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Employment measures mark start of new long-term approach

Training and employment measures developed to meet the immediate employment needs of Canadians were announced by Employment and Immigration Minister Lloyd Axworthy in the House of Commons on June 2. Excerpts from the statement, outlining the Government's \$137-million employment program, follow:

...In designing our employment program, we looked first at the principles that would provide the basis for specific initiatives. The first of these principles is the principle of targeting — or reaching out directly to those who traditionally receive little or no benefit from the economic growth of the country.

Native people, even in the province of Alberta, face unemployment rates of approximately 75 per cent and this situation is even more critical for native women. Handicapped people everywhere face not only the challenge of overcoming their disability, but also must contend with the invisible barriers of prejudice and ignorance that bar their entry into the labour force. Women, and particularly those who have worked tirelessly in their homes to raise families and manage households, are told that they are not wanted in the paid labour force. Whatever else we

do to ensure that all Canadians enjoy rising levels of real income, we must — and we will — give special assistance to such people....

The second principle upon which [these] measures are based is the recognition that employment must have continuing and genuine value. It should offer an unemployed worker hope for the future and contribute to his or her sense of self-worth....

The third principle reflected in these measures is recognition of the need to have the particular mix of employment measures tailored to regional needs. By this I refer not only to employment disparities or the fact that there are shortages of skilled workers in certain industries and regions, but also to the differing capabilities of regions to cope with problems in their respective labour markets....

Job development

First, we are introducing four specific job creation programs to meet special employment needs:

- *Canada community development projects* — A major new program is being implemented to further national and regional priorities in such areas as fisheries enhancement, energy conservation, tourism development and community restoration. In addition to providing valuable work experience, this program will contribute to the development of an expanded employment base. More than \$100 million will be committed across Canada to such projects this winter and next year, with special emphasis in areas of high unemployment. This program also gives us the flexibility to respond to emerging employment problems caused by industrial dislocation, or major emergency events such as the fires and drought in the West.
- *New technology employment program*



Lloyd Axworthy

One hundred-and-thirty-four years ago today... The first telegraph line in Canada, operated by Toronto, Hamilton and Niagara Electro-Magnetic Telegraph Company, was opened.

— This program is designed to assist men and women trained in technical and scientific areas to make full use of their skills in support of research and development. Funded at \$7 million in 1980-81, this program will provide subsidies to firms and non-profit institutions that hire unemployed or under-employed post-secondary graduates to work in research and development activities. This will help to promote innovations in manufacturing and the application of conservation and alternative energy techniques and programs.

• *Local economic development assistance (LEDA)* — The LEDA program is a new initiative aimed at providing selected communities with the means to develop comprehensive employment development strategies through community corporations. LEDA will accelerate the process of economic development in those communities which lack the expertise to fully develop their plans. Funded at \$3 million in 1980-81, it is intended as an experimental program and as a complement to other business development programs. Our target is to have a number of pilot projects across Canada during the current fiscal year.

• *Canada community services projects* — This experimental program will enable the Federal Government to enter into new partnership arrangements with voluntary agencies....

A major innovation of Canada community services projects is that funding will be provided for up to three years on a diminishing share basis. On-going service activities will be funded, as demonstration projects, only if there is a reasonable expectation that the organizations will, over three years, be able to make other provision for the costs of services....

Training initiatives

...In some parts of the country today, and particularly in the resource rich areas of western Canada, industries have problems finding enough skilled workers in a growing number of occupations, while elsewhere the level of unemployment remains at intolerable levels....

In order to begin the process of establishing a balance between labour supply and demand, and to ensure that all Canadians get a fair share of the economic and social benefits of our society, we are taking the following measures:

• *Critical trades skills training* — This ex-

In his statement, Employment and Immigration Minister Axworthy also announced the beginning of a long-term approach to the development of employment opportunities. The Parliamentary Task Force on Critical Skills for the 80s, headed by Liberal member of Parliament Warren Allmand, and a high level task force reporting to the Chairman of Employment and Immigration Canada, will work to develop a comprehensive employment strategy for the 1980s, said Mr. Axworthy.

isting program is designed to help industry fill critical skill shortages. The level of funding will be increased immediately from \$20 million to \$30 million, an amount constrained only by the capacity of industry to effectively utilize the program during the next 12 months. I am prepared to consider increasing funds for this program still further in subsequent years if industry is prepared to offer the necessary training.

