September/October 1983

ZEPHYR

PORT METEOROLOGICAL OFFICE
BUREAU MÉTÉOROLOGIQUE PORTUAIRE
CANADA

A Day in the Life of a PMO

Environment Canada Environnement Canada

Canada

NEWS

Near-tragedy at Eureka station

Winter at the AES weather station at Eureka — 1150 km from the North Pole — with temperatures in the -40°C range is usually uneventful. But this February, when the British Solo North Pole Expedition arrived, tragedy almost occurred.

The expedition was a three-man team, David Hempleman-Adams, Giorgio Matranga and Steve Vincent. They planned to make a base camp at Eureka, then to trek 350 km north to Alert. From Alert, Hempleman-Adams was to set out alone, on foot, on the final 845 km to the Pole.

However, in Eureka, they decided to occupy an unheated building near the airstrip five km away to save expenses. They set up a gasoline powered generator at one end and some inadequate heaters elsewhere. They hung blankets over doorways to keep heat in and slept in sleeping bags.

AES loaned the expedition a walkie-talkie radio.

Trouble loomed when, several mornings in a row, Steve Vincent complained of feeling sick and dizzy. AES staffers suspected carbon monoxide poisoning.

A crisis occurred on the sixth day. At 8:45 a.m. weather shift man Verne Jarvi heard an "emergency, carbon monoxide poisoning" call over the radio. Another AES employee, Iain Ross, had gone to the post office so Mr. Jarvi went there. They agreed the call could only have come from the radio AES had loaned the expedition. Mr. Jarvi reported to Ken Wowryk, officer-in-charge of the weather station while Mr. Ross ran to the garage to start up a truck.

He drove to the expedition's camp and found Hempleman-Adams sick and weak. He had, however, managed to drag Steve Vincent, still in his sleeping bag, out to fresh air. Giorgio Matranga was not present, having slept on a couch in Eureka. The carbon monoxide was later traced to the generator.

Back at the weather station, Ken Wowryk had oxygen ready and it was immediately applied.

The medic at Alert over the phone advised continuation of oxygen. A radio teletype was sent to Jim Millar, OIC Resolute Bay, 500 km south of Eureka. The Resolute Bay nurse then called the doctor at Frobisher Bay, Baffin Island. The doctor relayed instructions to AES Eureka on how to handle extreme cranal pressure or convulsions. Electronic technician Jim Silverthorne took the patient's urinalysis and sent the results to the nurse at Resolute Bay.

After 2½ hours of oxygen treatment, Steve recovered full consciousness — but with a splitting headache — and his breathing returned to normal. Next morning, his headache had "subsided considerably", and he ate breakfast. He was then judged to be in good enough shape to return to the base camp.

Eureka weather station

Zephyr Highlights

Cover: This ship's wheel design is used to help identify the Port Meteorological Officers as they go about their duties on ships from all nations. Story on PMOs on pages 10 and 11.

Zephyr is a periodical publication for employees of the Atmospheric Environment Service, Environment Canada. It is produced for the Atmospheric Environment Service by the Information Directorate of Environment Canada.

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Environment Canada / Environnement Canada

Atmospheric Environment Service / Service de l'environnement atmosphérique

WANTED: Your contribution to Zephyr Breezes

See pages 8 and 9

Guérin recruits 57 francophones

For outstanding work in recruiting 57 francophone technicians in two years, Normand Guérin, OIC Montreal weather office, received a special performance award from ADMA, Jim Bruce.

At a Montreal ceremony, attended by friends and colleagues, Mr. Bruce said Mr. Guérin richly deserved the award. Signed by deputy minister Jacques Gérin, it was given under the Incentives Awards program.

Mr. Guérin had targeted more than 30 000 French speaking secondary school students outside Quebec and given detailed, lively presentations to some 3 000 of them on career prospects and all aspects of AES operations.

In 1980 the department had set a goal of recruiting 17 new francophone technicians by 1985. By visiting francophone schools from coast to coast,

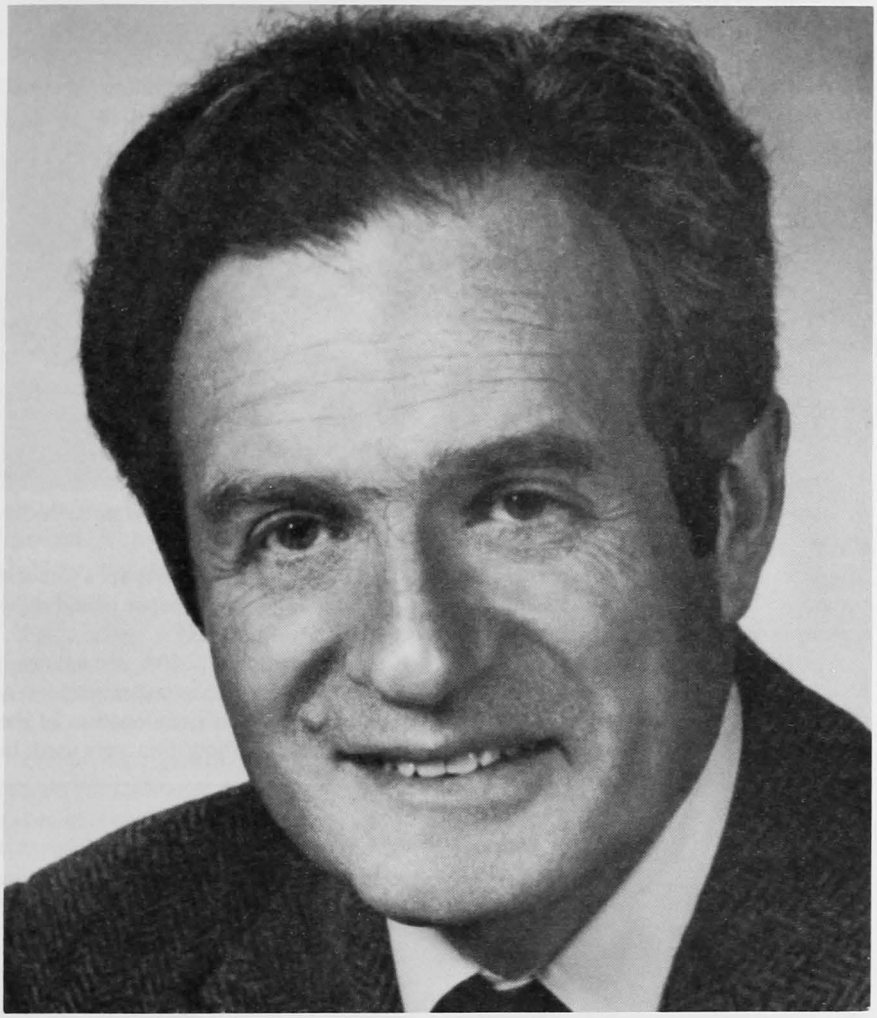
Normand Guérin

Mr. Guérin managed to recruit 16 new francophone technicians in one year. By the end of his second year he had generated 185 employment applications and recruited 57 new francophone technicians.

Mr. Guérin had also helped set up and promote Weatheradio Canada stations in Montreal in 1977 and in Edmonton in 1980. He participated in an AES bicultural exchange project in Edmonton.

He was praised for his work in popularizing meteorology on television, especially in a series: "La couleur du temps", shown on Montreal's Tele-Metropole station during 1978-79.

Charles L. Caccia appointed minister of Environment Canada



Hon. Charles L. Caccia was appointed Minister of the Environment on 19th August 1983. Formerly Minister of Labor, he replaces Hon. John Roberts who becomes Minister of Employment and Immigration.

