

Canada Weekly

Ottawa
Canada

Volume 11, No. 9
March 2, 1983

Arctic expedition to explore little-known
undersea mountain range, 1

Canada-United States defence testing
pact, 3

Petro Canada participates in Thai oil and
gas development, 3

Aid to Poland, 4

Canadian minister leads trade mission to
five countries, 4

New compact gas furnace is efficient
and safe, 6

Northern Telecom signs pact with
Japanese firm, 6

Luger wins gold, 6

News of the arts — exhibition, 7

Award for journalistic merit, 8

News briefs, 8

Arctic expedition to explore little-known undersea mountain range

Earth scientists and technicians from Canada and the United States will take part this March in an Arctic expedition which may shed more light on Canada's northern resources.

The Canadian Expedition to Study the Alpha Ridge (CESAR) marks the centennial of the first International Polar Year and follows by four years a similar study of the Lomonosov Ridge which runs through the North Pole. The location of the 1983 expedition will be about 500 kilometres south of the true North Pole.

More than 40 federal government Arctic specialists and scientists from Canadian and US universities will conduct experiments during the CESAR project to sound the deep structure of the Arctic Ocean's crust using a variety of geophysical methods. The expedition will focus on the Alpha Ridge which is a rugged submarine mountain range 350-400 kilometres wide, rising 2.7 kilometres above the adjacent Makarov and Canada basins and extending 1 300 kilometres west from Ellesmere Island to the Mendeleev Ridge.

The Arctic Ocean consists of a deep

basin surrounded by continental shelves varying from very wide along the Soviet coast to very narrow along the Alaskan coast. The basin is divided by the Lomonosov Ridge into two parts: the Eurasia Basin and Amerasia Basin. These two basins are in turn bisected by the Nansen-Gakkel Ridge and the Alpha-Mendeleev Ridge, respectively. Scientists believe the Eurasian Basin is growing along an active spreading centre, the Nansen-Gakkel Ridge which is an extension of the better known Mid-Atlantic Ridge. The Eurasia Basin started to open up after the North Atlantic Ocean opened some 70 million years ago. This process is still continuing. Today, relative motions between Greenland and Norway, and between the Lomonosov Ridge and the Barents Shelf are about 12 millimetres and 6 millimetres a year, respectively.

Arctic research difficult

Because the Arctic Ocean is remote and difficult to reach, it remains the least understood of all the world's oceans. It is also among the most complex oceans from an evolutionary point of view.



The CESAR expedition will take place in an Arctic ridge like this one.



External Affairs
Canada

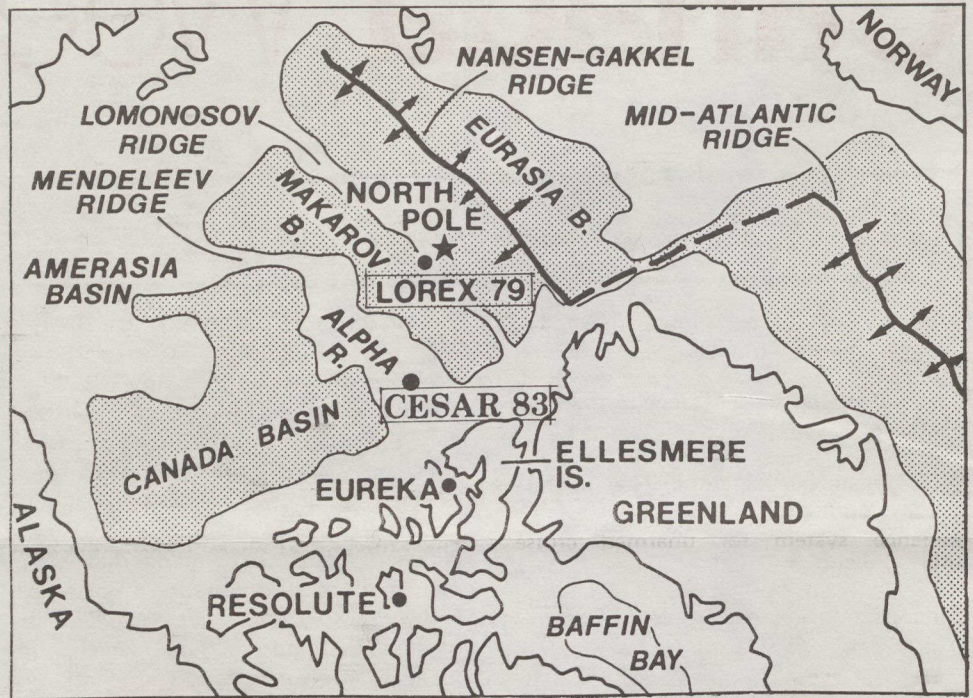
Affaires extérieures
Canada

There is a consensus among experts on the evolutionary history of the Eurasia Basin, but the age and origin of the Amerasia Basin remain largely speculative.