• *Special training incentives for natives* — A special allocation of \$10 million will be provided for additional training of men and women of Native ancestry. It is designed to enable them to take advantage of employment generated by new resource developments and to move into job opportunities in our urban centres.

• *Women in non-traditional trades* — In order to help open the way for women to enter occupations traditionally dominated by men, \$2 million will be provided to cover a wage subsidy of 75 per cent, under the Canada Manpower Industrial Training Program, to employers who train women in non-traditional occupations....

• *Language training for refugees* — Finally, because of the large number of Indo-chinese refugees who have come to Canada, an additional \$7 million will be provided for language training for refugees. This will speed the successful integration of these people into the Canadian labour market.

These initiatives — which provide a good indication of future directions in developing employment opportunities — bring total federal expenditures on training, including income support, to \$834 million* in 1980-81. A growing share of

* This figure includes funding allocated under the new measures in addition to funding for existing employment training programs.

that training is being provided by industry, on the job site and in the skills that we so badly need....

These training and employment measures that I have announced are not the entire solution to our labour market problems. But they are an important beginning. We will focus on the training and employment needs of natives, women, young people, and other groups facing special difficulties in finding and retaining jobs. We will provide extra jobs in areas of high unemployment. We will reorient employment programs to serve key national and regional priorities. These measures represent the start of a new long-term approach to employment generation and national development....

Fishing fines raised

The Federal Government intends to sharply increase penalties for foreign fishermen who break Canada's coastal fishing laws.

In a bill to be presented for approval in Parliament by Fisheries Minister Roméo LeBlanc, amendments to the Coastal Fisheries Protection Act will raise maximum fines for unauthorized fishing and related offences (Section 3(2)) from \$25,000 to \$100,000 on indictment, and from \$5,000 to \$25,000 on summary conviction.

The amendments will bring penalties under the Act into line with those existing in other major coastal states such as Britain, the United States, Japan and New Zealand.

Penalties under the Coastal Fisheries Protection Act now include imprisonment, but prison terms will be dropped in all cases except for resisting or obstruction of a protection officer. This has been done to keep Canada's regulations in conformity with agreements reached at the Law of the Sea Conference.

Penalties for resistance or obstruction of a protection officer, however, will be increased from \$10,000 and/or one year imprisonment on indictment to \$25,000 and/or two years' imprisonment, and from \$2,000 and/or one month imprisonment on summary conviction to \$5,000 and/or three months' imprisonment. Control of foreign fishing under the Act is largely exercised by fishing licences and permits issued under the Act's regulations. They are enforced by the Department of Fisheries and Oceans' surveillance and enforcement system.

Oil sands plant planned

Alberta Gas Trunk Line Company Limited (AGTL) of Calgary and Petro-Canada have agreed to spend \$100 million during the next two years preparing a formal proposal to build Alberta's fourth oil sands plant, reports Jeff Carruthers in the *Globe and Mail* May 30.

If approved, the plant would be built in the middle or latter part of this decade.

The AGTL-Petrocan operation would be comparable in size to the 130,000-barrel-a-day Syncrude Canada Ltd. oil sands complex in operation and the 140,000-barrel-a-day Alsands project awaiting final governmental approvals. The Alsands project is in the advanced planning stages with production of synthetic oil slated to start in 1990.

Suncor Inc. of Toronto also has a plant near Fort McMurray in northern Alberta.

Costs are estimated at \$10 billion or more for the proposed fourth plant, compared with the latest estimate of \$7 billion for the Alsands plant.

Petrocan and AGTL are undertaking the joint technical and economic feasibility studies with the intention of making a formal application to the Alberta Energy Resources Conservation Board by late 1982, at an initial investment by that time of \$100 million. Petrocan currently has interests in about 127,644 net acres in the Athabasca oil sands.

Energy agreement signed



Federal Energy, Mines and Resources Minister Marc Lalonde (right) and Manitoba Energy and Mines Minister Don Craik sign an \$18-million four-year federal-provincial agreement that will provide funds for projects demonstrating the application of energy conservation and renewable energy technologies. The two governments will share equally the eligible costs of projects that demonstrate the potential for energy savings or that encourage the development and adoption of alternative energy sources.

plinary geological, geophysical and geochemical study of a section of the Precambrian Continental Crust.

