

# Canada Weekly

Ottawa  
Canada

Volume 12, No. 45  
December 12, 1984

**Innovative designs and service tied to success of Canadian firm, 1**

**Peace prize for Pierre Trudeau, 3**

**Software spells success for shuttle, 3**

**Public Archives expands international role, 4**

**Meeting of first ministers, 4**

**World's longest submarine cable links Canada with regions in Pacific Ocean, 5**

**Taste of victory savoured by Canadian chefs, 6**

**News of the arts — exhibition, 7**

**News briefs, 8**

**Heading for soccer fame, 8**

## **Innovative designs and service tied to success of Canadian firm**

Ceeco Machinery Manufacturing Limited of Concord, Ontario, is a company that meets customer demands by designing, manufacturing and marketing wire and cable machinery specifically dedicated to each individual customer's needs.

This innovative, service-oriented firm was founded by Andre Varga in the late 1960s. During his experience in the wire and cable manufacturing industry, he found that most of the equipment needed by the industry required considerable modification. It was proving inefficient and, from a design point of view, obsolete.

### **Equipment classification**

Ceeco's equipment can be classified into four general types: wire drawing equipment to make close tolerance, fine wire from copper or aluminum rod; stranding equipment to twist or wind many fine wires into a large diameter but still flexible strand; cables or closers which can combine several insulated strands into

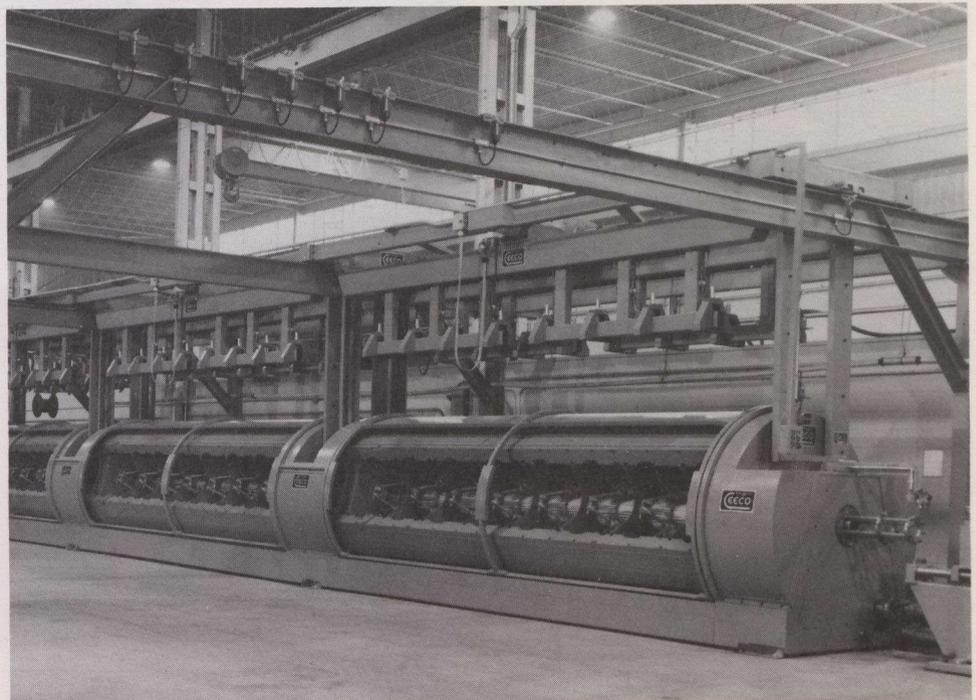
a single, large multi-element cable for electrical use, or which can form a single, massive steel cable several inches in diameter for use in towing very large objects like ships or oil rigs; and armouring machines which apply a flexible metal sleeve around a finished electrical cable for protection against mechanical damage.

### **Complete package**

The company was designed to provide a complete manufacturing capacity. From the initial concept to the finished product, all the work is done in one place. Sales, design and manufacturing functions are closely inter-related and mutually supportive.

A staff of engineers examines a customer firm's requirements and proposes a solution. The concept is then turned into a workable prototype by a design team.

One example of the company's successful, innovative designs is the Orbistrand system. Orbistrand is a rigid cage strander. The key to its high-



*The 88-bobbin Orbistrand system that can load and unload in less than five minutes.*



External Affairs  
Canada

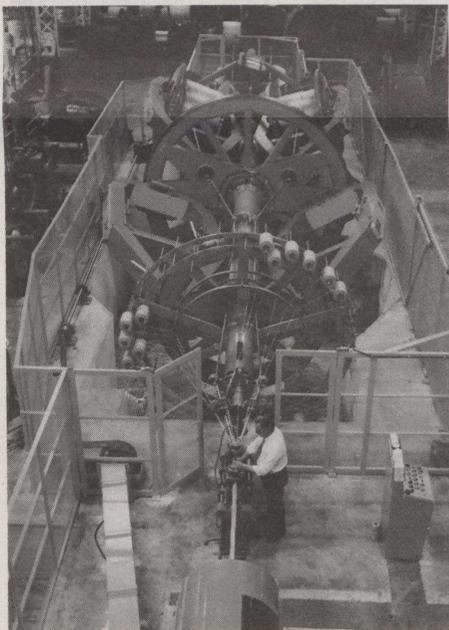
Affaires extérieures  
Canada

speed performance is that the bobbin does not rotate. Previously, conventional rigid cage stranders were limited by the tension fluctuations of the heavy bobbin rotating under high centrifugal force conditions.

