Environment Canada Environnement Canada

Atmospheric Environment Service Service de l'environnement atmospherique

SEPTEMBER/OCTOBER 1988

AES Organizes "Conference of Conferences"

Based on an interview with Gordon McKay with comments by ADMA, Howard Ferguson

Two years of planning, led by AES, recently resulted in a landmark international conference. The World Conference on The Changing Atmosphere : Implications for Global Security (Toronto, June 27-30) attracted more than 300 delegates from 46 countries with over 200 media and was by all standards a major success.

The Conference discussed the broad range of socio-economic impacts associated with man-made changes to the chemistry of the atmosphere. It recommended specific national and international strategies and policy initiatives for dealing with the harmful effects of greenhouse warming, acid rain and the depletion of the ozone layer. Canada's lead questioned. Of course the Service had been involved in scientific conferences before, but the main objective of this Conference was to convince politicians and decision makers of the urgency of combatting major atmospheric threats. "AES rose to the occasion and proved that it could handle a World-class policy conference professionally and with resounding results", added Mr. McKay.

Mr. McKay says planning for the Conference drew in part on the work of the Brundtland Commission on Environment and Development. That Helped set the tone of the Conference and led to Mrs. Brundtland attending to deliver a stern warning about environmental threats to the planet being second only to nuclear war.

When the Brundtland Commission visited Canada in the spring of 1986, Environment



One of the main Conference "photo opportunities" took place at the Ozone Layer Protection display at the Metro Toronto Convention Centre. Left to right: Alex Chisholm, director general, Atmospheric Research Directorate, Norwegian prime minister Gro Harlem Brundtland, prime minister Brian Mulroney and Environment minister Tom McMillan.

in seeking solutions to these planetary threats and the role of Environment Canada received wide recognition in the media and elsewhere. But the key parts played by many AES staff, away from the glare of publicity, are not so well known.

According to Conference secretary, Gordon McKay, the ability of a scientific service like AES to organize a major policy conference was at first minister McMillan proposed to host a follow-up international meeting to discuss ways of improving forecasts of global change. An AES offer to assume the lead role in planning and implementing such a meeting was accepted and ADMA, Howard Ferguson, took on the responsibility of Conference director. The late Dianne McKay transferred from the Corporate Planning Group in Ottawa to become a special advisor to ADMA in Downsview. Over the ensuing months, several basic plans were developed and discussed with the minister and his staff. Advisory Committees at the Service, Departmental, Interdepartmental and International levels contributed their expense. Consultative meetings were held with the World Meteorological Organization (WMO), United Nations Environment Program (UNEP) and other international bodies.

Dianne McKay's illness and untimely death left a tremendous gap to be filled in the Secretariat. Gordon McKay, who was available at that time, joined the Secretariat under contract in the late spring of 1987.

The Beijer Institute of Sweden had planned two workshops to formulate responses to the

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greenhouse gas issue. As it became clear that strong linkages should be made to the Toronto Conference and to the Second World Climate Conference in 1990, ADMA was invited to join the Steering Committee for the Beijer Workshops. Several members of that Committee were also recruited to the Toronto Conference Statement Committee chaired by ADMA. Gordon McKay attended the first Beijer Workshop, held in Villach, Austria, in September, 1987. About 50 highlyqualified scientists from many countries put together a current consensus on the greenhouse gas problem. ADMA attended the follow-up workshop of senior policy advisors held in Bellagio, Italy, in November, 1987. The report of these workshops provided much of the scientific background and conceptual basis for many of the recommendations in the Toronto Conference Statement.

A final framework for the Toronto meeting was established in the Fall of 1987, encompassing local, dates and format. It was to be a four-day conference, which would include keynote speeches

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Toronado rips AES Research Station

A tornado badly damaged an AES Radiative Gases Site near Asquith, Sask., causing some \$43,000 in damages.

The incident occurred on July 14 during the evening when no one was around. The twister destroyed the computer and monitoring equipment



Badly damaged research trailer at Asquith, Sask.

used to detect ozone-layer depleting and greenhouse gases. It also ripped apart the walls of the trailor containing the equipment and destroyed some 30 metres of cable buried a metre underground.

The station is operated privately for AES under contract. The trailor and equipment are owned by AES. Staff spend roughly an hour a day on the site. The station is automatic the rest of the time.

The tornado also ripped up a schoolyard forming part of a daycare centre in Asquith and an empty government transport garage.

September 9, 1986 It last rained in Vancouver on July 17 breaking a 35-year old record for lack of precipitation. Vancouverites usually panic when they receive a week of sunshine, wondering if its ever going to rain again. Their prayers were answered — 0.2 mm of rain fell in Vancouver, the first moisture in 54 days.