The CESAR base camp will be established on the drifting pack ice some 350 kilometres off the coast of Ellesmere Island. There, scientists will carry out gravity, seismic and magnetic measurements, and will probe the ocean bottom by coring, dredging and photographing. They will measure the heat transfer from the ocean floor to the water, determine the amount of nutrients, trace elements and micro-organisms in the water column, measure its temperature and salinity, and determine the speed and direction of ocean bottom currents.

Concurrently with CESAR, the Canadian Hydrographic Service (CHS) will carry out ocean depth sounding and gravity surveys on the continental shelf north of Ellesmere Island to the 1 000-metre isobath. These surveys are part of an ongoing program of hydrographic and gravity mapping of the Canadian Polar Continental Shelf and the Arctic inter-island waters that has been carried out every spring since 1960. They serve to delineate the extent of Canada's sovereignty over its offshore oil and mineral resources, in accordance with international law.

The relatively high cost of logistic support for an offshore operation in the Arctic prevents projects of this type being undertaken each year. Consequently, the operation has been spread over three years; fuel and some equipment were placed in strategic locations during the



summers of 1981 and 1982.

Canadian Forces *Hercules* aircraft will airlift 300 000 kilograms of equipment, supplies and fuel, and scientific and support personnel from Resolute to the CESAR base camp, a distance of 1 200 kilometres, and will evacuate them two months later. During the first week of March, when there is still little daylight, the airlift will be preceded by a reconnaissance flight with an aircraft equipped with side-looking radar. A radar image mosaic of the pack ice will be produced to identify areas containing ice floes sufficiently smooth and large for runway construction. On about March 11 two *Twin Otter* aircraft chartered by the federal government will leave Eureka for the areas identified on the radar mosaic and start the search for a suitable camp site.

The search planes will be manned by personnel with many years of experience in sea ice reconnaissance, and by the chief scientists and a military engineer. Once the site has been chosen the Canadian Forces will parachute in a detachment of engineers together with heavy machinery, explosives, pumps, radio communications, tents and rations for two weeks, to construct two 1 600 metre-by-100-metre runways for the *Hercules* aircraft. The first runway will be built on smooth first-year ice of minimum 1.5-metres thickness; the second will be built on a thick multi-year ice floe, and will serve as an alternative runway for the evacuation should the first runway break up.

Once the runways are completed the main airlift from Resolute will begin.

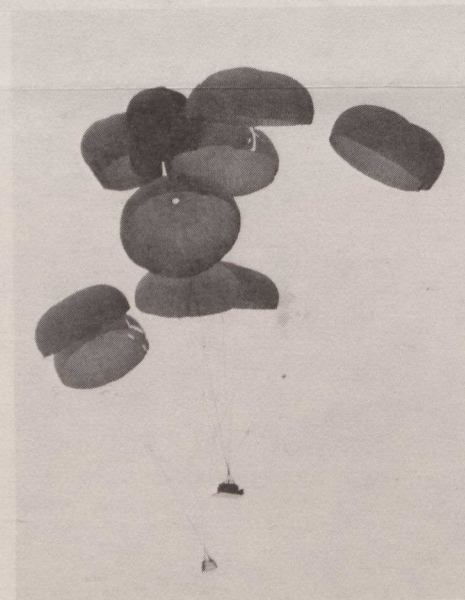
The Polar Continental Shelf Project (PCSP) of the Department of Energy, Mines and Resources will provide \$1.7 million logistic support for the expedition in the Arctic. This includes transfer payments to the Department of National Defence for airlifts and a fund for unforeseen expenditures, for example, an emergency evacuation should the ice break up prematurely. Included in this figure are funds which have been provided by agencies in the United States and other Canadian agencies.

Environmental effects studied

The CESAR experiment forms part of the Department of Energy, Mines and Resources's earth science program, which aims to provide a better understanding of Canada's geological framework as a basis for managing the development and exploitation of Canadian mineral and energy resources and a recognition of how such economic activities might affect the sensitive Arctic environment. Ocean basins are particularly important in this respect because they are dynamic structures forged by the forces of plate tectonics.

In view of the potential of the Polar Continental Shelf for energy resources and of the adjacent Arctic archipelago for both mineral and energy resources, clarification of the role of the Alpha Ridge in the geological evolution of the

(continued on P. 8)



Armed forces personnel rehearse parachute drop of equipment for CESAR.