Killam Research Fellowships, which provide full or partial salary replacement and fringe benefits but no research funds, were awarded to 13 researchers, while renewals of fellowships were granted to eight other recipients.

Killam Research Associateships, which provide a stipend of up to \$20,000 a year plus some fringe benefits, travel and research costs, were awarded to seven scholars while six others received renewals of associateships.

Electronics industry boosted

The Federal Government will make \$50 million available over the next three years to assist electronics firms, Industry, Trade and Commerce Minister Herb Gray announced recently at the annual meeting of Canadian Advanced Technology Association (CATA).

Most of the money in the fund will support "exceptional opportunity which might otherwise not be exploited or exploited rapidly enough", said the Minister.

The funds will help firms "undertake large scale investment projects or industry consolidation that will increase electronics research and development activities and production", said Mr. Gray.

The special fund's second component, the Minister said in his speech, is a program designed to encourage application of microelectronic devices to new and existing products.

It will include awareness programs for senior executives of industry, an incentive program to encourage application of microelectronic products to products and processes in all industry sectors, and formation of centres of advanced technology to develop competence in microelectronics.

Mr. Gray also said the Government is committed to use "procurement policy as a positive tool in Canada's industrial development strategy". The Federal Government is a large purchaser of electronics and can promote growth in the industry through its buying policies, he maintained.

The Minister said he is ready to go to Cabinet with a request for more money if the \$50 million proves inadequate, "particularly if these are instances where funding is the only obstacle to the capture of important new opportunities".

Canada Council announces research awards

The Canada Council recently approved awards totalling over \$1 million to 35 Canadian scientists in the thirteenth annual Killam competition.

The Killam awards are made possible through a bequest of the late Dorothy J. Killam. They are intended to support scholars of exceptional ability engaged in research projects of outstanding merit in the humanities, social sciences, natural sciences, medicine and engineering and interdisciplinary studies within these fields.

The Izaak Walton Killam Memorial Scholarships in Science, Engineering and Medicine, with a cash value of \$40,000 each, are meant to honour and assist distinguished Canadian scholars. This year's winners are:

- A.E. Litherland, a nuclear physicist

at the University of Toronto, who is working to develop the technique of ultra-sensitive mass spectrometry for carbon 14-dating and detection of other rare isotopes;

- J.M. McKenzie, a McGill University professor of Medicine and senior physician at the Royal Victoria Hospital in Montreal, who will continue his investigation of the receptor-antibody interaction underlying Graves' Disease (hyperthyroidism), using the technique of hydrioma formation;

- D.W. Strangway, a geophysicist at the University of Toronto, who will consolidate his past electromagnetic studies of rocks and minerals into books on the physics and geology of the moon and on the magnetic fields and history of the planets and will undertake a multidisci-

Onion power

The British Columbia Government will fund independent testing of a unique wind turbine designed to withstand high wind speeds.

Heinz Lange, a secondary school teacher from Merrit, B.C., 200 miles east of Vancouver, claims that his Wind Onion, as it is called, can stand up to 100 mph winds.



Heinz Lange shows his turbine to a group of interested onlookers.

“Current wind turbines can’t stand up very well to storm winds,” said B.C. Hydro spokesman Nick Vanderkwaak. “Even the 50 KW Darrieuses are shut down when wind speeds reach 50 mph because it is not known how they would hold up.”

Lange’s unit is extremely sturdy and rugged. It is built of the high tensile strength aluminum used in airplane wings. Seven blades act as scoops to catch the wind, and are twisted in such a way as to divert the wind upward within the Wind Onion, creating a whirlpool. This upward pressure takes the weight of the turbine off the bottom bearing and reduces friction.

The unit is completely self-contained and needs no guy wires or special set-up. That means a helicopter could simply set it down on a mountain top or other remote location, the unit would be bolted down or set in a concrete slab, and it would be ready to operate in wind speeds as low as 5 to 6 mph. Like the Darrieus, the Wind Onion is omni-directional, but because of its many blades, it is unlikely

to be thrown out of balance because of icing.