The new Minister was born in Milan Italy in 1930, graduated in forestry economics at the University of Vienna. In 1955 he came to Canada and worked at the faculty of forestry at Toronto University, later formed his own consulting and publishing firm.

He was elected an alderman in Toronto in 1964 and 1966. Then he was elected to the House of Commons (Davenport) in 1968, 1972, 1974, 1979 and 1980. Mr. Caccia served actively on a variety of parliamentary committees and was parliamentary secretary to three cabinet ministers. He was twice elected chairman of the Canadian Parliamentary Helsinki Group.

In 1977 he introduced a bill to estabish a Canadian Solar Institute. A motion by Mr. Caccia passed unanimously in the House led to recycling of waste paper on Parliament Hill, another motion passed unanimously concerned incentives for passive solar energy designs and systems.

In 1979 Mr. Caccia was Environment critic in the Liberal opposition shadow cabinet.

The Minister is married, with a son and daughter.

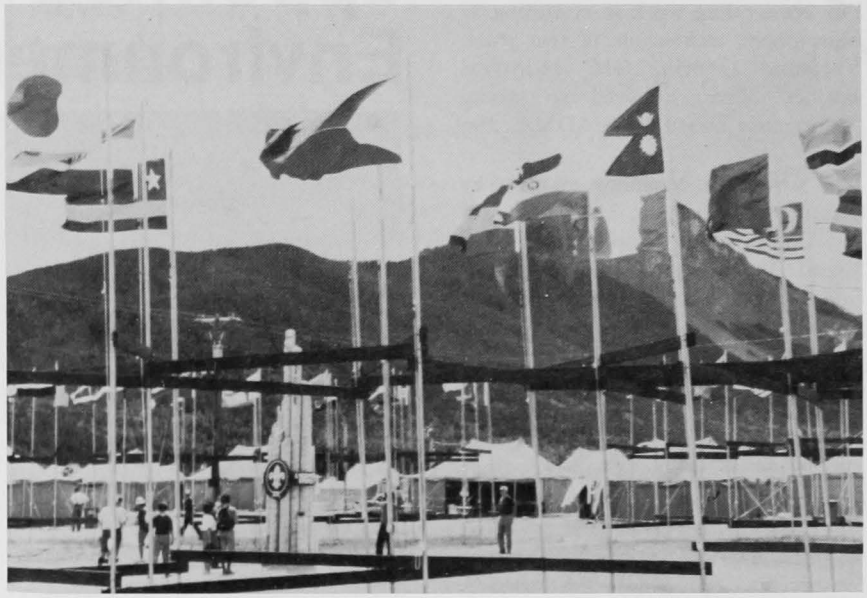
Good deeds for Scouts

Three technicians, Jim Steele and Gary Cormick from Calgary and Jim Ross from Edmonton, joined the 15th World Boy Scout Jamboree held near Kananaskis in the foothills of south-western Alberta in July. About 14 000 scouts and 2 000 volunteers from 109 countries attended the Jamboree.

Atmospheric Environment Service, western region, was invited to provide weather services and tours. A trailer was provided by the Calgary Amateur Radio Association and the regional mobile weather van was set up next to it. It was equipped with most meteorological instruments of a standard weather station. Also in the van was a minisonde receiver and recorder for recording temperature in the first few thousand metres of the atmosphere.

A computer terminal was supplied free to AES, and it was set up in the trailer along with weather displays. The computer was connected to the regional computer in Edmonton to obtain the current forecasts and weather bulletins.

Weatheradio reception proved to be good — an antenna on top of a 15-metre mast pulling in the signal from Calgary, more than 65 kilometres to the east.



Flags of many nations flew at Jamboree.

The first task was to prepare a forecast for the bilingual newspaper issued daily during the Jamboree.

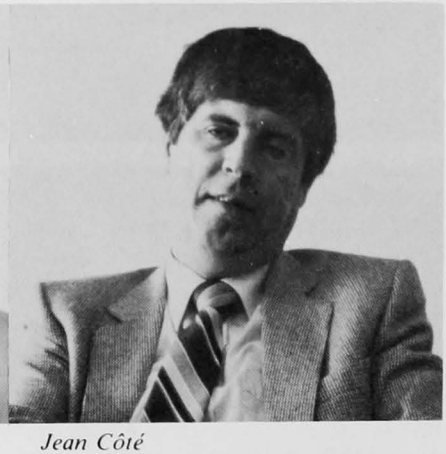
Approximately 1 500 scouts were shown through the weather station. A tour consisted of an explanation of the instruments, and how data were used. In the trailer they observed foreign weather reports. Usually, a report close to the home of those on tour would be found.

During the evening of the opening ceremonies, a heavy rainshower flooded the camp of about 500 scouts. But skies cleared with a full rainbow about 15 minutes before the opening ceremonies began.

The 1988 Olympics will see AES return to the Kananaskis area for downhill and cross-country ski events. The Jamboree helped testing communications equipment and the mobile weather van.

Field Services make changes

Herb B. Kruger



Jean Côté

Don K. Smith, director general, field services, announced staff changes effective in September when Mrs. Nancy Cutler completed her CAP assignment with field services.

Herb B. Kruger will become director of planning, a newly-defined position. Jean Côté will be responsible for administration and retain his title as Head, Office of the Director General (AFDH).

Both will report directly to Mr. Smith.

WMO to visit Canada in '84

Articles in next Zephyr issue

Help for personal problems

Safeguarding the employee's confidentiality in the program that deals with human problems has been strengthened with the addition of two professional counsellors in Toronto.

The Employee Assistance Program (EAP) is coordinated at Downsview by Mary Helen Kaizer, chief, classification, staff relations and pay. The usual system

Mary Helen Kaizer

in the department, with trained referral agents used as contacts for employees with problems, has been perceived as somewhat less than successful in Downsview and outside assistance is now being tried on an experimental basis.

Assistance can now be obtained from psychologist Dr. Charles Cooley, a specialist in employee counselling and psychologist graduate Anthea Stewart, an employee counsellor for 16 years.

The stress on confidentiality has been underlined with the availability of both these counsellors to employees directly — by phoning (416) 483-4313.

Regular sessions for assistance at Downsview are held every Thursday morning. But the locale of the sessions is changed each week, again to ensure confidentiality to the employee.

This professional counselling is also available for non-AES employees of Environment Canada in the Toronto area. AES employees elsewhere in Canada, who do not know of a local EAP should contact Miss Kaizer at (416) 667-4752.

Problems dealt with are those that affect the employee's personal well-being or ability to perform a job well. They may include marital or family difficulties, financial or legal problems, emotional problems and those caused by alcohol or drug abuse.

EAP offers a helping hand because personal problems can affect job performance or the morale of colleagues and the effectiveness of the department.

Employees generally initiate the request for assistance themselves. Supervisors may encourage use of the program but it is rarely effective unless the employee personally recognizes the need for help.

Counselling under the EAP is free and counsellors will try to steer employees to appropriate agencies that give service free or that are covered by health or other insurance.

Dr. Charles Cooley

Anthea Stewart

Snow conference record attendance

Attending Eastern Snow Conference were: Phillip Hansen, Ducks Unlimited (Pres. ESC) Hilda Snelling, USAF, Jean Louis Bisson, Hydro-Québec, Nebil Elhadi, N.B. Environment ministry, Barry Goodison, AES (editor, ESC).

"Snow and Man" was the theme of the 40th Eastern Snow Conference (ESC) held in Toronto in June, 1983. It was co-hosted by Environment Canada, Ontario Hydro and Ontario Ministry of Natural Resources.