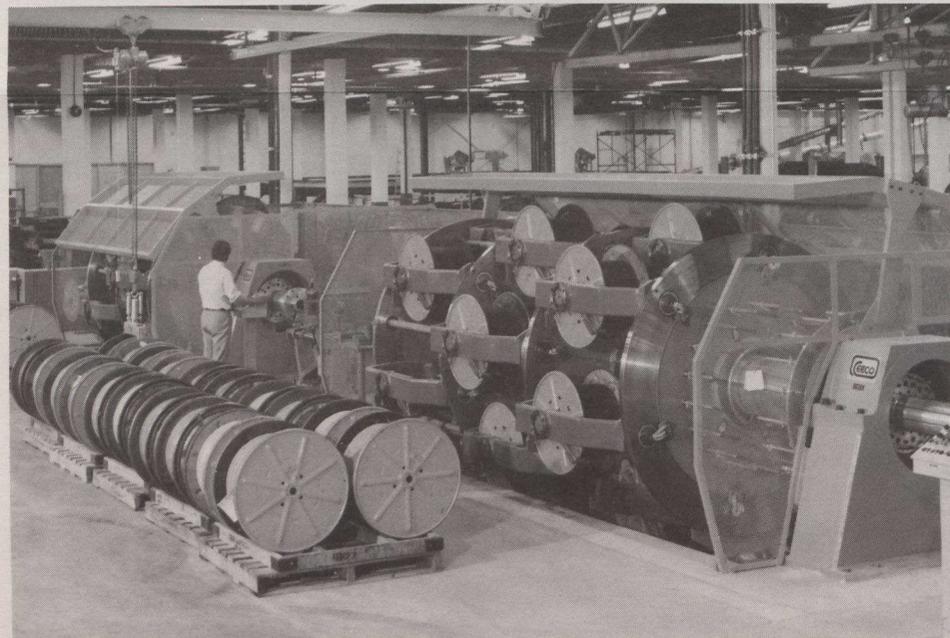
Customers continue to find uses for the principle of the non-rotating bobbin, outside the initial objectives, which enhanced its appeal even further.

#### Expansion of markets

After the company's early success in Canada, the growing market for its products in the Third World countries



*A five-bobbin planetary cage section with individual rotating payoff that can produce an assembly with six principal elements.*



*Planetary strander/cabler designed to accommodate 30, 76-centimetre bobbins.*

became obvious. They were beginning to develop their industries and the necessary electrical power generation and transmission services.

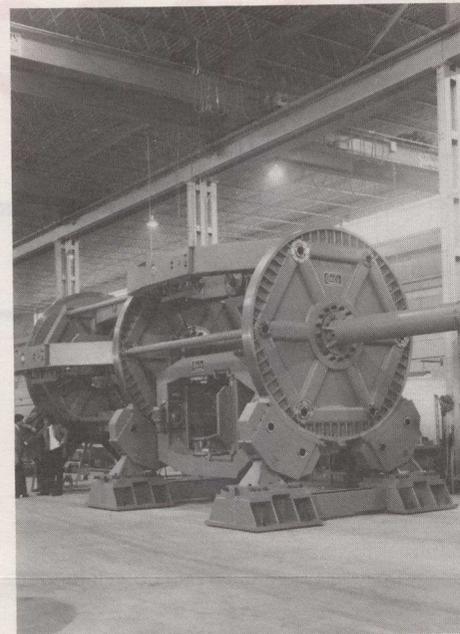
In order to spread design and development costs over a wider geographical base, speed delivery and service time and overcome the high tariff barriers in some countries, Ceeco began to establish operations outside Canada.

The company became sole owner of the Syncro Machine Company in the United States which simultaneously provided a manufacturing base in that country and added wire drawing systems to the product line. Interests were acquired in companies in Brazil and Mexico and a sales and marketing centre, Wicama Aachen, was established to serve Europe, Africa and Asia. Today, 95 per cent of Ceeco's customers are outside Canada and sales volumes have climbed to four times the level of 1975.

#### Over-all operation

Each company within the Ceeco group operates on a business plan and is monitored continuously to ensure that its objectives and performance are consistent with the over-all goals of the group. This entails a co-ordinated approach to research and development and a common manufacturing policy. All members of the group are capable of manufacturing a broad line of equipment and the over-all production program is decided on the basis of productivity and delivery requirements.

Manpower is another area which has been carefully rationalized. Within individual



*Heavy duty rope closer with reel for 50-tonne capacity.*

manufacturing plants each machinist has been trained to operate several machine centres, so one person can achieve optimum production each day. This provides an edge in international competition and means that, despite the cyclical nature of the capital goods industry, Ceeco's manpower remains relatively constant. People are moved to where the work is.