Runs in high winds

At high wind speeds the Onion spreads out. This lowers its efficiency and prevents it from running wild. Lange has tested his turbine in 100 mph winds. In a 50 mph wind the turbine will run at 180 revolutions a minute.

Lange claims the manufacturing costs for the unit will be up to a third less than a comparable conventional wind turbine.

Harley Kelsey of the Ministry of Economic Development has been studying the unit and is enthusiastic: “This turbine has several unique properties, and if it is developed properly, I think it’s going to have a lot of potential.”

“An important feature is that the machine is capable of keeping an almost constant torque because the diameter of the Onion changes. Constant torque creates a steadier output current, which can be an important advantage,” said Kelsey.

(Article by Joe Szostak in Renewable Energy News, April 1980.)

University builds coal centre

A new laboratory centre for coal and mineral processing — the only such facility in Canada — will be built this year at the University of British Columbia.

The three-storey, 20,000-square-foot structure is expected to be completed by the end of this year.

The new laboratory will meet the needs of teaching and research in coal preparation and mineral processing, and will also be available for co-operative research with the Canadian mineral industry.

Professor George Poling, head of the Department of Mining and Mineral Processing Engineering at UBC, said coal is becoming an increasingly important source of energy and hydrocarbon chemicals, and that traditional uses of western Canadian coal for making coke are also expanding rapidly.

“Preparation plants are necessary since coal cannot be utilized directly as it comes out of a mine,” Dr. Poling said. “Impurities such as mineral matter and water must be removed to utilize our coal resources efficiently and with a minimal environmental impact.”

“Establishment of this new centre will

give our students a third option, that of coal preparation engineering,” he said, “to go with mining engineering and mineral process engineering, and it will provide better facilities for students in mineral processing.”

Dr. Poling said candidates for a Bachelor of Applied Science degree in mining and mineral processing spend three years in the department, after a year of science and a year of general engineering.

Hansard marks centenary

Hansard, the daily written record of parliamentary debate, celebrated 100 years of publication on May 5.

Speaker Jeanne Sauvé unveiled a plaque on May 7 commemorating the centenary of Commons *Hansard* service and read a message of congratulations from the Queen in the House of Commons.

“I express my confidence in the continuing impartiality and accuracy of the institution,” the Queen’s message said.

There now are 63 *Hansard* employees including 41 on the English side and 22 on the French to handle the reporting, editing, transcribing and printing of the Commons debates.

Hansard reporters in the House of Commons still use shorthand to take down words of the debate, just as their predecessors did a century ago.

Editor Douglas Baker said a recent check disclosed only four errors among 252,000 words recorded by *Hansard* reporters in a single week.

Erratic hours

The hours of work for a *Hansard* reporter are erratic. When the House is in session reporters typically work ten hours a day. They spend ten minutes in the House scribbling furiously, then an hour dictating what they have just written to a typist. Then they repeat the process over and over again until adjournment.

The title *Hansard*, used to describe official parliamentary reports throughout the English-speaking world commemorates T.C. Hansard, who acquired publication rights for the reporting of debates at Westminster in 1811.

In 1909, the Parliament at Westminster adopted the Canadian system of recording debates after describing it as “the best in the world”.

Canadian firsts

Canada has an illustrious record of invention and technological innovation dating back to the middle of the nineteenth century.

These early discoveries and inventions fall generally into the categories of communications, transportation, resources and medicine and range from the world's first commercially successful oil well to the first practical electron microscope.

Communications: a telling story

- Edward Rogers produced the first commercially sold batteryless radio, and in 1927 he built radio station CFRB, the first radio station transmitting without batteries.
- In 1942, the transceiver was patented – a combination transmitter and receiver used in army tanks during World War II.
- Dr. Alexander Graham Bell, born in Scotland, invented the telephone in 1874 while residing in Brantford, Ontario. The first actual use of telephone lines was in Canada.
- The world's first sponsored film production was a series of half-hour films produced across Canada by CPR in 1903 in order to attract investment and increase emigration from Europe.
- Thomas Willson, a prolific Canadian inventor (1867-1935), discovered calcium carbide and also invented the Willson gas buoy and gas beacon used in marine signals.

- In 1887, John Connon of Elora, Ontario, patented the first panoramic camera ever made which would photograph in an entire circle at one exposure.