Department of National Defence

Canada-United States defence testing pact

Deputy Prime Minister and Secretary of State for External Affairs Allan J. MacEachen and Minister of National Defence Gilles Lamontagne announced the signing of an agreement between Canada and the United States of America concerning the use of Canadian facilities and airspace for the test and evaluation of United States defence systems.

Systems to be tested under the agreement could include artillery equipment, helicopters, surveillance and identification systems, advanced non-nuclear munitions, aircraft navigation systems, and the guidance system for unarmed cruise missiles.

The exchange of notes constituting the agreement was signed February 10 in Washington, D.C. by Canada's Ambassador to the United States Allan Gotlieb and US Acting Secretary of State Kenneth W. Dam. The notes were tabled on February 10 in the House of Commons by the Secretary of State for External Affairs. The agreement will remain in effect for five years and will be renewed for a further five years unless terminated. It may be terminated on 12 months' notice in writing, or without advance notice under certain circumstances.

Under the framework agreement, specific test and evaluation proposals may be put forward by the US Department of Defense for consideration by the Canadian Minister of National Defence or his representative. If approved, a project arrangement will be concluded between the US Department of Defense and the Canadian Department of National Defence. Canada may refuse any proposal.

An important subject for a project arrangement is expected to be the testing of the guidance system for the cruise missile. Such testing is linked intimately to Canada's security as a member of NATO and NORAD and to Canada's policy on arms control and disarmament.

NATO concerned

Since 1977, NATO members have been deeply concerned about the Soviet Union's deployment of a powerful intermediate-range missile with triple warheads — the SS-20, which poses a very serious threat to many of the European member states. In 1979, a special meeting of NATO foreign and defence ministers took what is known as the "two-track decision" to counter this

Soviet threat: to deploy 108 *Pershing II* launchers and 464 Ground Launched Cruise Missiles to replace shorter-range missiles, and to propose negotiations between the Soviet Union and the United States to limit land-based intermediate-range missile systems on both sides.

Since 1979, the Soviet Union has continued to expand its force of SS-20s, which now numbers 333 missiles with 999 warheads. In addition, it continues to deploy some 250 intermediate-range SS-4 and SS-5 missiles which threaten European centres.

In November 1981, however, the Soviet Union and the United States opened formal negotiations in Geneva to limit intermediate-range nuclear forces (INF). The outcome of these Geneva talks on intermediate-range missiles will have very important implications for the security of all NATO countries, but particularly of Canadian allies in Europe. The talks are also a crucial step in the broader context of arms control and disarmament negotiations aimed at the prevention of nuclear war.

Canada shares the deep NATO interest in successful INF negotiations. The government is following the talks closely and intends to continue consulting actively with the United States in the development of the Western negotiating position. Canada is willing to give full consideration to any serious Soviet proposals that would enhance the chances for effective and verifiable agreements. At the same time it is the government's deeply held conviction that real progress can only be made on the basis of the principle of mutual security.

Canada and its allies would prefer not to deploy new missiles. They are convinced, however, that the INF negotiations will not succeed if the Western alliance shows signs of weakness. They cannot accept a result which would require NATO to abandon the modernization of its forces in Europe while the Soviet Union maintains its missiles. The conclusion of the present agreement is fully consistent with and is a manifestation of Canada's support for the NATO two-track decision.

Petro Canada participates in Thai oil and gas development

Petro Canada International Assistance Corporation (PCI), the development arm of Canada's national oil company Petro-Canada, has extended \$5.5 million in assistance to the government of Thailand.

The decision was taken following a recent mission to Thailand led by Petro-Canada International chairman Peter Towe. The aid, the first of its kind to Thailand

by Canada, represents a further step in the development of economic relations between the two countries. The program will also benefit the Canadian oil and gas industry with the aid being used to purchase Canadian goods and services to assist in developing Thailand's oil and gas industry.

The PCI initiative will consist of



(From left to right): Commercial Counsellor Maurice Hladik; PCI Chairman Peter Towe; Canadian Ambassador Fred Bild; Industry Minister's Advisor Korn Dabharangsi and Thai Minister of Industry Chatichai Choonhavan.

exploration for hydrocarbons in areas of Thailand where private industry is not active plus providing technical assistance and on-the-job training of personnel in hydrocarbon exploration, development and production. The current expenditure will be made over a two-year period.

PCI receives its funds separately through appropriations from the Canadian government. Its funding under Canada's National Energy Program has been established at some \$250 million by 1985 as part of Canada's official development assistance.

The mandate of PCI is to employ Canadian oil and gas technology and expertise to provide assistance to oil-importing developing countries and, in doing so, to open up industrial and trade opportunities for Canada while generally improving bilateral relations.

In addition to discussions in Bangkok the PCI delegation led by Mr. Towe also visited Manila where a similar program will be undertaken.