#### Production balance

A careful balance is sought in the combination of manufacturing existing products and developing new designs. The high overhead costs of new product development preclude devoting too much effort and expenditure at any one time to new designs for which the basic parameters are unknown. Similarly, limited manufacturing capability is not concentrated on any one machine, no matter how successful it has proven.

Over the past decade the requirement for customers for the provision of additional engineering expertise, beyond the supply of equipment has increased dramatically. This change has opened a whole new market for Ceeco in offering turn-key systems for contractors constructing major facilities.

Ceeco has received assistance from the government for research and development and today is in the forefront of the technology in rigid frame stranders and large closers.

*Further information can be obtained from Ceeco Machinery Manufacturing Limited, 65 Basaltic Road, Concord, Ontario, L4K 1G4. (From Canada Commerce, August 1984.)*

## Peace prize for Pierre Trudeau

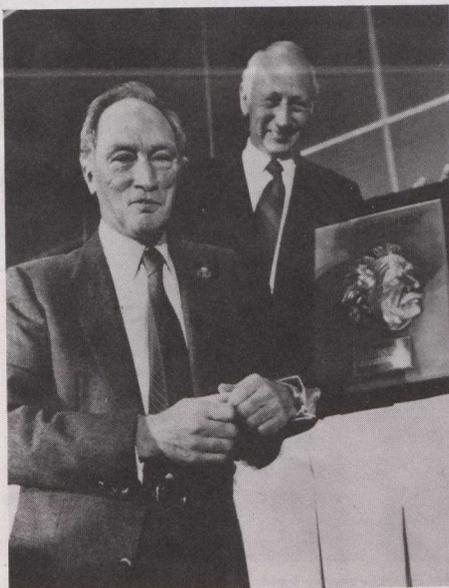
Former Prime Minister Pierre Trudeau, named the 1984 peace laureate by the Albert Einstein Peace Prize Foundation, was presented with the foundation's \$50 000 international peace prize on November 13.

The Einstein Foundation, set up in 1979, awards a peace prize annually to show that individuals can and do make a difference to world peace.

In his acceptance speech, Mr. Trudeau renewed his plea for better East-West relations and urged world leaders to pursue the "politics of peace" more vigorously.

One of Mr. Trudeau's principal suggestions called for the North Atlantic Treaty Organization (NATO) to be transformed "into a vital political alliance, as had been intended in the beginning".

If NATO wants to show its desire for peace and its political maturity, Mr. Trudeau said, the organization should: adopt a policy prohibiting the first use of nuclear weapons, once NATO and the Soviet-dominated Warsaw Pact reduce their forces to 900 000 troops each; urge those negotiating a balanced reduction in West-East forces to respond more constructively to Soviet proposals made last year; get its nuclear force members to sit down for five-power nuclear summit talks sponsored by the United Nations; ban testing and deployment of anti-satellite systems designed to operate at high altitude; and announce a temporary moratorium on the deployment of intermediate nuclear force weapons in Europe, making it clear the Soviets are expected to respond in kind and resume negotiations.



Pierre Trudeau with Einstein Peace Prize and foundation chairman, Norman Cousins.

## Software spells success for shuttle

The software program that was used by payload engineers at the Johnson Space Centre in Houston to plan payload operations during the October 5-13 United States space shuttle mission that included Canada's first astronaut, Marc Garneau, was developed by UX Software Inc. of Toronto, Ontario.

It was the first time a microcomputer and its associated software program was used at mission control to manage important experiments and the firm is credited with the successful outcome of many of the complex experiments conducted during the mission.

### Special requirements

The UX-Basic software program developed by the Canadian firm was selected by the National Aeronautics and Space Administration (NASA) for its programs and they had to be designed to handle the unique requirements of the eight-day mission of *Challenger*.

The particular micro used by NASA's payload engineers, the MC-500 supermicro, was developed by Masscomp Corp. of Westford, Massachusetts. It is capable of data acquisition and control, high speed computation and analysis, and communications and graphics.

Maurice Kennedy, head of the attached payload operations at the Johnson Space Centre, said the system performed flawlessly during the flight and this mission was one of the few times that "we had no hardware or software problems with this or any other computer critical to the success of a shuttle mission". He further stated that "the UX and Masscomp systems were a key element to the success of this mission".

### New technology

The microcomputer and software program were also the first use of Unix technology by NASA for spacecraft operations. Unix is an operating system for micro- and minicomputers originally developed by the Bell Laboratories of American Telephone and Telegraph Co. of New York.

UX Software of Toronto is a software house specializing in Unix programming languages for scientific and commercial applications. The company was started in December 1983 by president Frank Hsu and research and development vice-president Thomas Brand to market the UX-Basic program, developed originally for NASA and Masscomp.

The advantages of the software is that

it is a sophisticated C language package that controls all the programs and input/output at high speeds. Because the system language is translated into Basic, payload engineers can program their computer with relative ease.

"That alone is a departure for mission control specialists because all other engineers program their systems with Fortran language," said Mr. Kennedy.

### Important for experiments

NASA's UX-Basic program developed by UX Software was used on the mission to control and manage four important experiments: the Shuttle Imaging Radar (SIR-B) package, the Large Format Camera, the Measurement of Air Pollution from Satellites (MAPS) package and Feature Identification and Location Experiments.