Transportation: the long distance feeling

- In 1883, John Wright and Arthur Vanderpool installed an experimental railway connecting Toronto's Bathurst Street and Strachan Avenue, using overhead wires with a connecting trolley pole, which they invented. The system proved successful and was the first practical electrical railway in history.
- The world's first hydrofoil boat was invented and successfully tested in Toronto by Casey Baldwin in 1911. Hydrofoil vessels based on Baldwin's designs are used around the world today.
- The first successful locomotive braking system was patented in 1868 by A.W. Robinson, superintendent of the Great Western Railway shop in Hamilton, Ontario. This device gave railways a positive braking arrangement superior to the old hand-braking methods then in existence.

Resources: the big wheel

- In 1857, James Williams opened the first commercially successful oil well in North America at Oil Springs, Ontario.
- The first time hydro-electrical power was used to drive the wheels of a factory was in 1888 in Georgetown, Ontario, when John Barber conceived the idea of augmenting his water-driven paper mills with electric power.

- The process of manufacturing paper from wood pulp was discovered by two Canadians – one from St. John, New Brunswick, and the other from Napanee, Ontario, both around 1850.
- Leigh Instruments of Carleton Place, Ontario, produced and sold the first crash position indicator in 1962, the first mechanical strain recorder in 1975 and the first ice detection system in 1976.

Medicine: a human resource

- Insulin was discovered in 1921 by Sir Frederick Banting and Dr. Charles Best in Toronto.
- Dr. Alan Brown and Dr. Theodore Drake developed the first pre-cooked cereal or pablum in 1932 at Sick Children's Hospital, Toronto.
- Dr. Donald Green was the co-inventor of the Cobalt "Bomb" (1950-59) used in the treatment of cancer. Radioactive cobalt for its operation was produced at Chalk River, Ontario.
- While working at the University of Toronto, Dr. Ely Berton and Dr. James Hiller constructed the first practical model of an electron microscope.

Last but not least

- Henry Woodward and Matthew Evans of Toronto were granted a Canadian patent in 1874 for an electric light. (Edison's first patent did not follow until 1879.)
- Sir Sandford Fleming developed the idea of standard time zones in 1878, first described at a meeting in Toronto in 1884.
- Although the first game of basketball was played in Massachusetts in 1892, it was invented by a Canadian, Dr. James Naismith, born in Almonte, Ontario.
- The city of Hamilton deserves a special mention because of its list of firsts – the first sewing machines, the first sulphur matches were made in that city which also installed the first telephone exchange in Canada, in 1878.
- Thomas Ahern of Ottawa was a busy man in the late 1800s. To his credit goes the first electrical cooking oven in 1892. He served a banquet of electrically cooked food at the Windsor Hotel in Ottawa for the first time. He also invented an electric sweeper to remove snow from railway tracks and the first electric heating system in the world, making year-round street car service possible.

(From Ontario Business News, March 1980.)



Electric railways were well established in Toronto by the time this photograph was taken; it was back in 1883 that the first practical electric railway came into use.

Order of Military Merit presented

The order of Military Merit was presented recently to 53 Canadian regular and reserve forces members in a ceremony at Government House in Ottawa.

Governor-General Edward Schreyer, Chancellor of the Order of Military Merit, and Commander-in-chief of the Canadian Forces invested the regular and reserve officers and other ranks.

The Queen is the Sovereign of the Order which was created in 1972 to recognize meritorious service and devotion to duty by members of the Canadian Forces. The Order has three grades of membership — Commander (CMM), Officer (OMM) and member (MMM).

His Excellency presented insignia to three Commanders, 15 Officers and 35 members.

Mining boosts city's economy

The city of Saskatoon, Saskatchewan is expecting another prosperous year as companies move in to mine the province's uranium.

"It would be an understatement to say that 1979 was a banner year for Saskatoon," says Dave Fairlie, the city's development director.

With mining offices moving into town, the total value of building permits reached \$250 million, an increase of 75 per cent over 1978. Residential construction was up 34 per cent; 171 new businesses opened; the population probably climbed to an estimated 150,000 and the largest supermarket in western Canada was opened.

The city scored another big industrial gain, an \$8-million manufacturing and testing plant for Northern Telecom Canada Limited's fibre optics operation. Within a few years, the plant is expected to employ 300 people.