Aid to Poland

Canada, through the Canadian International Development Agency, will provide \$200 000 in assistance to vulnerable groups in Poland. The funds are in response to a joint appeal by the League of Red Cross Societies (LRCS) and the International Committee of the Red Cross (ICRC).

A disruption of essential services in Poland, in the wake of the economic and social upheaval dating from 1981, means that medicine, food and clothing will be required this year. For this reason the LRCS and ICRC have begun a joint appeal in order to pursue their humanitarian operations through to June 1983. The program will continue to provide relief, tracing services and medical assistance, aimed at defined vulnerable groups in Poland. This includes the aged, sick and handicapped children from low-income families, newborn babies and their mothers, and children suffering from long-term or incurable diseases.

The latest contribution brings to \$1 million the amount of Canadian humanitarian relief to Poland. Canada provided \$100 000 to the Canadian Polish Congress in October 1981 and \$200 000 in March 1982, and \$500 000 to the LRCS/ICRC joint relief program in January 1982.

Canadian minister leads trade mission to five countries

Minister of State for International Trade Gerald Regan led a trade mission to Hungary and the Middle Eastern countries of Oman, Kuwait, Saudi Arabia, and the United Arab Emirates from January 2-17.

Mr. Regan's visits to Oman and the United Arab Emirates were the first ever to those countries by a Canadian minister.

The main objectives of the mission were to further Canadian trade relations, promote Canadian products and expertise and develop technical co-operation with each of the countries visited.

In Hungary, Mr. Regan along with Canadian government officials and businessmen, met with Deputy Prime Minister Marjai and other ministers to discuss ways of increasing trade between the two countries. Their meeting also served to support the efforts of Canadian firms involved in negotiations with Hungarian officials.

They spoke of the possibility of Dominion Engineering Works of Montreal supplying the Danube Iron and Steel Works with a \$10-million strip coilbox. G and B Automated of Toronto, in co-operation with Canada's Export Development Corporation, has already signed a \$3.1-million contract for grinding wheel manufacturing technology and plant design with a possible sale of \$4 million in machinery still to come.

In addition, H.B. Nickerson and Sons Limited of Sydney, Nova Scotia is pursuing opportunities for the sale of Canadian seafood products to Hungary, while James A. Lewis Engineering of Calgary is interested in selling a computer software package to the Hungarian National Oil and Gas Trust for drilling activity. Ontario Bus Industries Incorporated are also holding discussions with Hungarian officials on the manufacture of articulated Ikarus-design buses in Canada.

Negotiations between the delegation and Hungarian officials centred on future trade missions involving the exchange of expertise between the two countries.

Omani visit

From January 5-8, Mr. Regan and the Canadian delegation visited the Sultanate of Oman for talks with Minister of Commerce and Industry Mohammad Al-Zubair. They discussed co-operation in a number of sectors including telecommunications and mining, as well as, Canadian participation in the implementation of Oman's second five-year plan which will provide for \$28 billion in investments.



Mr. Regan (left) is met at airport in Saudi Arabia by Dr. Suleiman Al Solaim.

The Canadian trade minister also met with Deputy Minister for Finance and Economic Affairs Qais Abdul-Munim Al-Zawawi and Minister of State for Foreign Affairs Yusuf Al Alawi Abdullah with whom he reviewed the Middle East situation. Mr. Regan participated at a round table discussion at the Ministry of Petroleum and Minerals. The Omani ministers present expressed an interest in Canada's aerospace industry, in particular Canada's *Challenger* and de Havilland's *Buffalo* and *Twin Otter* aircraft.

The Canadian businessmen accompanying Mr. Regan also held a series of meetings with officials of state organizations and business leaders. The Canadian delegation visited a copper mining and refining complex developed by Canadian companies and utilizing Canadian equipment.

Canada-Kuwait relations

Following his stay in Oman, Mr. Regan travelled to Kuwait where he met with Minister of Commerce and Industry Jassim Khalid Al-Marzouk. The two discussed furthering Canada-Kuwait trade relations particularly in the areas of telecommunications, high technology equipment, urban transit and consulting services. The Canadian minister also met with the Minister of Petroleum Sheikh Ali Al-Khalifa Al-Zaban, Minister of Finance and Planning Abdul-Latif Al-Hamad as well as the president of the Kuwait Chamber of Commerce and Industry Abdul-Aziz H. Al-Sagar. Mr. Regan held talks

with Minister of Communications Essa Al-Mazidi, who will visit Canada this year.

Canadian exports to Kuwait have increased steadily from \$37 million in 1977 to \$83 million in 1981 and consist mainly of cars, trucks, automotive parts, high technology products and primary goods. Canada imported some \$165 million in hydrocarbons from Kuwait in 1981.