The computer program had 14 000 lines of code that were used to manage more than 6 000 files of data variables.

### Two functions

The software program involved two basic functions. First the program generated all the commands and instructions that were transmitted by satellite to the personal computers aboard the space shuttle to operate complicated experiment payloads and integrated the commands from the different programs for each experiment into one steady stream. It then acquired and processed all the data received from the experiment packages and put them into the appropriate files throughout the flight.

As one experiment alone could have as many as 6 000 commands that must be sent to the shuttle's computers and payload specialists, this number translates into 50 pages of computer script to be processed on each day of the mission.

### Saving of work and time

Many of the tasks performed on the system were previously done manually. Some of the programs were reduced to a running time of eight minutes, compared with 20 minutes on other systems.

"We had a number of terminals and operators to split up the jobs. One operator was responsible for running the terminal that executes the command program that transmits the instructions to the shuttle. Another person programmed the commands for the next day's operations when the crew was asleep and, all the time, data was being acquired," said Mr. Kennedy.

---

## Public Archives expands international role

Until 1968, the Public Archives of Canada (PAC) had very little involvement at the international level. Now, every division of the PAC and many staff members participate on international committees, present papers or attend conferences abroad. The PAC has increased its reputation internationally because of its achievements in various fields. In records management, the PAC is considered by many as having the most efficient system. Another area of achievement is conservation. The PAC was the first archival institution to use the mass deacidification of paper and the videodisc.

The PAC's expansion at the international level has been led, in large part, by Dr. Wilfred I. Smith, dominion archivist since 1968 and secretary-general of the International Council on Archives. In an article in the September-October 1984 issue of *The Archivist*, Dr. Smith, who is about to retire after 34 years with the PAC, outlined the growth and development of international activities at the Archives.

The following are excerpts from the article:

...For more than a century, PAC staff has been engaged in acquiring from Britain and France copies of archival material relating to Canada. This activity, focused on the London and Paris offices, still continues and has been extended recently to Spain, Italy and other countries.

With the exception of the foreign acquisition program, international activities are a comparatively recent aspect of PAC functions....

### Important organizations

The first and most prominent organization involving the PAC is the International Council on Archives (ICA). The dominion archivist attended the first ICA Congress in Paris in 1950 and most of the subsequent congresses, which are held every four years, as well as the ICA Round Tables, which from 1954 have been held annually....

Since 1968 PAC participation in ICA has steadily increased. This year the staff involved includes the dominion archivist as secretary general, the assistant dominion archivist as editor of *CAD News* and others as members of committees on reprography, automation, literature and art, and working groups on records management, audio-visual archives and architectural records.

PAC was host to an ICA Round Table Conference in 1974, it will host meetings of the Executive Committee and the Automation Committee in 1985, and it will invite ICA to hold its 1992 Congress in Canada.

Memberships in other international organizations reflect the wide range of archival collections at PAC that has developed as a result of the concept of total archives. These organizations include three that together cover the mandate of PAC's film, television and sound archives, three related to microfilm, others concerning EDP, maps, pictures, photographs and still others....

The assistant dominion archivist is chairman of the Archives Committee of the Pan American Institute on Geography and



Dr. Wilfred I. Smith

History, which is of a regional nature. PAC is also assisting this year with the founding of the Commonwealth Archivists Association.

### Cultural agreements

In the last decade or so, the PAC has negotiated cultural agreements with several countries. Probably the most active has been that with France, and the most recent is that with the Republic of China.

Visitors from abroad are in several categories. There are those who come to take PAC courses in records management, archives administration or micrographics. These candidates are usually from developing countries in Africa, Asia, South America or the Caribbean and are expected on their return to establish similar services in their countries. Other visitors come for instructional visits to learn about aspects of PAC operations, either specific areas such as conservation, reprography and records management, or particular archival collections, such as machine readable archives or film archives....

The visits of PAC members to other countries vary in nature from attendance at special meetings where information or

advice is required such as the short conferences in Jamaica in 1965, Mexico in 1975 and Pakistan in 1980, to extensive visits to advise on archival development, such as in Australia in 1973 and New Zealand in 1978. There is also a special type of visit known as a mission, such as those sponsored by UNESCO to Upper Volta, Burma, Latin America, West Africa and other places.

The PAC will probably continue to play an active role in international archival affairs because of its acquisitions program, the professional interchange between the archivists of its national collections and the corresponding international associations, the interest of developing countries in obtaining information and of developed countries in sharing expertise. The PAC is recognized as the leader in several areas, including records management; new archival media such as computer and film, television and sound records; technological developments such as mass deacidification and videodisc; and relations with the public through research services and facilities or through exhibitions and other diffusion programs....

---

## Meeting of first ministers

Prime Minister Brian Mulroney met with Canada's ten provincial premiers in November at his Meech Lake retreat in Quebec and initiated what many of them called "a new era of federal-provincial co-operation".

The first ministers agreed to hold a two-day meeting on February 14-15 in Regina, Saskatchewan focusing on issues of economic development. Mr. Mulroney expected job creation to be a main topic of discussion at the meeting, along with ways of increasing investment, trade and improving Canada's competitive position in the world marketplace.