The conference in the eastern United States and Canada is concerned with the origin, precipitation, accumulation, character, melt and runoff of snow from the viewpoint of meteorology, power generation, conservation, engineering, forestry and related fields.

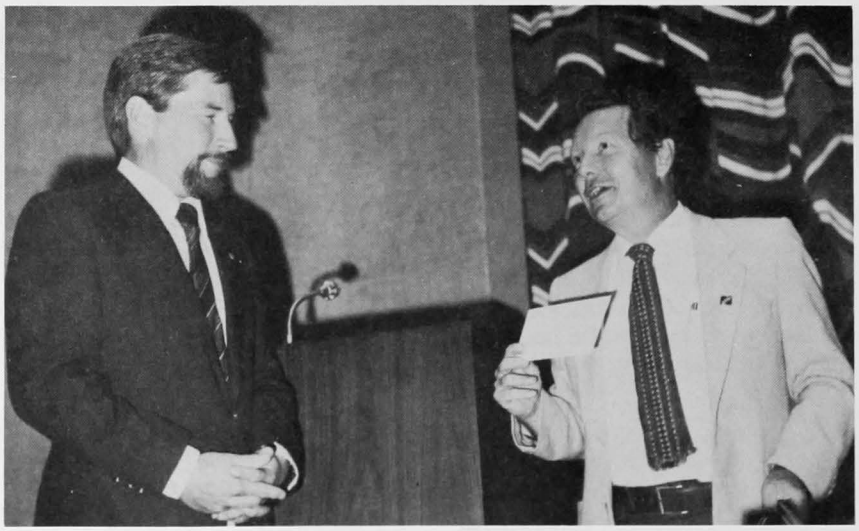
AES has been long associated with ESC. Barry Goodison is editor of proceedings and John Metcalfe a member of the equipment committee.

A record attendance with 106 registrants included 16 AES personnel. A technical tour of the Downsview facility was provided.

Papers covered many topics including, snowpack chemistry, lake ice cover, Arctic snowpack, weather modification for snowpack enhancement and the effects of snow cover patterns on winter resort operators. Subjects ranged from the theoretical aspects of snow physics, to the more practical aspects of highway snow removal.

AES papers included "A Preliminary Identification of Snow Cover Patterns and Risk Implications for Canadian Winter Resort Operators" by Ron Crowe; "Comparability of DCP Data with Standard Station Observations" by Dr. Goodison and John Metcalfe; and "Precipitation Measurement Comparisons in Northern Ontario" by Dave Carr.

The manufacturers' and publishers' display was organized by Mr. Metcalfe.



George Boer receives award from ADM Jim Bruce.

Award, cheque to George Boer for 9 years work

George Boer, chief of the numerical modeling division was given a departmental incentive award for developing an internationally recognized climate modeling and diagnostic system.

Presentation of the award, on September 13, was by ADM Jim Bruce at the Downsview auditorium before a large group of colleagues and friends. The award certificate was signed by Deputy Minister Jacques Gérin and was accompanied by a cheque.

Mr. Bruce commended him for applying leadership, extra effort, scientific skills and dedication.

With a team of six assistants, and over a period of nine years, Dr. Boer developed a climate modeling system that allows Canadian scientists to tackle problems such as the effects of human activity on climate and the question of climate prediction.

He obtained his Bachelor's degree from UBC, his Master's (Meteorology) from Toronto U and doctorate from Massachussets Institute of Technology. He first worked as a forecaster in 1963, became a research scientist in 1972, was named head of the modeling division in 1974.

In 1979 George Boer represented Canada on the first Global Atmospheric Research Program. In 1983 he was co-organizer of the Canadian Meteorological and Oceanographic Society conference, and won the CMOS president's prize.

CAPTEX tracks pollutants

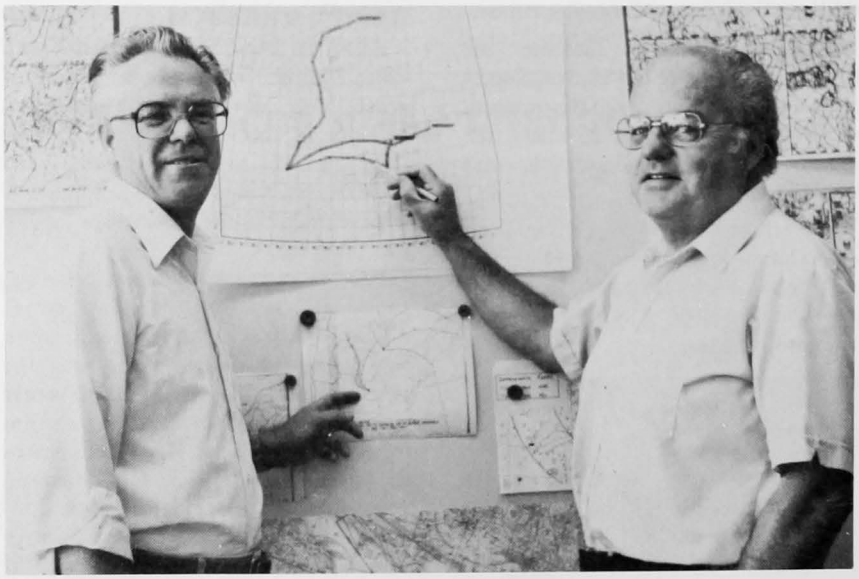
A six-week experiment to track the long distance transport of airborne pollutants from Canadian and United States sources started early in September.

Some 200 kilograms of an inert, colorless, odorless and non-toxic tracer gas (perfluoro-monomethyl-cyclohexane) were to be released on three occasions from Sudbury, Ontario and Dayton, Ohio. Releases were to be about one week apart, depending on weather conditions.

Seven aircraft and 85 ground sampling stations would track the tracer for 1 000 kilometres across eastern North America.

The release sites are near two main sources of airborne pollution and are thought to contribute significantly to acid rain.

CAPTEX (Cross-Appalacian Tracer Experiment) is expected to cost $2 to $3 million. Canada will contribute about 10 percent.



Marvin Olson and Peter Summers with map showing expected track of tracer gas.

Canadian agencies participating include Environment Canada, the Ontario and Quebec environment ministries and the National Research Council. In the United States the Department of Energy, The National Oceanic and Atmospheric Administration, the Environmental Protection Agency and the Electric Power Research Institute are involved.

Celestial bodies' knowledge useful

by Marc A. Gélinas

Operational employees at weather offices receive many inquiries about celestial phenomena, and should have some knowledge of astronomy to provide satisfactory answers.

Suppose it is 4:00 a.m. and a local policeman calls you at the weather office and says, "We've had several reports of a strange light in the sky. Do you know what it is?" You explain that it is Venus rising, and because Venus is the brightest heavenly body after the moon, it can be an impressive sight. Your caller thanks you and hangs up.