During his visit Mr. Regan toured the installations of the Kuwait Oil Company and discussed development of the petrochemical industry in that Middle East country.

Meetings with Saudi ministers

The Canadian delegation, led by Mr. Regan, also visited Saudi Arabia, January 9-13, where they met with Minister of Commerce Suleiman Al Solaim and a number of Cabinet ministers. They reviewed commercial and industrial relations between the two countries and explored the possibilities for intensifying trade relations and broadening co-operation.

Saudi Arabia has been one of the fastest growing markets for Canadian products and services; exports of goods in 1981 totalled \$455 million, and the total for services (essentially management and consulting) was roughly equivalent. The totals for 1982 are expected to be even higher, but nevertheless the Canadian share of the Saudi market is still small with Saudi imports estimated at over \$40 billion.

In addition to his meeting with Dr. Solaim, Mr. Regan met with His Royal Highness Prince Badr Bin Abdul Aziz; Minister of Petroleum and Mineral Re-

sources, Sheikh Ahmed Zaki Yamani; Minister of Posts, Telegraphs and Telephones Alawi Darwish Kayyal; Minister of Industry and Electricity and Acting Minister of Health Ghazi Al-Gosaibi; and Minister of Communications Hussein Al Mansouri.

The minister called on the civil aviation authorities and was briefed on Saudi development priorities by officials of the Ministry of Planning. Mr. Regan also toured the industrial city of Yanbu, one of two large industrial complexes being constructed by Saudi Arabia to produce and export petrochemical products from that country's vast reserves of natural gas. In addition, he met with Canadian businessmen active in Canada's trade relations with Saudi Arabia.

Minister Regan said he was satisfied with the results of his visit, which had met his objective of supporting and advancing current Canadian projects in the fields of rural electrification, management services, telecommunications, and high technology and related services, worth approximately \$2 billion. He also explored with Saudi officials possibilities for broadening Canadian exports to Saudi Arabia in such sectors as urban transport and agricultural products.

"I am confident that as a result of my visit some important contracts will be signed in the next few months," said Mr. Regan. The Canadian minister also expressed strong support for several upcoming Canadian trade missions to Saudi Arabia. He called for increased contact between Saudi Arabian and Canadian officials and businessmen and extended invitations to visit Canada to Mr. Man-

souri and to Abdul Aziz Al-Zamil, vice-chairman and managing director of Saudi Arabian Basic Industries Corporation (SABIC), which is responsible for the two industrial complexes at Yanbu and Jubail. "I am hopeful that these visits may take place in the next few months, thereby affording another opportunity to demonstrate Canadian capacity to provide the very sophisticated products and services required by Saudi Arabia," said the minister.

UAE trip

The final leg of Mr. Regan's trip was a visit to the United Arab Emirates (UAE) from January 13-17. Minister Regan was received at the Dubai airport by Minister of State for Cabinet Affairs Saeed Al-Ghaith and spent a private weekend in Abu-dhabi.

The following day he met with Dr. Kruha, Director-General of Abu-dhabi National Oil Company (ADNOC) to review the world energy situation and ADNOC's downstream development plans. Mr. Regan later met with the Abu-dhabi Chamber of Commerce and Industry.

The Canadian minister held talks with the UAE Minister of Communications Rashid Al-Makhawi on the UAE's development plan, specifically in the communications sectors. They discussed the possibility of the use of Canadian expertise and technology in furthering the UAE's development plan.

The Abu-dhabi Chamber of Commerce also gave a reception for the Canadian delegation.

The delegation travelled to Dubai where Mr. Regan met with Minister of Defence Mohamed Bin-Rashed. They discussed closer economic relations between Canada and the UAE and the Middle East situation. Mr. Regan spoke of a possible sale of Canadian telecommunications equipment and aircraft to the United Arab Emirates.

The Canadian delegation also took part in a round table discussion with Dubai businessmen which led to the establishment of a joint committee on direct investment in Dubai for industrial development co-operation. The committee, which is still in the planning stages, is currently composed of Canadian embassy personnel and members of the Dubai Chamber of Commerce.

On the last day of his visit, Mr. Regan hosted a reception which was well attended by UAE government officials and senior businessmen in Dubai.



Talks with Kuwaiti officials: (left to right) Canadian Ambassador Ian Wood; Minister of State for International Trade Gerald Regan; Minister of Commerce and Industry Jassim Khalid Al-Marzouk and Minister of Finance and Planning Abdul-Latif Al-Hamad.

New compact gas furnace is efficient and safe

A Canadian company has introduced one of the world's most efficient and safest gas furnaces on the market.