The two-day economic conference in February will be the first time such talks will be held outside Ottawa.

Prince Edward Island Premier James Lee, spokesman for the premiers, said the conference would be followed by an economic summit of labour, business and other community leaders with the federal government.

The first ministers will then reconvene for another one-day round of talks, following which Finance Minister Michael Wilson will introduce his first budget in April.

Prior to the Regina meeting, the 11 industry and trade ministers and the 11 finance ministers will meet in January to prepare the agenda for the talks.

Mr. Lee said that the 11 first ministers had agreed that following the Regina meeting, a first ministers' conference on the economy will become an annual event.

## World's longest submarine cable links Canada with regions in Pacific Ocean

Canada, Hawaii, Fiji, Norfolk Island in the South Pacific Ocean, Australia and New Zealand were officially linked on November 7 with the inauguration of the world's longest submarine cable. The cable was opened for commercial service between the countries on October 1.

The 15 000-kilometre ANZCAN undersea cable, one of the largest telecommunications projects of its kind, is at present capable of carrying 1 380 simultaneous telephone conversations on the one copper and steel conductor. This is made possible by using a technique known as "multiplexing" which enables more than one signal to be carried on the same transmission path.

In a few years from now, as the demand for circuits increases, the terminal multiplex equipment will be augmented and the system will then carry nearly 2 000 conversations. If still more capacity is needed, another technology, "circuit multiplication equipment", can be added, increasing the capacity to nearly 4 000 conversations.

### Major contributor

The ANZCAN cable is a \$500-million facility, owned and operated by a consortium of 22 telecommunications carriers including Teleglobe Canada, which is the second largest investor in the system

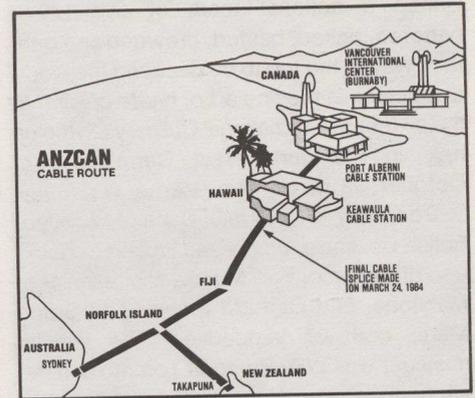
with a 13 per cent interest. Canada's contribution includes some \$20 million for processed copper, polyethylene, steel and multiplex equipment for direct use in the system and about \$40 million for indirect offsets such as high technology equipment, manufactured materials and semi-processed materials.

The new cable replaces the old Commonwealth cable. It has been in the planning stages since 1978, and is expected to play a major role in expanding the range and quantity of international telecommunication services to countries in the Pacific region.

### Increased capacity

Some 40 million calls were carried by the older COMPAC cable in the 20-year period from 1963-1983. This works out to 6 000 calls per day or four calls a minute. The ANZCAN cable is expected to handle about 129 000 calls per day or 90 calls per minute.

The cable system is powered at every land terminal station. In between these stations, "repeaters" are used to keep the signal up to its proper strength and specifications. Each repeater is housed in a torpedo-like casing and joined to the cable approximately every 7.2 nautical miles. An "equalizer" was also used while laying the cable for any final adjustments necessary



Artist's drawing of the ANZCAN submarine cable route.

to make sure the signal is just right. In all, the ANZCAN system has 1 124 repeaters and 75 equalizers.

The cable and the repeaters have been engineered to work, undisturbed on the seabed, for 25 years. They are not expected to corrode or break down.

While maintenance of a routine nature will not be required, any unforeseen difficulties will be handled by the maintenance authority for the system. The ANZCAN partners have appointed Teleglobe Canada and the Australian, Fijian and New Zealand cable administrations as the members of the authority.

Inauguration ceremonies were held simultaneously in Vancouver, Fiji, Australia, New Zealand and England. Queen Elizabeth II gave a televised inaugural message and Canada's Minister of State for Science and Technology Tom Siddon and Australian Minister of Communications Michael Duffy spoke together in a ceremonial telephone call.

### Canadian launch

The Canadian ceremony took place in Teleglobe Canada's new Vancouver International Centre in Burnaby, British Columbia.

The centre is linked to the Port Alberni Cable Station, the Canadian landing point of the ANZCAN cable on Vancouver Island, by a microwave network.

Speaking at the inaugural ceremony, Teleglobe Canada President Jean-Claude Delorme pointed out that "the ANZCAN project has been a huge collaborative effort benefiting Canada in many ways. Besides providing improved telecommunications capacity with countries in the Pacific region where traffic is growing at a rate of about 8 per cent per year, ANZCAN has either directly or indirectly provided Canadian industry with some \$60 million worth of business."



Queen Elizabeth II accepts a piece of cable presented to her by the chairman of the ANZCAN Management Committee, Derek Rose of New Zealand, after the inauguration ceremonies of the longest underwater cable.

Canapress

## Taste of victory savoured by Canadian chefs

Canada's national team of five chefs battered, baked, basted, browned and beat their way to the top to be declared the world champions in the fine art of *haute cuisine* at the sixteenth international Culinary Olympics held in Frankfurt, West Germany from October 12 to 18, this year.

