communications Minister Marcel Masse led a Canadian delegation to Confecon, a conference organized by l'Agence de coopération culturelle et technique (Agency for Cultural and Technical Co-operation) in Cairo, Egypt February 3-8. At the conference, ministers of communications from some 40 member countries addressed issues related to the global expansion of the francophone presence in communications and culture. The conference established four committees to focus on concerns such as communications, training and research, production and dissemination, and new technologies.

Federal, provincial and territorial ministers responsible for science and technology who met in Calgary, Alberta early in February, agreed to develop a comprehensive national policy on science and technology designed to build on provincial and territorial economic opportunities and

priorities. The national policy is expected to lead to a number of specific initiatives that will most effectively employ finite monetary and human resources.

The Export Development Corporation (EDC) has approved export insurance, guarantees and financing transactions supporting potential export sales of \$79.85 million (US) to eight countries. The transactions involve the sale of kraft paper and pulp; mobile control towers and runway systems, spare parts and training; diesel electric locomotives, spare parts and related services; building construction; geophysical equipment; breeding cattle, and a paper process control system. Once the commercial contracts have been finalized, the export sales that result are expected to create or maintain an estimated 3 180 person-years of employment in Canada and involve 223 exporters and sub-suppliers.

Nathalie Grenier of Ste-Foy, Quebec won a 1 000-metre speedskating race to finish second over-all in the women's competition of an international speedskating meet in Inzell, West Germany. She was clocked at 1.25:33. Guy Thibeault of Quebec City, finished third in the men's 1 000-metre race behind Sergei Chlebnikov of the Soviet Union and Hans-Peter Oberhuber of West Germany.

Reino Keski-Salmi of Sudbury, Ontario won the silver medal in the Gatineau 55 cross-country race, completing the course in 2:54:54, just 8 seconds behind Sweden's Orjan Blomqvist. Keski-Salmi and Blomqvist led the third Worldloppet League marathon race of some 1 500 skiers, chasing each other over the hilly, demanding course for the first 54 kilometres and 800 metres. Exactly even at that point, they pushed to the finish line using the double-pole method. Angela Schmidt of Midland, Ontario, making her marathon debut, won the women's race in 3:40:37 and placing forty-sixth over-all. Sharon Firth of Inuvik, Northwest Territories placed second and Janet Lumb of Ottawa was third in the women's race.

Canada Weekly is published by the Cultural and Public Information Bureau, Department of External Affairs, Ottawa K1A 0G2.

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Cette publication existe également en français sous le titre Hebdo Canada.

Algunos números de esta publicación aparecen también en español bajo el título Noticiero de Canadá.

Alguns artigos desta publicação são também editados em português sob o título Notícias do Canadá.

Canada

ISSN 0384-2312