While agriculture and potash mining were big factors in the city's boom, uranium was the catalyst.

Uranium companies spent \$80 million exploring the north last year. In the next ten years, exploitation of Saskatchewan's 500-million pounds of uranium ore will produce some 17,000 direct and indirect jobs, as well as, up to \$3 billion in provincial royalties. All this in a province that already has only 3 to 5 per cent of its population looking for jobs.

Program to aid whales and fishermen

On a cold, wet spring day on Conception Bay, off the east coast of Newfoundland, observers from a sailboat spotted five humpback whales circling around a trapped companion, writes Ed Walters of the *Canadian Press*.

The stricken whale, 17 metres (57 feet) long, had a net mooring wrapped around its tail, holding most of its body under water, and appeared in imminent danger of drowning.

It managed to get the blowhole at the top of its head to the surface for an instant to spout and draw in fresh air. Then it broke free, whistled, leaped like a trout in visible joy and bore away at high speed. The net was left in torn ruins.

Dr. Jon Lien, an animal behaviour specialist at Memorial University's psychology department, says humpbacks and other whales caused about \$2.5-million damage to Newfoundland's inshore fishery in 1979 in lost gear and down time. Gear destruction alone was estimated at \$500,000.

Dr. Lien now is in the third year of a program to find ways to keep humpbacks away from fishing gear. Some nets, such as cod traps, cost \$8,000 and there is no whale-damage insurance.

Humpbacks, an endangered species who give birth only once every three

years, are protected in local waters by a Canadian ban on whale-hunting.

After wintering in the Caribbean, between 2,000 and 3,000 humpbacks migrate to Newfoundland waters in spring. Some pass through the Gulf of Maine and others find their way to the Gulf of St. Lawrence.

Overfishing of caplin on the Grand Banks and other offshore grounds has been blamed for the whales' shift to inshore waters. Offshore caplin fishing has been banned this year.

The caplin, which spawn by laying their eggs on Newfoundland beaches at the waterlines, move in to shore in June.

Feeding on the smelt-like fish, humpbacks apparently let their appetites override their natural echo-location warning system and blunder into nets.

Dr. Lien says several experimental devices have shown promise. The aim is to use something that will tell a whale a net or other fishing gear is in his way. Such a device has to be visible or audible to a whale but must not scare away fish.

An underwater bell, made of three pieces of metal and costing about \$2.50, appears so far to be most successful. The low-frequency sound it produces with wave action is of an irregular pattern and cannot be heard by cod.

John G. Diefenbaker stamp issued by Canada Post

A commemorative stamp honouring John Diefenbaker, Canada's thirteenth Prime Minister, was issued by Canada Post June 20.

A dignified profile portrait on a rich blue background enhances the design of the stamp, which shows Mr. Diefenbaker in a typical dramatic pose. By cameo effect it indicates a man of strength, sincerity and dedication. The stamp design was conceived by Bernard Reilander, an Ottawa graphic artist. The steel-engraved interpretation of Mr. Reilander's original artwork was executed by Yves Baril.

Another feature of the stamp was that the First Day Covers were cancelled in Saskatoon, the site of the stamp launch. The pictorial cancellation shows the top of the Peace Tower with the Canadian flag at half-mast. To the left of the stamp and cancellation is the envelope cachet design which features the quotation "I am a Canadian, Je suis Canadien". This quote is from the House of Commons debates on the Bill of Rights. Beneath the quote is a reproduction of John Diefenbaker's signature.

The stamp launch was held on the anniversary of John Diefenbaker's being named a member of the Queen's Privy Council for Canada in 1957, and one day before he became Prime Minister.



News of the arts

War museum marks centennial

Parades, concerts, special exhibits and old-fashioned military drills are some of the events planned to celebrate the one-hundredth anniversary of the Canadian War Museum in Ottawa this year.

Since 1880 when it started as a small group of trophies and collectibles, the Canadian War Museum has grown to include exhibits ranging from the earliest North American Indian weaponry to modern twentieth-century missiles. While the museum had collected and stored books, records and artifacts since 1880, it was not until 1942 that the first permanent exhibit was opened to the public.



The Cross of Saint Louis instituted by Louis XIV in 1663 was awarded for distinguished service in the armies of France. The first native-born Canadian to receive the cross was Pierre Le Moyne d'Iberville in 1699.