The team, led by Henri Dane of Nanaimo, British Columbia, comprised Hubert Scheck, also of Nanaimo, Toni Murakami of Winnipeg, Manitoba, and Gerhard Pichler and Bruno Marti, both of Vancouver. The logistic manager was Willy Brand of Toronto and the kitchen manager Hans Meier of Charlottetown, Prince Edward Island.

The national team was selected by the Canadian Federation of Chefs.

Earning three perfect scores in hot kitchen, hot platters presented cold, and show platters, Canada won top honours over 27 competing countries.

"I'm happy for Canada that we've shown the world we can be the best," said manager Henri Dane. "Every Canadian should be proud of our achievement and of our Canadian cuisine," he said.

Several Canadian teams — the national team, five regional teams and one student team — competed at the games. They were selected through regional competition and all members of the sponsoring Canadian Federation of Chefs de Cuisine (CFCC). The five student team members were selected from some 100 students from five major culinary colleges, who had competed in April 1983 in Canada's first National Culinary Competition for Students.

In the world championships, each national

team developed a menu with ten items, two of which were chosen by the judges for the final competition. The chefs had to prepare 100 of both dishes and sell them as fast as possible.

Competition at the world championships was in six categories — entrées, hot dinners, cold dinners, buffets, pastries and desserts. Judging was done by an international panel of judges, all recognized master chefs, who rated nutrition and the meal itself, up to 12 points; preparation, including cleanliness, speed and efficiency, 10 points; presentation, 14 points; price, value or cost, up to 40 points; plus extra merits for dishes never before submitted.

### Winning dishes

The artistically garnished winning recipes that won the championship for the team from Canada were stuffed boneless duck with native Canadian wild berries and mushrooms, and a seafood combination of northern pike mousse with scallops, abalone and shrimp.

Canada's national team won ten gold medals, one grand gold and the overall championship. Regional teams from Quebec, Ontario, Manitoba and Alberta won 22 gold, two silver, one bronze and three grand gold medals.

After their return to Canada, the team was recognized for its outstanding service to Canada's tourist industry and the members were awarded Canadian Tourism Medallions. At a special ceremony in Ottawa, Minister of State for Tourism Thomas McMillan said "the team focused worldwide attention on Canada as a tourism destination".

### One of the winning recipes

#### Stuffed duck with wild mushrooms and berries

- 1 duck, 5 lbs (2.3 kg)\*
- 1 duck liver
- 1 c (250 mL) chicken stock
- 2 tbsp (30 mL) shallots, finely chopped
- 3 tbsp (45 mL) butter
- 1/3 c (85 mL) Madeira
- Salt, pepper, thyme, rosemary
- 4 slices white bread
- 2/3 c (165 mL) whipping cream
- 4 oz (125 mL) oyster mushrooms
- 4 oz (125 mL) pine mushrooms
- 4 oz (125 mL) small chanterelles
- 4 oz (125 mL) small morels
- 2 oz (60 mL) wild gooseberries
- 2 oz (60 mL) cranberries
- 2 oz (60 mL) red currants
- 2 oz (60 mL) Saskatoon berries

Debone duck, keeping the entire breast in one whole piece. Cover duck carcass with water and simmer for an hour to make a stock. Simmer leg meat and liver gently in chicken stock, then cut into small cubes.

Sauté 1 tbsp (15 mL) finely chopped shallots with poached liver and meat in butter until slightly browned. Add madeira to pan over low heat and stir to scrape up all the pan juices. Season with salt, pepper, thyme and rosemary. Refrigerate.

Remove crusts from bread, cut into cubes and soak in cream. Combine liver, leg meat, shallots and soaked bread and mix lightly.

Lay out the duck breast and gently pound into a fairly flat large square. Spread mixture over centre of meat. Fold duck breast over into an even roll. Wrap carefully in cheese cloth or a clean tea towel, secure ends, and poach in the duck stock for 30 minutes. Cool 15 minutes and remove cheese cloth.

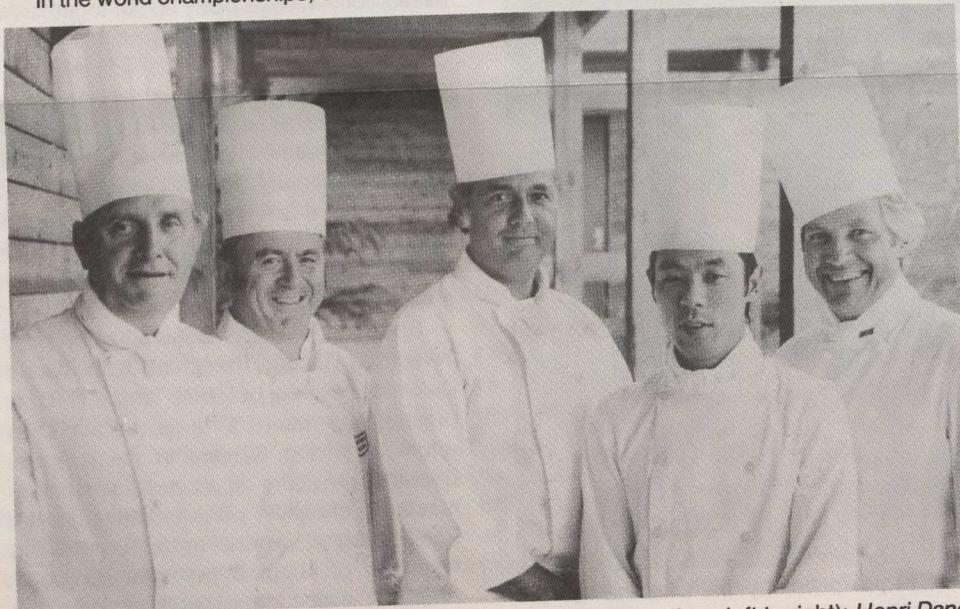
Bake in 325°F (190°C) oven for 25 minutes until browned, turning broiler on if necessary.