The compact new furnace, developed by Lennox Industries of Toronto, uses a revolutionary technology to achieve heating efficiencies ranging from 96 to 98 per cent (efficiency approved by the Canadian Gas Association). The average furnace in Canada is 55-60 per cent heat efficient. The G14 Pulse, as the unit is called, can reduce homeowners' gas heating bills by more than 40 per cent.

New technology used

Where conventional furnaces heat with an open gas flame, sending almost half of the heat produced up the chimney, the pulse furnace uses a totally new technology for home heating. It operates on the pulse combustion process which ignites minute quantities of gas at a rate of 68 times per second within a closed combustion chamber. In addition, the unit has a series of heat exchange surfaces to recover almost every British thermal unit (BTU) of heat produced.

Once begun, the pulse process becomes

self-perpetuating, allowing the spark igniter and combustion air blower to be turned off. As the products of combustion travel through the components of the furnace, a blower moves air across them to absorb almost all the heat produced. This heated air is then circulated throughout the home for heating. The Pulse unit even recaptures the latent heat of combustion gases through a fin-and-tube heat exchanger.

The unit's exhaust is comparatively cool, ranging from 38 degrees Celsius to 52 degrees Celsius and can be vented out the side of the house through plastic piping, thus eliminating the need for a costly chimney.

The Lennox Pulse furnace, in five capacities ranging from 40 000 to 130 000 BTUs, is designed to meet the heating needs of any home. This new furnace was designed to replace any of the estimated 2.25-million forced warm air gas furnaces installed during the past 20 years. It accepts all furnace accessories, including central air conditioning.

The Pulse has been under development for six years and has undergone extensive

field testing throughout Canada and the United States during the past three heating seasons. During field testing the new furnace confirmed the efficiency and reliability features developed by Lennox's research and development laboratories, with efficiencies easily reaching the 98 per cent mark. Analysis of units, after thousands of heating cycles, showed little wear. The heat exchange section of the Pulse carries a 20-year warranty. The design of the new furnace also makes it the safest gas furnace on the market.

(From Natural Gas, No. 2, 1982.)

Northern Telecom signs pact with Japanese firm

Northern Telecom and Mitsui & Company, Limited of Japan have signed a long-term agreement under which Mitsui will distribute Northern Telecom communications products.

The agreement will make Northern Telecom's SL-1 systems available in the Japanese market for the first time. Northern Telecom and Mitsui expect to establish a long-term relationship with the Nippon Telegraph and Telephone Public Corporation, the government-owned telephone company, and to sell SL-1 systems to Japanese end-users, directly and through subdistributors.

SL-1 systems for sale in Japan will be manufactured at Northern Telecom's facilities in Santa Clara, California.

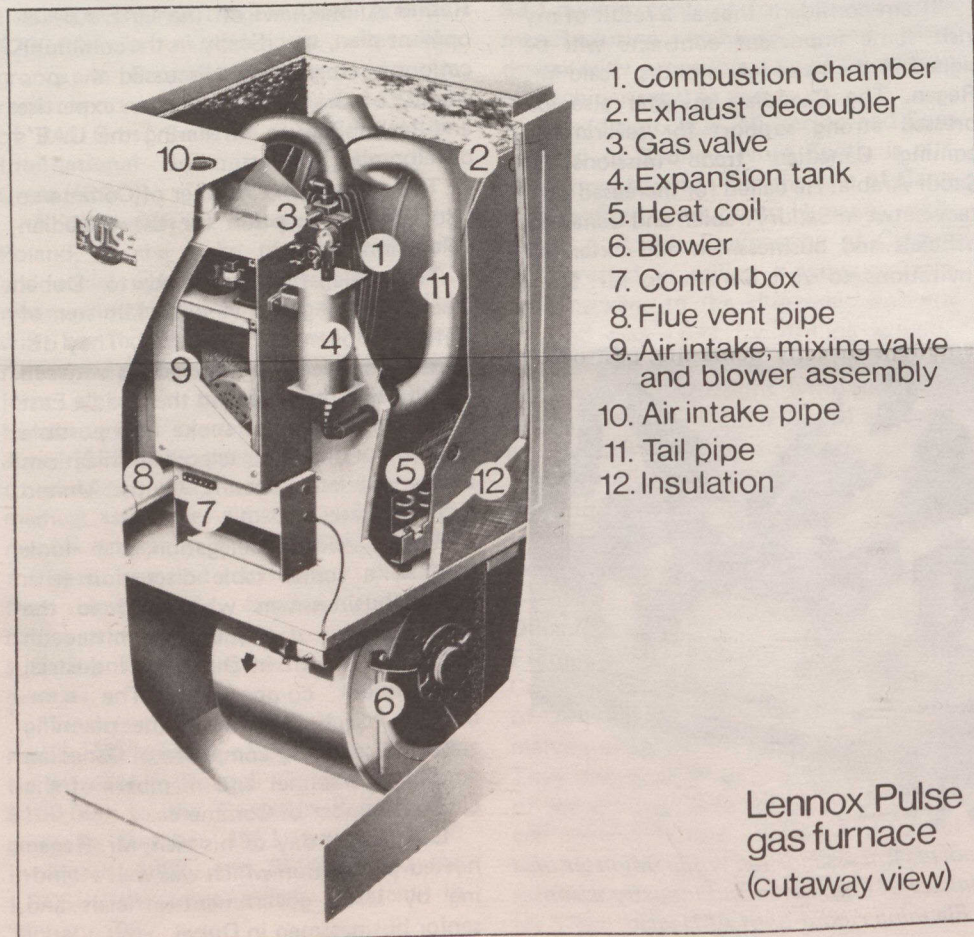
The SL-1 is Northern Telecom's computerized fully digital private branch exchange. To date, Northern Telecom has more than 5 000 systems sold or on order, serving more than 2 million lines in 40 countries throughout the world.