"Our goal," said Victor Suthren, historian at the museum, "is to portray the reality and significance of war without emphasizing the more morbid aspects."

This is accomplished through the use of display cases, pictures, dioramas, audio-visuals, airplanes suspended from ceilings, artwork and reconstructed scenes such as a World War I trench, complete with sandbags, battle sounds and shell flares, through which visitors can walk. All types of weaponry from muskets to huge tanks are also displayed. In addition, the staff car used by Herman Goering during the Second World War is exhibit-



View of first-floor display at Canadian War Museum.

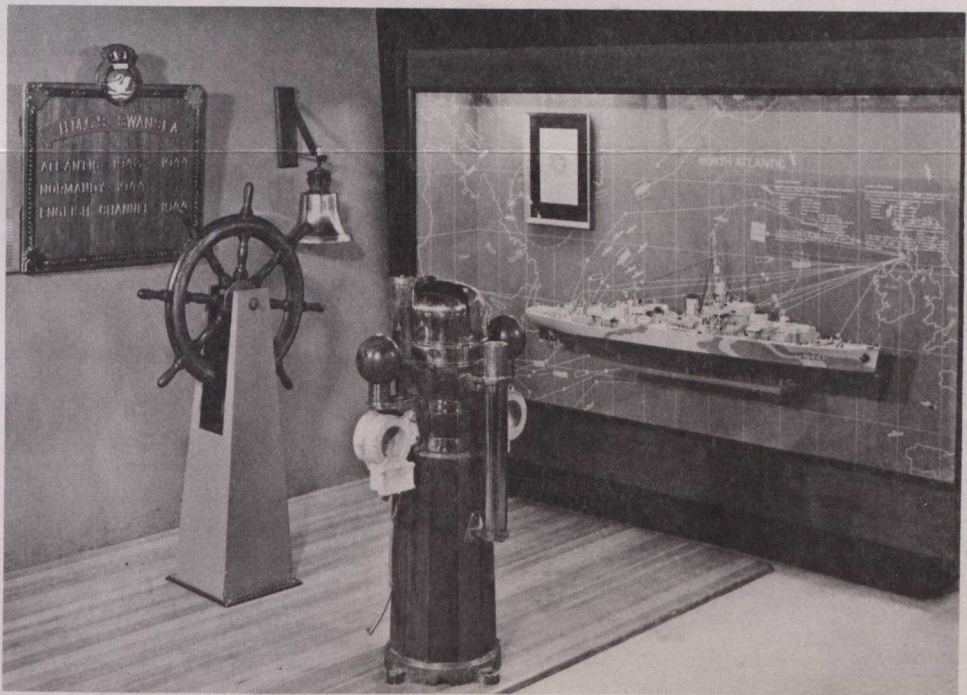
ed, as is a collection of medals.

This spring and summer there will be re-enactments of early military drills and encampments on the museum's grounds. Throughout the summer men, women and children, in authentic costumes and with genuine accoutrements will recreate what life was like during certain eras.

Indoor exhibits marking the museum's

centennial have been on display since December 1979 and will continue throughout 1980.

The climax of the anniversary celebrations takes place August 3 when a parade of military units, representing regiments from 1665 to the present, marches through Ottawa to Parliament Hill for a *feu de joie* and dignitary review.



The wheelhouse of HMCS Swansea, built at Esquimalt, British Columbia in 1943; her war record included a share in the sinking of three U-boats.

Bees may help locate minerals

Tiny doormats at the entrances to beehives may help mining companies locate mineral deposits, a University of British Columbia geological researcher believes.

"I think we've got a very useful method that may add to the various methods used by geologists to discover minerals," said Harry Warren, professor emeritus at the University of British Columbia.

Dr. Warren has spent years of research trying to discover if infinitesimal concentrations of mineral trace elements can yield clues to the whereabouts of big mineral deposits.

He said honeybee pollen has been shown to contain varying concentrations of copper, molybdenum, zinc, lead, iron and cadmium, depending on where the bee makes his rounds.

Pollen on feet

"Bees collect pollen from flowers on their feet, and other parts of their bodies," he said.

"By putting a pollen trap at the hive entrance so that the bee is forced to wipe his feet before he can pass into the hive, the pollen falls off."