Sauté remaining shallots and mushrooms in 1 tbsp (15 mL) butter. Season to taste.

Before serving, add the gooseberries, cranberries, red currants and Saskatoon berries.

Reduce poaching stock to about a cup. Prior to serving add three ounces (90 mL) butter, season to taste and serve with duck.

\* NOTE — Recipe was given in imperial measure and metric amounts are estimated.



Canada's top winners at the 1984 world Culinary Olympics are (from left to right): Henri Dane, Hubert Scheck, Gerhard Pichler, Takasli (Toni) Murakami and Bruno Marti.

## Multi-panel works featured in exhibition

An exhibition, *Jack Shadbolt: Act of Painting*, which focuses on the large multi-panelled works produced by the artist during the past 12 years, is currently being held at the Vancouver Art Gallery in Vancouver, British Columbia.



Siwik Productions

*Jack Shadbolt at the opening of the first retrospective of his large-scale works painted during the past 12 years.*

The exhibition, comprising 23 major works, represents the first retrospective view of his large scale series of this period in a single exhibition.

The works were assembled by Vancouver Art Gallery curator Scott Watson from public and private collections and include such

works as: *Hornby Suite (Homage to Emily Carr)* (1968-69), 15 panels, charcoal on paper; *The Chilkoot Experience* (1971), 30 panels, acrylic on watercolour paper; *India Suite* (1976), 20 panels, charcoal on watercolour board; *Summer Suite* (1979), 20 panels, acrylic on paper; *Butterfly Transformation Theme* (1981), six panels, acrylic on canvas; and *Hill Fire* (1984), three panels, acrylic on canvas.

### Nature and ritual explored

"Shadbolt's energetic and expressive paintings deal with the forces of nature, ritual and sexuality," said Mr. Watson. "An admirer of Emily Carr, whom he knew in his youth, he has carried on a tradition of modern *avant garde* painting, in an effort to understand his West Coast biological and anthropological roots," he said.

In *Butterfly Transformation Theme*, 1981, Mr. Shadbolt uses a motif that often appears in his work. Butterflies are a symbol of the soul for him and he turns them into gigantic solid beasts. They enter the world tattooed, decorated and painted, and represent the artist's modern longing for an authentic experience of being which is unmediated by culture.

According to Scott Watson, *India Suite*, 1976, and *Coast Indian Suite*, 1976, are more literal transcriptions of the high art of exotic, non-Western peoples in which the statement seems to be about the "natural" correspondence between these arts and nature. "As a Western man, deeply alienated from the other of nature and just as deeply

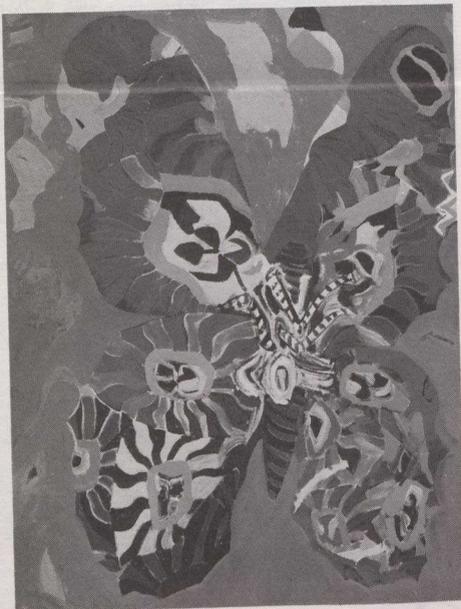


*One of the 20 panels in Summer Suite, 1979. A characteristic work of Jack Shadbolt's, where the sense of agitation appears aggressive and raw.*

fascinated by it, Shadbolt, like Emily Carr, would appear to believe that the highly sophisticated arts of the Northwest Coast have an *organic*, relationship to the world. This organic relationship is something both artists constantly struggle to recapture for the tradition of modern art," he wrote in the catalogue accompanying the exhibition.

### Long, distinguished career

The exhibition was also designed as a celebration of Jack Shadbolt's long career as "British Columbia's most celebrated artist," said Mr. Watson. "Not only has Jack Shadbolt distinguished himself as artist,



*A series from the six panels in the Butterfly Transformation Theme, 1981. The butterfly is a motif common to Jack Shadbolt's work. This series is painted in vivid acrylic colours on canvas. Each panel measures 152.4 x 132.1 centimetres.*

teacher and author, he has consistently championed and helped foster the experimental in art," he said.