Luger wins gold

Canadian luge team member Miroslav Zajonc won the gold medal at the world championships held recently in Lake Placid, New York.

Zajonc, 22, made four record runs on the 1 000-metre chute to edge Sergei Danllin of the Soviet Union for the world championship. The Canadian team member, a Czechoslovakian who now lives in Toronto, had a combined time of 2 minutes 47.232 seconds.

Zajonc, who came to Canada only recently, said he would apply for Canadian citizenship as soon as possible so he could compete in the 1984 Winter Olympic Games in Sarajevo, Yugoslavia.



Canadian folk art exhibited

The most comprehensive exhibition of folk art ever produced in Canada opens at the Glenbow Museum in Calgary, March 7, as part of a cross-Canada tour.

From the Heart: Folk Art in Canada was organized by the National Museum of Man in Ottawa and features about 300 artifacts from the museum's collection. The Allstate Foundation of Canada is sponsoring the exhibition with a \$200 000 grant — the largest grant ever received by the National Museum of Man from a corporate sponsor.

Folk art can perhaps be best defined by what the folk artists have in common. Most significant is the fact that many are self-taught artists who have close ties with the land. Their inspiration often comes out of situations they have experienced themselves, from memories of the past and from their personal imagination and fantasy. Many work with a minimum of materials and tools that are at hand. Their work is characterized both by a strong community tradition and an imaginative exuberance, emphasizing the essentials in a direct way.

The works included in the exhibition are drawn from the National Museum of Man's folk art collection, the largest of its kind in this country which includes the extensive Price, Sharpe and McKendry collections. This will be the first time such a significant selection of works from



Wooden and metal tobacco cutter made by an artisan in Quebec.

the Museum's Canadian Centre For Folk Culture Studies will tour nationally.

The *From the Heart* exhibition will include approximately 280 artifacts and emphasis will be on twentieth-century folk art from all parts of Canada with material from the nineteenth century. Included will be carvings (the largest single category), paintings and a selection of handcrafted tools and furnishings. The over-all purpose of the exhibition is to demonstrate the richness and variety of folk art in Canada.

Three main themes

Three main themes are illustrated:

Reflections includes: utilitarian objects such as tools, furniture, hooked rugs; nature-depicted figures such as animals, birds, weather-vanes and decoys; man in nature or settlement which shows representations of early home life; past occupations includes models of plowing, logging, boats and trains; paintings of the past illustrating folk tales and history.

Commitments includes: icons, objects and furniture which represent past cultural affiliations; religious objects which include biblical figures and church scenes; and love, which includes objects that have been made for loved ones.

Fantasies includes: Eros as represented by sensual bathing beauties, the sailor and his girlfriends etc.; humour illustrated in such objects as dancing dolls and a trick bible box; eccentricities which includes a unique music box incorporating over 50 moving figures; and yard art which includes outdoor pieces such as bird houses, whirligigs and mailbox holders that were carved to decorate people's premises.



The Stork made of wood and cloth by Billie Andrews of Bradford, Ontario.

Another section of the exhibition will highlight *Four Canadian Folk Artists*, all of whom are living and still producing works. This section includes Nelphas Prévost of Quebec, who carves fiddles and makes root sculptures; Sam Spencer of Saskatchewan, who carves wooden plaques; Frank Kocevar of British Columbia, who paints memories of his past; and George Cockayne of Ontario, who creates wooden sculptures.