Working in co-operation with the provincial Ministry of Agriculture and the B.C. Honey Producers Association, Mr. Warren selected 25 acres around the province and analyzed the mineral content in pollen samples from each.

Pollen from the area around the Afton copper mine near Kamloops, British Columbia, yielded a copper content of 54 parts *per* million, compared with 15 parts *per* million from the area around Trail where lead and zinc are smelted.

Zinc concentrations were much higher in samples taken from the area around Trail.

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

News briefs

A delegation of Canadian nuclear experts visited Peking recently for discussions with Chinese government and electrical utility representatives. The Canadian officials gave a series of talks to groups within the First Ministry of Machine Building (which consists of industries fabricating components for energy production), the Second Ministry of Machine Building (responsible for nuclear research and development), and Chinese electrical utilities. They also visited an industrial exhibit and some large manufacturing plants in Shanghai.

The Export Development Corporation (EDC) has announced a \$20-million (U.S.) line of credit agreement with a group of associated Mexican mining companies, which will be used to finance purchases of mining-related equipment and services that the group expects to make from Canada during the next three years. The Mexican group is composed of Industrial Minera Mexico, S.A. (IMMSA), Zinc de Mexico, S.A., Minerales Metalicos del Norte, S.A., Carbonifera de Mexico, S.A., and Carbonifera de San Juan, S.A. Sales made under the line of credit are expected to generate some 800 man-years of employment in Canada at various manufacturers and their suppliers. The group, which is the largest private mining group in Mexico, is involved throughout Mexico in the mining, smelting and refining of a great variety of minerals, including gold, silver, copper, lead, zinc, fluorspar and coal.

Abitibi-Price Inc. of Toronto plans an \$8-million expansion of its exterior hard-board siding plant at Roaring River, North Carolina. This is in addition to last year's \$22-million expansion, scheduled for completion this year. The company will also spend \$2.5 million on pollution control. Employment at the plant is expected to rise to 360 from 230 by mid-1981.

J.A. Marcel Crête has been appointed Chief Justice of the Quebec Court of Appeal. He replaces G. Edouard Rinfret who served as Chief Justice since his appointment in 1977.

Potash Corporation of Saskatchewan has started construction of a \$1.3-million potassium sulphate plant at its Cory mine to test a new production method using sodium sulphate. David Dombowsky, company president, said he expects a commer-

cial plant, capable of producing 200,000 tons a year of potassium sulphate, to be in operation within three years. Potassium sulphate is used to make fertilizer for chlorine-sensitive crops such as citrus fruits and tobacco.

The Federal Government has signed agreements with the Province of Quebec, the Cree Regional Board of Health and the Kativik Health and Social Services Council. The five agreements, involving federal expenditures of \$908,000, will ensure the delivery of health care services and programs to the Cree and Inuit people in the James Bay communities of Poste-de-la-Baleine, Mistassini, Povungnituk, Akulivik, Inukjuak and Sugluk through the use of the health system of the Quebec Department of Social Affairs. The agreements are a mechanism to ease the transition until such time as the Cree Board and the Kativik Council assume the takeover of the entire responsibility of health services for their people in the area.

Air Canada reported profits of \$55.4 million last year, a 17 per cent increase over 1978, according to Claude Taylor, president. For a second consecutive year the airline paid a \$13.2-million dividend to the Federal Government, the Crown company's only shareholder. The airline carried 12.8 million passengers last year and 158,950 tons of cargo.

The Canada Cup hockey tournament, scheduled for this September, has been cancelled because a large number of National Hockey League players decided that they could not support the event with a Soviet representative competing, Alan Eagleson, chief international negotiator for Hockey Canada announced recently. "The players were agreed that the sacrifice (Canadian) amateur athletes have been forced to accept because of a government decision is a sacrifice professional hockey players can make without government interference," he said.

The Manitoba agricultural department will spend an estimated \$33.9 million in 1980-81, a \$3.7-million increase over last year's spending. The bulk of spending will be in four specific areas - livestock management and production, market development, Agri-Water resource management, and 4-H programming and extension services. Initiatives will be taken to stimulate development and growth of the livestock sector. The province will work with the Federal Government to try to expand and refine national stabilization programs.