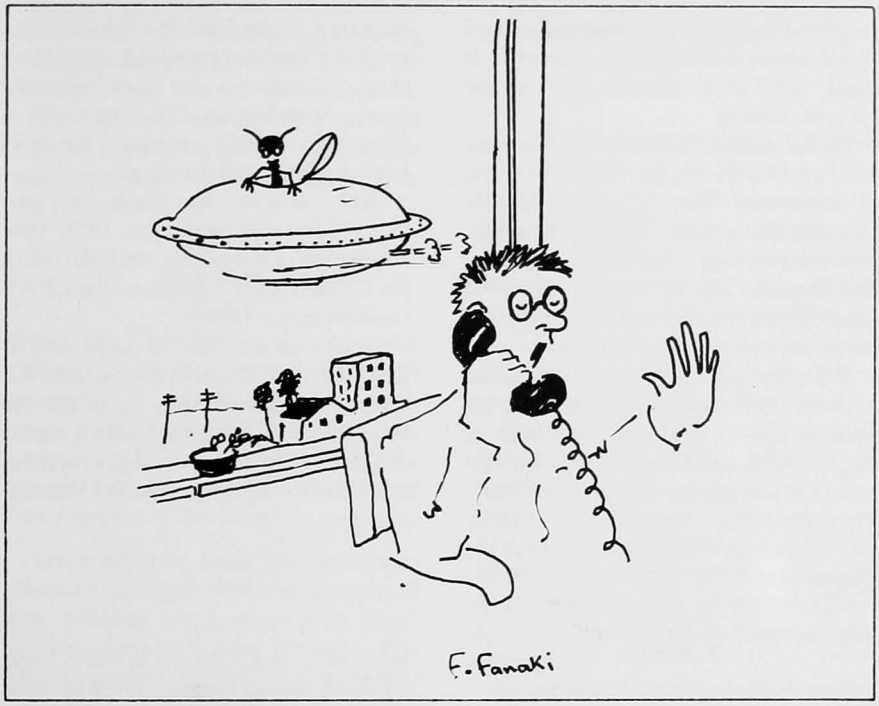
Many weather technicians have had to explain that Venus is not an unidentified flying object (UFO), but sometimes people don't believe it. "No," they say, "it's too bright. It must be something else!" Well, the fact is, Venus *is* very bright.

One night in 1975 Jupiter and Venus, the two brightest stars, were together in the sky, only a fraction of a degree apart. A thin bank of altocumulus cloud was passing in front of them, making them dim alternately and sometimes causing one or both to disappear for short periods. From the ground, they looked like two pulsing, flashing lights, one white (Venus), the other yellowish (Jupiter). The result was general commotion along the north shore of the St. Lawrence.

Even air-traffic controllers in Baie-Comeau and Sept-Iles phoned in about these lights. They were visible more than 160 kilometres away. Luckily, I was able to reassure the controllers and the numerous other clients who called the weather office.

However, local papers broke out in headlines about UFOs visiting the north shore, while the local UFO "specialists" speculated that the UFOs were interested in the local hydroelectric complex. Only Environment Canada provided the astronomical explanation.

Weather offices provide other astronomical information. To practice their religion, Moslems have to know during which periods the moon will be visible at certain hours. We also get inquiries concerning meteor showers (the brightest ones usually turn into UFOs before anyone calls AES).



"No, Sir. I assure you it is not a UFO."

There are many other examples of the weather-office providing astronomical information, but weather technicians receive little training for this. They often have to acquire the knowledge on their own. The *Observer's Handbook* published by the Royal Astronomical Society of Canada is available in many weather offices, and technicians who deal with the public should be familiar with and understand it.

All AES presentation staff should acquire some knowledge of celestial mechanics, so they can know and understand what they observe in the sky. They should know why Venus is visible just before sunrise at some times, just after sunset at others, but never in the middle of the night.

Academic programs often neglect astronomy, and people with college diplomas, or even university degrees, may be completely unable to answer such questions.

Weather-office staff should, at least, read an introductory book on astronomy. A knowledge of the sky as observed with the naked eye can greatly help them to reassure the public about many celestial phenomena.

Hailey's Comet, when it returns, will no doubt have AES telephones ringing. The comet may be seen with the naked eye from around the end of 1985 to the end of 1986, but because it will be passing close to the sun, visibility will not be very good. It will not be as spectacular as in 1910, and many people may not be able to see it at all.

People do identify AES with what they see in the sky. There is no official agency responsible for providing the public with information on celestial phenomena, and the very few astronomical observatories in Canada are not equipped to handle large numbers of inquiries.

Hence, it is often up to the weather offices to cope with such inquiries as accurately as possible. To do this successfully, weather technicians need to improve their knowledge of astronomy and sources of astronomical information.

Marc Gélinas is a presentation technician at the Montreal/Dorval weather office.

Zephyr Breezes * * *

With issue two of the new Zephyr Breezes column now before you, we'd like to say a word about contributions. The style is light, brief and cheerful, the content people-oriented.

So far many of the items have centred around the AES Downsview headquarters. This is understandable because that's where Zephyr is edited. But from now on, even if we have to turn the Breezes fan up to gale force to emphasize our point, we're putting heavy stress on regional contributions.

Whether you work in the regional director's office or in a remote upper air station, sooner or later you'll hear of some colorful incident or human interest story. We hope you'll write it, phone it direct, or radiosonde it to us Pronto (For phone number and address, please see page two).

★ ★ ★ ★

Thirty years after its original transmission from Montreal, the first Canadian Weatherfax chart was re-transmitted from the Canadian Meteorological Centre (CMC). In the Downsview auditorium among AES personnel and retirees, many remembered the first broadcast of the 300 mb analysis from the then Central Analysis Office (CAO).

ADMA Jim Bruce noted that he was a forecaster at the CAO in 1953 and often worked all night to produce a satisfactory chart. Computers are now infinitely faster. Attending parallel ceremonies in Montreal, CMC director François Lemire telephoned greetings.

Each decade has had its own innovation: Weatherfax in 1953; then acquisition of computers, the G20 (1963), the CYBER CDS (1973) and the CRAY supercomputer (1983).

Present at Downsview were AFDG Don Smith; ACDG Jim McCulloch; Art Childs, communications head for the Met Branch in 1953; Paul Johns, retired director of Field Meteorological systems and Bob Dodds, former chief of Weather Services.

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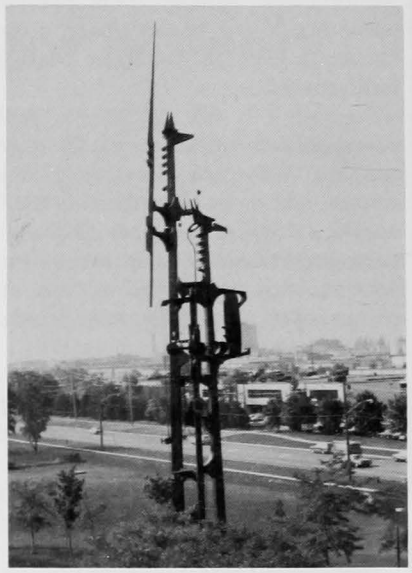


Downsview weather monster

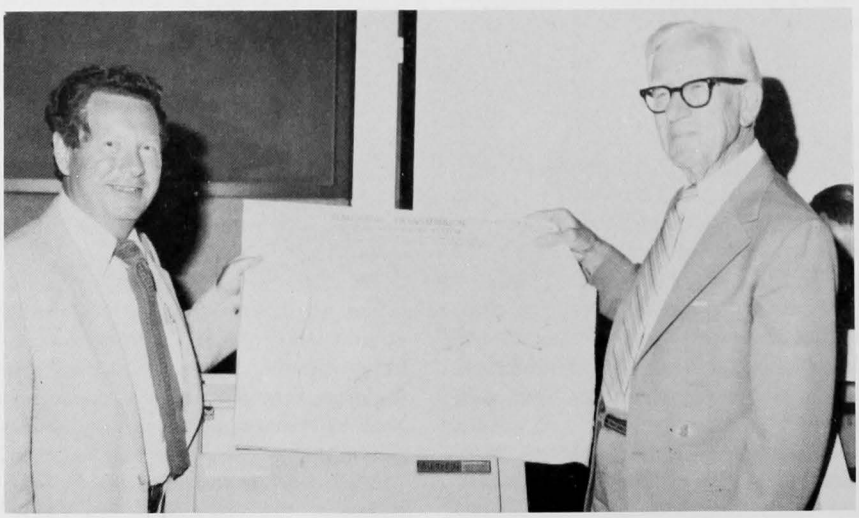
What is the best sculpture in North York, Canada's fourth largest city? Why none other than the huge clanking steel "weather monster" designed for AES by Ontario sculptor, Ron Baird. It stands on guard beside the Downsview headquarters building, a semi-abstract representation of all weather activities.