Jack Shadbolt has lived in British Columbia since he was a child. He began his career as a teacher and participated in the first Vancouver School of Art camp on Hornby Island with Jock Macdonald.

During the Thirties, Jack Shadbolt was influenced by surrealism and the Mexican and American muralists and he developed an interest in architecture. In the late 1940s he came in contact with the work of the abstract expressionists in New York. His work became involved with nature in the early 1950s.

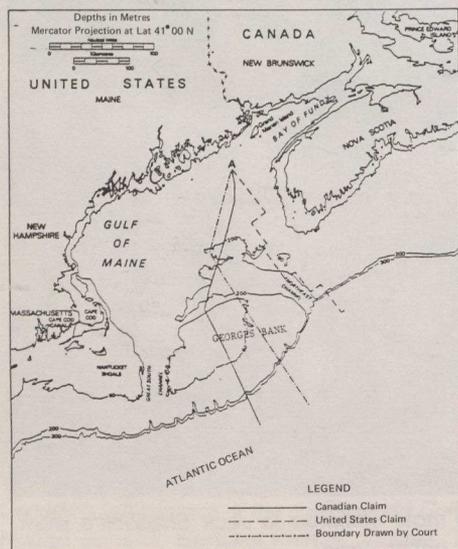
He travelled to the Mediterranean twice and, as a consequence, introduced sharp, bright colour into his palette. During the late Fifties his method developed in what he described as the "act of painting".

In the Sixties there were important mural commissions. He began the program at Emma Lake and was one of the founders of Intermedia, in Vancouver. In the Seventies he started making his large serial works and triptychs.

Throughout his career he has had many solo exhibitions as well as being involved in numerous group exhibitions in Canada and in many countries throughout the world. Jack Shadbolt has also been the subject of many articles and books.

*Jack Shadbolt: Act of Painting* was financially assisted by the Canada Council and by the government of British Columbia. The exhibition continues through January 2, 1985.

**Corrigendum:** Unfortunately the map that accompanied the item "Canada-US boundary established in the Gulf of Maine" in Volume 12, No. 40, p. 3, was inaccurate in its representation of Georges Bank. The correct map is published below.



## News briefs

**Statistics Canada** has released a new publication, *Family Expenditure in Canada, 1982*, which outlines the expenditures of families including income, family size and tenure living in the country from 1978 to 1982. According to the publication, the average total expenditure by families and people living alone rose 45 per cent from \$18 728 to \$27 062. Food, shelter, clothing and transportation accounted for 51 per cent of spending in 1982. This percentage varied from 69 per cent for families and unattached individuals with an income under \$10 000, to 42 per cent for those receiving \$50 000 or more.

**The Export Development Corporation (EDC)** has approved export insurance, guarantee and financing transactions supporting potential export sales of \$346.1 million (US) to nine countries. The transactions involve sales of generators, ancillary equipment, bridge cranes and services; flight simulators; truck, technical assistance services; ambulances; firefighting vehicles, spares and related equipment; earth station equipment and services; helicopter engines; nuclear valves; breeding cattle; off-highway trucks, and digital telecommunications equipment and related engineering services, including installation. The commercial contracts have not as yet been finalized.

**Manitoba Premier Howard Pawley** recently visited Asia where initial agreement was reached with both Chinese and Indian governments on the potential for joint cooperation — either on an investment or guaranteed contract basis — that could mean the establishment of a \$500 million Canamax potash mining operation near Russell in the province. The potash discussions will be followed up by a number of detailed joint studies to be completed in June 1985. Discussions with Asian officials included hydro-electric opportunities, market potential in telecommunications services and food-processing technology.

**Canada's three largest domestic automobile makers** sold 28 per cent more cars and trucks in the 1984 model year, which ended in September, than they did a year earlier. General Motors of Canada Limited of Oshawa, Ontario, Ford Motor Company of Oakville, Ontario, and Chrysler Canada Limited of Windsor, Ontario, sold a combined 923 120 vehicles in the 1984 model year, compared with 722 312 the previous year.

**Kathy Ross, 27, of Burlington, Ontario** captured the over-all title in Mistral-class sailing on the Mediterranean in October.

In three years, she had mastered the five events that take place in world competition — triangle-course racing, marathon, slalom, free style and "fun" boards. The fun board involves tricks and wave jumping, the most attractive part of the sport for spectators. Another Canadian, Richard Myerscough of Vancouver, took the men's over-all crown. Sailboarding, also known as windsurfing, involves all the principles of conventional sailing, but requires no crew other than the participant.

## Heading for soccer fame



*Angelo Salvati of Ottawa, Ontario shows how he impressed the judges at the National Soccer Skills Competition at Vancouver's BC Place last September. Angelo, 12, won two of six categories, including the head juggling contest in which he bounced a soccer ball off his head 141 times. In the juggling competition, he managed to kick the ball up in the air 468 consecutive times before it finally fell to the ground. The other skills tested were dribbling, shooting, running and passing.*

Canada Weekly is published by the Cultural and Public Information Bureau, 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, Carole Stelmack.

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

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

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

**Canada**

ISSN 0384-2312