After its showing in Calgary, *From the Heart* will travel to Saskatoon, Regina, Windsor, Edmonton, Vancouver, Charlottetown, Halifax, Winnipeg, Quebec City, Toronto and Montreal.



Clem, was originally used as a scarecrow.

Arctic expedition (cont'd from P. 2)

Arctic is an essential step in the department's Arctic research. Other important benefits deriving from this program include an improved capability to operate from sea ice, the development and testing of technology in Arctic environments, particularly navigation systems, and an enhanced image for Canada as an Arctic nation. In 1979, the successful LOREX experiment over the Lomonosov Ridge near the North Pole proved that Canada has both the organizational and scientific expertise to carry out large Arctic projects. The ability to construct equipment capable of operating in the harsh environments of both polar sea ice and deep ocean was demonstrated during LOREX.

During the 1983 expedition some new technology will be employed, including a sophisticated computer program developed by federal scientists that greatly im-

proves the accuracy with which the position of a drifting ice floe can be determined by tracking artificial satellites. In addition, engineers at the Bedford Institute of Oceanography in Dartmouth, Nova Scotia have developed a seabed corer for CESAR that will allow researchers to collect cores up to 10-metres long from the ocean floor. Previous corers had a penetration of only 3 metres. With this new tool marine geologists, for the first time, will be able to penetrate to pre-Pliocene depths antedating the onset of the Arctic Ocean ice cover.

Reaching this depth is important for two reasons: first, to collect sediments that are uncontaminated by material carried out to sea by the floating ice cover, and second, to study the relationship of ice cover to interglacial periods, in order to determine palioclimates and perhaps to determine the time when glaciation was initiated.

Award for journalistic merit



Hamish McDonald, a Tokyo-based correspondent for the Sydney Morning Herald, is the winner of the 1982 Canadian Award for Journalistic Merit. The award is presented annually to a journalist in the Australian press, radio or television reporting on international affairs in the Pacific area. It is intended to promote interest in and a better understanding of international affairs. As part of the prize, Mr. McDonald will be invited to tour Canada this year as a guest of the Canadian government.

News briefs

Under an agreement between the federal government and Manitoba, the Canada Centre for Remote Sensing (CCRS) has begun the first phase of a new program to transfer to provincial and territorial agencies the techniques it has developed for extracting information from satellite images of the earth's surface. CCRS, a branch of the Department of Energy, Mines and Resources, is Canada's co-ordinating agency for remote sensing. The co-operative program between CCRS and the Manitoba Remote Sensing Centre runs until March 1984.

Eleven furniture manufacturers were recently presented with awards for excellence in design, production and marketing of Ontario-made furniture. The winners of the Trillium awards were selected from about 100 submissions by a jury representing the furniture industry. Trillium awards, which were first presented in 1974, are co-sponsored by the Ontario Ministry of Industry and Trade and the Ontario Furniture Manufacturers' Association.

Preliminary data provided by Statistics Canada indicate that full-time enrolment in Canadian universities increased about 6.5 per cent (25 850) in 1982-83 to some 428 800 students. Provinces which showed the most notable increases in enrolment were Newfoundland (15 per cent), Prince Edward Island (14.5 per cent) and

Manitoba and Saskatchewan (11.5 per cent) with the other provinces recording gains ranging from 4 per cent to 10 per cent.

The board of directors of the Export Development Corporation (EDC) has approved export financing transactions supporting potential sales of up to \$295.67 million to seven countries. Export sales that will result if sales are finalized will create or maintain in the order of 11 430 person-years of employment in Canada and will involve 78 exporters and major suppliers. The transactions include goods and services for the design and construction, on a turnkey basis, of a social and cultural centre, a park, a hotel and an office building.

The First National Occupation Outlook Conference was held recently in Hull, Quebec. Representatives of the federal and provincial governments, business, labour, the academic community and special interest groups were invited to attend the first joint manpower planning conference. The conference, an annual event, provides an opportunity to identify and discuss major trends in labour force supply and demand. The conference allowed participants to become acquainted with the Canadian Occupational Projection System (COPS).

Odds makers are quick to point out you have twice as much chance of being hit by lightning as you do of winning \$1 million. But Montreal bank employee Pierre Casault, who has never been hit by lightning, collected his second \$1-million prize in a recent Super-Loto draw, just 31 months after he had won \$1 million in a July 13, 1980 draw. Loto-Quebec, the provincially-owned lottery, calculates the odds of winning the grand prize twice in 31 months are one in 1 075 308 603.

Canada Weekly is published by the Public Affairs Branch, Department of External Affairs, Ottawa K1A 0G2.

Material may be freely reprinted. A credit would be appreciated. Photo sources, if not shown, will be provided on request to the editor, Joanna Kerr.

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