The accolade was bestowed by Toronto Star writer, Jim Byers, in an article assessing the highlights and lowlights of this important part of metropolitan Toronto. Despite his praise, Mr. Byers describes the sculpture as "perhaps, the work of some mad scientist who went wild with Paul Bunyan's erector set."

★ ★ ★ ★

When the luxury liner *Island Princess* (alias *Love Boat* to millions of TV viewers) won its eighth annual AES award for voluntary weather observations, Pacific region director Jack Mathieson and other AES staff were invited on board for a banquet.

A Vancouver newspaper described the menu: "After hors d'oeuvres, lunch proper began with a giant-sized shrimp cocktail large enough for a meal in itself. Next came double beef consommé with sherry or dumplings Parisienne. Then there was stuffed Alaskan king salmon en croute with steamed potatoes and mousseline sauce. A rainbow sherbert cleared the palate; then sauted tournedos of beef Rossini followed, served with glazed carrots, cauliflower, brocolli and Duchesse potatoes. After a salad, diners stared in disbelieve at the high spun-sugar crowns of gateau Saint Honoré. Even those who resisted and ordered cheese and fruit, were finally undone



Jim Bruce, ADM with Art Childs at Weatherfax ceremony.

Zephyr Breezes * * *

when waiters brought round trays of bonbons and chocolates. Wine was served throughout the meal as well as liqueurs, and espresso coffee."

The article concluded "Our recent interludes of sun may be due to the fact that the weathermen haven't yet made it back to their offices to arrange for their customary rain."

★ ★ ★ ★

More about Baden-Soellingen, mentioned in the last Breezes column. On September 1 this Canadian Forces Base in southern Germany celebrated its 30th anniversary and this included the Canadian Forces Weather Office, there from the start.

The current AES secondments there are Major Mike Hawkes and Captains Bob Howell, Rick Power, Rick Wagner and Glenn Vickers. Brian Veale in the Department of National Defence's Ottawa Met office has been collecting names of previous B.S. weather personnel so that they can be formally recorded.

By the way, our original correspondent, Capt. Doris Siemieniuk has now been transferred back to Cornwall, Ont.

★ ★ ★ ★

Humorist Alex Mair in the provincial magazine *Environment Views* chides Albertans for strange attitudes toward weather. He asks why a family spends $800 plus for a "two-toned self defrosting freezer which for nine months of the year will keep their leftover sauerkraut at a temperature 21 degrees *warmer* than the outside air!" Their ultimate summer status symbol is a self-propelled lawn mower on which to sit and cut the grass.

"And it they can afford it, they pay $2500 to have this pleasure for six weeks every summer — and for the other 40 weeks they'll clear walks and driveways with a shovel bought for $7.98 in a sale."

An Albertan will stand beside his car on a bitterly cold -40°C February morning, and a force 4 gale blowing. The car windows are covered with frost. The block heater cord has unplugged during the night, the keyhole is frozen shut, the battery is dead and the tires are square.

Yet our boy answers the shouted greeting from his neighbor, who has just been transferred from B.C., saying, "Yes, but it's a dry cold."

★ ★ ★ ★

When Dr. Chung Yong Seung of Air Quality Research branch (Downsview) attended a special environment education conference in his native Korea (August 1-11), he received a handsome plaque of appreciation from the Office of Environment of the Republic of Korea.

Quite different from the certificates handed out in the West, the plaque is of fine polished black wood with inlaid mother-of-pearl Korean dragons. The citation praises Dr. Chung for his outstanding contribution to dissemination of knowledge and experience.

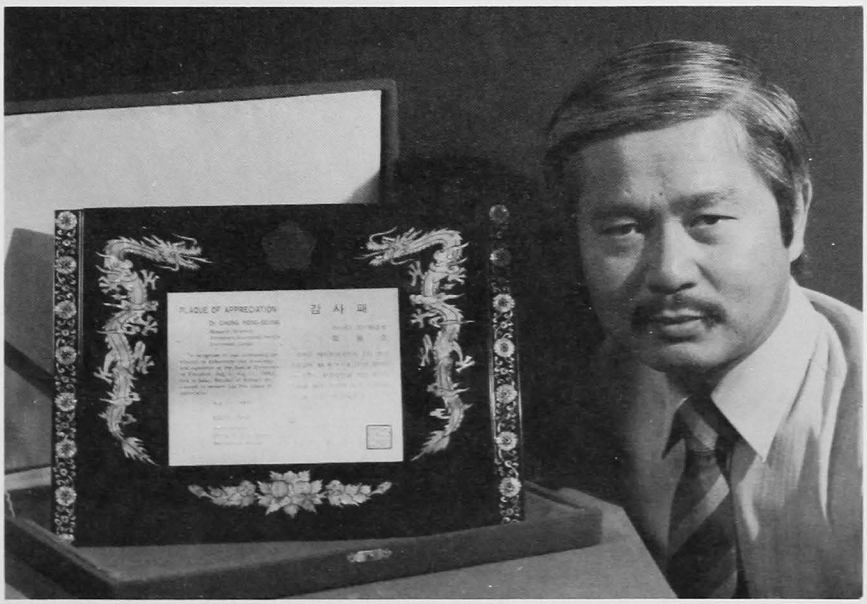
Dr. Chung, the lone AES representative at the conference lectured on air pollution meteorology and considers the plaque an exceptional honor. He left Korea to do research work in Canada some 15 years ago and has been with AES for 10 years.

★ ★ ★ ★

Any AES personnel who find themselves at loose ends in Washington, D.C., would find it very rewarding to visit the Smithsonian Institutions' comprehensive Air and Space Museum. Besides showing historical aircraft like the Wright Brothers' plane and Lindberg's "Spirit of St. Louis", as well as several actual mooncraft in operational mode, they let you touch a small piece of moon rock.

Weather service people will probably find the meteorological satellite section the most interesting part. Suspended from the ceiling is everything from TIROS I to the current updated GOES satellite, and many experimental models in between. They are all shapes and sizes from large cylinders to briefcase-sized oblongs.

In addition, there is a hugh display wheel showing how space and meteorology are becoming reunited. Telescopes were removed from weather station observatories early in the century. Your **Breezes** reporter saw all the above in air-conditioned comfort while the temperature outside was a sizzling 38°C.



Chung Yong Seung and Korean plaque.

A Day in the Life of:

A Port Meteorological Officer

Only seven Port Meteorological officers are employed by Environment Canada, so the intricacies of the job are little known to most AES staff. Images of fog-shrouded lighthouses and "ships that pass in the night" tend to give the occupation a romantic aura, but that is 99 percent illusion. This composite "Day in the Life", though hypothetical, tries to show ***realistically*** *how Canada's PMOs function from sea to sea.*

Vancouver's two PMOs plan the day carefully. The port is the busiest in tonnage in North America after New York. There are eight or nine ships to board that day for inspection, routine repair of weather instruments or initial contact with the captains and officers. There is a never-ending search to recruit new vessels to make volunteer weather observations at sea.

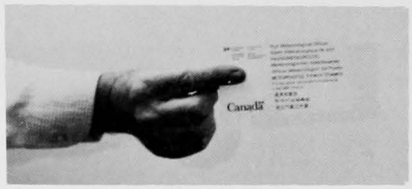
Soon after sunrise, one PMO drives down to the sulfur dock below Lion's Gate Bridge to visit a Liberian freighter. Wearing recently cleaned dark clothes, the PMO grimaces. The dock is dirty and the air full of sulfur and potash blown around by the wind. Both his clothes and his car will need cleaning again. But he is eager to recruit the freighter into the Voluntary Observing Ships program for Canada. This will be his last chance. The ship will leave Vancouver by sunset and may not return for months.

As he crosses the deck, he passes deck hands wearing life jackets in a fire drill, most of them staring at him, wondering who he is.

He finds the captain in his quarters and introduces himself. The captain's English is broken, but there is no real language problem. Among most of the foreign ships in the port, English is the lingua franca.

The PMO is given a mug of coffee and he gradually steers the conversation around to the purpose of his visit. Is there anything the PMO can do for the captain? Would he like the ship's barometer checked, a weather briefing, some maps or some weather satellite photos of cloud formations over the Pacific?

He hands the captain an auxiliary ship's code card with its explanation of the international meteorological code and a log book to record observations. The captain accepts the items and they shake hands.



Multilingual card

The same morning the other Vancouver PMO makes a dash for the automobile dock in New Westminster with its patchwork quilt of Toyotas, Hondas and Mazdas. He boards the big Japanese car carrier FRIENDSHIP and checks the equipment for the Automated Shipboard Aerological Program (ASAP) inside the large AES container on the top deck. Time is precious. The massive carrier only stays

Shipboard equipment

12 hours in port and everyone, including the Japanese ASAP technician, is in a hurry.

The visit to the car carrier is atypical. Unlike many other AES employees, PMOs have relatively little to do with high-tech equipment . . . at least for now. In another 5-10 years, however, the PMO's functions will probably be as automated as anyone else's.

ONTARIO

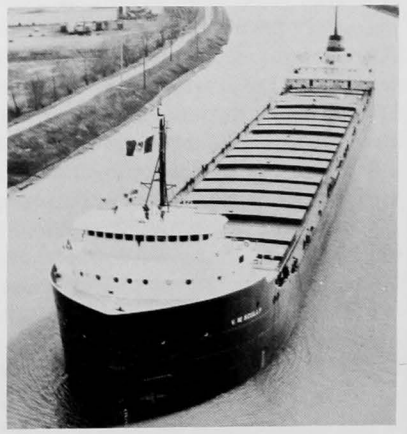
It's noon and one of the two southern Ontario-based PMOs is pleased to have completed a full morning's paper work. Administrative duties, not dock work, take up most of his time.

The phone rings. There is a breakdown of weather equipment at Great Duck Island Lighthouse on Georgian Bay. He calls the coast guard at Parry Sound to arrange for a helicopter, and drives to Parry Sound, 290 km north of Toronto. For the next day or so, his paperwork plans are shot.

At noon the other Ontario PMO leaves his Thorold office after performing preliminary work on an anemometer detector unit. At the Welland Canal, one of the busiest waterways in the Great Lakes system, he learns that the laker, CANADIAN PROGRESS will be in Number Four lock at 2 o'clock. It needs a visit.

The lock is lined with tourists staring down at an endlessly long laker, far below, which has just fitted itself neatly into the lock. The PMO strides along its length wearing a hard hat. Slowly the lock fills with water and the laker rises up between sheer walls of weatherworn cement.

When the ship's deck levels with the top of the lock wall, he steps on board and walks aft down the aisle between hatch covers and the rail, carefully



Laker negotiates canal.

avoiding taut cables. He opens a door, and climbs seven sets of stairs to the

Oceangoing vessel observes weather.

spotlessly clean wheelhouse. By now the ship is moving along the canal heading for the next lock.

The skipper stands at the wheel like an alert statue. The PMO deals with the mate. They have a long talk; the PMO goes outside, inspects the anemometer and marine thermometer screens, comes back inside, checks the weather observation log for errors. At the next lock, the PMO steps off the ship and heads back to his office. He still has time to finish fixing the anemometer unit.

QUEBEC

Meanwhile, late in the afternoon, a PMO is returning to Montreal from one of his frequent trips to Quebec City, nowadays a far busier port than Montreal. During his stay he visited several foreign ships after their long journey up the St. Lawrence estuary. He also visited the ice-breaker, CCGS PIERRE RADISSON being readied for a northern patrol.

Driving homeward he mentally rehearses the lecture on basic meteorology and weather observing, which he will deliver to the coast guard training institute at Rimouski during the following week.

HALIFAX

In Halifax just before suppertime, the PMO receives a call from a tanker. The barograph, installed by AES, has stopped drawing its customary air pressure graphs. He is asked to fix it while the giant vessel pauses on its journey from Venezuela to a Montreal refinery.

While performing this emergency task, he reflects on the antiquated shipboard weather instruments. He looks forward to the time, maybe a year from now, when automatic data collection platforms will be installed on some ships, at least on an experimental basis.

NEWFOUNDLAND

As the sun rises mistily over the surging Atlantic, the Newfoundland PMO is in a helicopter on his way to an oil rig 300 km out to sea. A slow, careful landing is made on the windswept platform.

The PMO makes a detailed inspection of all AES equipment and chats with the rig's paid weather observer concerning various problems encountered in the weather program. While there he will explain some basic meteorology to the rig's crew.

A sunbeam strokes the thermometer screen attached to the steel rail. Blue sky and bright sunshine on the horizon signal the start of a brand new day in the life of a Port Meteorological Officer.

Attending workshop last June were: Geoff Meek (PMO, Toronto) left, Bev Williams (PMO, Vancouver), Ron Miller (Downsview), Mike McNeil (PMO, St. John's), Rick Berry (Downsview), Ron Fordyce (PMO, Thorold, Ont.), Denis Blanchard (PMO, Montreal), Alex Gibb (PMO, Vancouver), George Payment (Downsview).

PMOs gather at workshop

Port meteorological officers held a workshop, June 14-16, 1983, at AES, Downsview. It gave the PMOs a rare opportunity to meet, discuss problems, and exchange ideas.

Attending were: Geoff Meek, Toronto; Alec Gibb and Bev Williams, Vancouver; Mike McNeil, Newfoundland; Ron Fordyce, Thorold, Ontario; and Dennis Blanchard, Montreal.

Also present were Rick Berry, head, network operations section who chaired the workshop, Linda Sarracini, observations systems division, who acted as secretary, and George Payment, marine meteorological officer.

Participants were welcomed by Phil Aber, director, field meteorological systems branch, and Ron Miller, chief, observational systems division. Mr. Aber discussed the roles of PMOs in advancement of automated shipboard devices.

The crowded agenda included:

- communication between PMOs
- reintroduction of Supplementary Ships Observing Program
- winter servicing of Great Lakes ships
- ship's inventory of AES equipment
- training
- making marine weather observing courses mandatory for government ships' officers
- difficulties encountered in the new common code
- annual requirements for marine stationary items
- recommendation to replace U2A anemometers on ships with the MK-1
- a seven-day barograph desired by ships officers
- a better criteria to determine regional responsibility of Canadian reporting ships.

Highly technical matters such as the Sonotek Remote Temperature system and the Viasala Anemometer were also discussed.

The last PMO workshop was in 1975. This year's was the fifth in the history of Canada's involvement in the international marine weather observing program. Another workshop in about two years time is planned.

Unusual summer during 1983

Though AES must decline credit for it the summer of '83 was nearly perfect — for the first time in about a decade — as warm, dry conditions from the Rockies to the St. Lawrence Valley provided great vacation weather.

And AES must firmly decline any credit for the cooler, rainy weather on the west coast, for the major forest fires in Quebec and for a lot of severe weather on the Prairies.

Mean temperatures on the southern Prairies were nearly 3°C warmer than usual. In some places 40°C were recorded; Winnipeg recorded a mean temperature of 20.6°C, its warmest summer ever. Cereal crop yields, however, were reduced by about 20 percent.

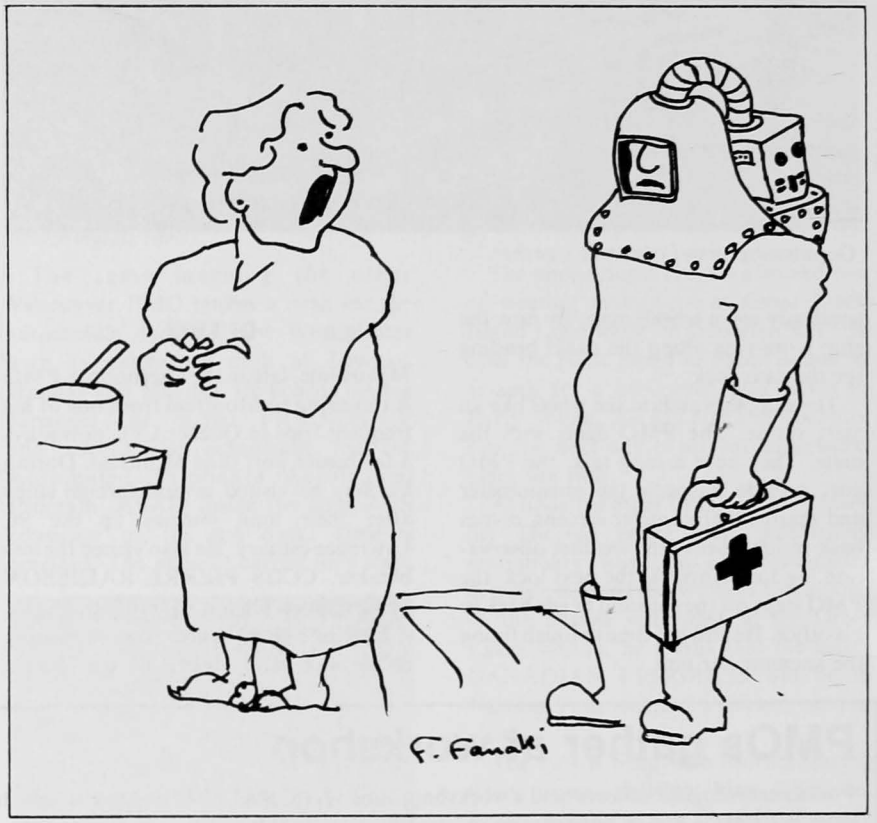
Ontario had temperatures about 2°C above average. In late July Thunder Bay recorded 40°C while Toronto had 35-36°C. Roads buckled, the humidex went to 42°C and energy for air conditioners increased consumption some 10 percent. Lake Ontario had a 9°C rise and this contributed to excessive bacteria and bans on Toronto bathing beaches. Record numbers flocked to national and provincial parks, to lakes and riverside resorts.

The June/July drought in Ontario stopped crop growth and reduced the corn harvest by 25 percent. Crops were eventually saved by the August rains. Haliburton had the driest summer in some 40 years.

Quebec suffered some of the worst forest fires in 50 years — 260 000 hectares burned in 1 284 outbreaks — 50 percent up on the last five years.

The Maritimes had slightly above average temperatures, especially in June. Heavy rain fell in July, particularly in Newfoundland.

There were 33 tornadoes, heavy rain/thunderstorms, hail or flash floods in the Prairies, causing tens of millions of dollars in damage. A major twister in Pennant, Sask. caused $5 million damage, killed many farm animals; flash floods drowned two people; in June a severe storm caused a woman to drown at the wheel of her car in Saskatoon.



"George, the pollution at the beach is not that bad."

B.C.'s Frazer Valley saw major mud slides, part of the Trans-Canada Highway was washed out; rail service was halted and one small town evacuated. Ten locations had record precipitation — one was seven times the average.

Climatologist Amir Shabbar says the causes are simple: a ridge of high pressure remained stationary over central North America; it produced generally dry and hot conditions while a low pressure system anchored off the west coast caused cool, damp conditions there.

Met stations safety training

As part of an accident prevention program, Diane Houle, director, industrial relations and safety, Environment Canada, took Pierre Rousseau, a Quebec City labor affairs officer, to inspect the AES weather station at Inoucdjouac (Port Harrison), Quebec, north of the 55th parallel. They wanted a better understanding of work done by electrical inspectors.

From Montreal, they flew to Great Whale. There, in snow blown by 50 kmph winds, they transferred to a Twin Otter. At Inoucdjouac, they were met by Luc Lamontagne, OIC, and Yves Belland, chief inspector of installations.

The inspection included the full meteorological complex, the hydrogen electroliser production building, the launch site for radio equipped weather sonde balloons, and the gas purification and scrubbing plant.

The visitors were escorted by Mrs. Lamontagne, Yves Belland, François and Mrs. Gélinas, and Grégoire Deschênes, to an Inuit co-operative. Daniel Harvey, aerological technician, took them by snowmobile to Harrison Island, in the Northwest Territories, over the endless white landscape, interrupted occasionally by outcroppings of rock.

Specialized training sessions for the inspection service and a general safety training program for all AES meteorological stations is now planned.

Obituary

J. Everett Parker stricken at work

Friends throughout AES will be saddened to learn of J. Everett Parker's death on August 23, 1983. Stricken at work, he died later that day at the hospital. He completed 32 years service and anticipated retirement in 1986.

A native of Campbellton, N.B. he joined the Service as a weather observer in 1951 and later served as a technician at Moncton, Goose Bay, Montreal (Dorval) and Toronto (Malton). From 1957 to 1962 he was a meteorological instructor at the DEW Line training school in Streator, Illinois.

In 1962, Ev, married with a daughter, returned to the Ottawa-based Air Services Training School to instruct in observing procedures. He became Officer-in-Charge at the Ottawa weather office in 1966. In 1968, he went to Toronto headquarters as a climatological services specialist.

In the Canadian Climate Centre he was responsible for administrative liaison between the Centre and personnel in the AES Regions doing similar work. He had many responsibilities regarding climate data and the information publication program. For the past two years, he was head of maintenance publications in the Data Acquisitions Services Branch. He had considerable expertise in the organization and administration of word processing systems.

He leaves his wife Peg, two sons and three daughters. Besides a busy family life, he was active in many community affairs, was District President of the Optimists Club.

"His passing was most untimely and his many friends in AES extend to his wife and children their sincere sympathy," said Morley Thomas. "He was a highly valued and capable employee."

STAFF CHANGES

Promotions/ Appointments

K. Chan (CH-2) Chemist, ARQA, Downsview.

N. Meadows (MT-7) Meteorologist, WAEML WC1, Edmonton.

G. Poulos (EG-3) Met. Tech. WS1, Sachs Harbour, N.W.T.

F.A. Richardson (EG-6) Industrial Investigation Tech. CCAI, Downsview.

R. Mawson (EG-6) Pres. Tech., WO4, Windsor, Ont.

P. Greenwood (EG-5) Reg. Met. Instructor, PAEOO, Vancouver.

M. Wharton (DA-PRO-2) Data Processor, ACPO, Downsview.

J.L. Le Blanc (EG-8) Sr. Instrument Aerological and Special Systems, TIEU, Cornwall, Ont.

A.E. Aldcroft (ENG-5) Head, Engineering Services, ACSL, Downsview.

A. Langlais (EG-3), U/A Tech., WS2, Frobisher Bay, N.W.T.

A.D. MacIver (EG-3) U/A Tech., WS1, Hall Beach, N.W.T.

A. Hunt (CS-3) Head, Training & Consulting, ACPT, Downsview.

G. Cross (CS-3) Head, Computer Operations, CIDO, Dorval, P.Q.

L. Veillette (CS-1) Prog. Scientist, CMCFT, Dorval, P.Q.

O. Kowal (EG-6) Met. Tech., ARQA, Downsview.

D. Etkin (MT-6) Meteorologist, ACET, Downsview.

STAFF CHANGES

A. O'Toole (MT-6) Meteorologist, ACET, Downsview.
W. Schmitke (EG-5) Met. Tech. OIC, WS2, Whitehorse, Y.T.
D. Dumaresq (EG-5) Ops/Pres. Tech., WAEMR, Edmonton.
D. Gosselin (MT-2) Meteorologist, QAEM, St-Laurent, P.Q.
D. Vigneux (MT-3) Meteorologist, QAEM, St-Laurent, P.Q.
J.P. Navarre (EG-1) Met. Tech., QAEOO, Dorval, P.Q.

Transfers

R. Jones (MT-6) Met. Supervisor, CMC, Dorval, P.Q.
T. Layes (EG-2) Met. Tech., WS3, Fort McMurray, Alta.
R. Lepine (EG-2) Met. Tech., WS3, Coronation, Alta.
P. Raczynski (EG-4) Met. Tech., WS2, Fort Smith, N.W.T.
L. Desjardins (MT-2) Meteorologist, PWC, Vancouver.
D. McCulloch (MT-3) Meteorologist, PWC, Vancouver.
G.A. Weaver (EG-6) Coordination and Developmt. Tech., ACGH, Downsview.
D. Reid (EG-6) Pres. Tech., WO4, Goose Nfld.
C. Brannen (EG-6) Pres. Tech., WO4, Goose, Nfld.
D. Owens (EG-6) Pres. Tech., WO1, Gander, Nfld.
A. George (EG-6) Pres. Tech., WO4, St. John's.
E. Crawshaw (EG-2) U/A Tech., WO4, Montreal/Mirabel P.Q.
R. Bédard (EG-2) Met. Tech., WS3, Ste-Agathe, P.Q.
Y. Héroux (EG-2) Met. Tech., WS3, Clyde River, N.W.T.
D.A. Henry (EG-2) Surface Obs., WO3, Resolute, N.W.T.
D. Lahn (EG-3) U/A Tech., WS2, Resolute, N.W.T.
M. Gillespie (EG-4) U/A Tech., WS2, Churchill, Man.
P. Barg (EG-5) Pres. Tech., WO4, Prince Albert, Sask.
D. Cowell (PC-3) Head, LRTAP Liaison Office, LLO/ADMA, Downsview.
B. Routledge (EG-3) Met. Tech., CCAH, Downsview.
J. How (EG-2) Met. Tech., WS3, Lytton, B.C.
R. Campbell (EG-1) Met. Tech., WS3, Cape St. James, B.C.
R. Bailey (MT-2) Meteorologist, CFB, Esquimalt, B.C.
A. Bodnaruk (EG-6) Met. Tech., WO4, Kamloops, B.C.
T.L. White (EG-7) Training Dev. Officer, ACGH, Downsview.
W. Romanko (EG-3) Met. Tech., WS2, Whitehorse, Y.T.
A. Drouin (EG-2) Met. Tech., QAEOO, Dorval, P.Q.
P. Dubreuil (MT-6) Meteorologist, QAES, St-Laurent, P.Q.
R. Gilbert (MT-6) Meteorologist, QAES, St-Laurent, P.Q.
P. Ducharme (MT-7) Meteorologist, QAES, St-Laurent, P.Q.
W.I. Higgs (EG-6) Weather Serv. Specialist, WO4, Kelowna, B.C.
F.N. Foster (EG-6) Weather Serv. Specialist, Victoria.
H. Auld (MT-3) Meteorologist, PWC, Vancouver.
M.F. Gauthier (MT-2) Dev. Meteorologist, PWC, Vancouver.
A. Schmiedel (EG-2) Met. Tech., WS3, Hope, B.C.
J. Derham-Reid (EG-2) Met. Tech., WS3, Vancouver Harbour.

Temporary or Acting Positions

R. Fleischmann (AS-3) Program Officer, LLO/ADMA, Downsview.
A.M. Purves (EG-10) A/Chief Tech. Services, ACSS, Downsview.
C. Labonne (AS-1) Admin. Officer, QAEM, St-Laurent, P.Q.
L. Sneidman (CS-1) Ops. Supp. Prog., CIDO, Dorval, P.Q.
E. Legault (DA-PRO-5) Data Processor Shift Coor., CIDO, Dorval, P.Q.
P. Arsenault (DA-PRO-5) Data Processor Shift Coor., CIDO, Dorval, P.Q.
D. Marchand (DA-PRO-5) Data Processor Shift Coor., CIDO, Dorval, P.Q.
B. MacLeod (CS-1) Ops. Sys. Prog., CIDS, Dorval, P.Q.
N. Allen (CM-5) Communicator, CMCFC, Dorval, P.Q.
R. Aubin (CS-1) Prog. Scientist, CMCFI, Dorval, P.Q.
M. Plante (CM-7) Chief Comm., CMCFC, Dorval, P.Q.
A. Panigas (CS-1) Systems Analyst, ARQT, Downsview.
B. Cahoon (MT-5) Senior Met., WAEMR, Edmonton.
W. Hartman (MT-6) Supervising Met., WAEMR, Edmonton.
R.B. Hall (ENG-4) Senior Elect. Engineer, ACSL/E, Downsview.
W.B. McNaughton (EG-8) Field Applications Consultant Mech., ACSL/I, Downsview.

Leave of Absence

K. Puckett, ARQA, Downsview. Development Leave — Scotland.
M.A. Crowell, ARDG, Downsview, Paris, France.
S. Jonvik, WO4, Prince George, B.C. Educational Leave — Simon Fraser.
O. Jacobsen, WO4, Vancouver. Educational Leave U. of Alberta.
M. Roch, PWC, Vancouver. Educational Leave.

Departures

R. Zurawski, WO4, Windsor, Ont.
F. Grywinski, CMC, Dorval, P.Q.
P. Blanchet, PWC, Vancouver.
D. Hagen, ACIR, Downsview.
C. Pilon, CCAA/Q, Downsview.
L. Methven, CCAA/Q, Downsview.
P. Chen, ACET, Downsview to SSD Ontario Region.
J. Alexander, ACET, Downsview to MOP Hull, Quebec.
G. Burke, WAEMR, Edmonton.
M.H. Morin, WS3, Ste Agathe, P.Q.
Y. Lebeau, QAEOO, Dorval, P.Q.
R. Samson, WS1, Kuujjuaq, P.Q.

Retirements

D. Kealy, ACSS, Downsview, June 1983.
J. Burns, ACSQ, Downsview, July 1983.
E.W. Brandon, SSD, Bedford, N.S. June 1983.
A.D. Dow, Data Acquisition, Bedford, N.S. June 1983.
O.J. Andres, ACGC, Downsview, August 1983.
M. Dzenick, WAED, Edmonton, August 1983.