Great success of native training scheme

All 11 trainees accepted last year for a joint national Environment Canada/Indian Affairs trainingon-the-job scheme have now graduated. A ceremony was held at the Transport Canada Training Institute (TCTI), Cornwall, Ont. on June 21 for the graduates who had spent about nine months working at weather offices in various regions or on training courses at TCTI and elsewhere.

Also attending the ceremony were Gordon Shimizu, acting assistant deputy minister, AES

and Peter Harrison, assistant deputy minister (Economic Development), Department of Indian and Northern Development (DIAND).

Mr. Shimizu welcomed the new recruits, now holding permanent positions as AES meteorological technicians and pointed out that their graduation was unique because it was the first to follow the agreement signed last August between AES and DIAND to train a significant number of native candidates from across Canada. He added that cont'd above



From left to right: Peter Harrison, Adam Green, Brian Brass, Germaine Cardinal, Troy Sock, Lorrie Stedel, Heidi Simon, Maurice Minoose, Gordon Dieter, Wade Dion, Clynten King, Darlene Taylor and Gord Shimizu.

Great success cont'd

graduation of the 11 trainees was just a beginning and predicted that after returning to their regions for surface weather observing work would no doubt one day return to TCTI to continue training because there was no limit to career possibilities within AES. He suggested they might find opportunities in ice reconnaissance, research, climatology, computer science or satellite technology.

Mr. Harrison congratulated the graduates for being successful products of the first national training program of its kind. He agreed with Mr. Shimizu about how important the dissemination of weather information was for all Canadians and pointed out how well-suited the culture of Canada's native peoples was for the study of weather, both traditional and in accurate, high tech forecasting.

Graduation certificates were handed out by a combination of management, program organizers and instructors. A dinner for all participants in the ceremony was served after the graduation.

September 18, 1975 An intense low over Winnipeg carried enormous rainfalls to Manitoba. Riding Mountain Park received more precipitation in one day than any Manitoba station ever had, 217.2 mm; Dauphin received 294 mm in 60 hours. Flooding was described as the worst in living memory.

September 19, 1936 Strong winds and heavy rains spread over Nova Scotia as a hurricane passed to the south; Liverpool recorded 184 mm of rain and Halifax 135 mm, all within 30 hours.



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Access for People with Disabilities

National Access Awareness Week, was marked at AES Downsview headquarters May 30 through June 1 by displays, "wheelie" contests, videos and seminars. The exhibits provided information about disabled people in the work force or expecting to enter it. There were also craft displays and interview stands.

The "wheelie" events challenged AES employees to carry out a tour of AES facilities in a wheelchair. People with no expertise of wheelchairs learned how it felt to negotiate elevators, pay phones, ramps, walk ways, laboratory work benches and the AES cafeteria. No winner was declared in the contest, but all entrants were praised for their interest and skills by Dr. Stan Woronko, head of the AES Disabled Persons' Program Committee.

The other major event was the seminar held in the Downsview Auditorium, June 1 during which Judith Sandys, employment consultant, Canadian Association for Community Living and Rhonda Vanek, co-administrator, Project WORK gave an overview of the issues including a look at some successful, initiatives in work placements. The program included a film entitled "Speaking for Ourselves", produced by National People First, a leading consumer self-advocacy group.



Monique Loiselle of Program Planning and Development (Downsview) tries to make a pay phone call from a wheelchair and finds it difficult.



On May 11 and 12, 1988 the Deputy Minister, Madame Sainte-Marie, visited various Environment Canada facilities in Saskatoon and surrounding areas.

Thursday morning May 12, during the C&P Science Forum, Mr. R. Lawford made a presentation on present research activities in the Hydrometeorology Research Division (HRD). That same afternoon the DM was given tours of the Meteorology Inspection Office and HDR at the National Hydro logy Research Centre (NHRC), and the Saskatoon Weather Office (WO4).

Many AES employees were introduced to Dr. Sainte-Marie during these tours. The DM also had the opportunity to meet some of our users during her time at the Saskatoon WO4. Left to right: Glen Bond, Weather Services Specialist, Saskatoon WO4; Dr. Sainte-Marie, Deputy Minister; Ken Johnston, OIC, Saskatoon WO4.



With 46 years service Ken Styles (left) is believed, next to Dr. Warren Godson, to have the longest career record of all AES employees. Mr. Styles is currently head of the Meteorological Section at the Defence Research Establishment Suffield, Alta (DRES). DRES is unique in the Department of National Defence in being the only establishment to employ AES Met. Techs. Elsewhere the technicians are all in the armed forces. Mr. Styles is seen receiving a very belated 25 year Long Service Award from David Nowell of the Directorate of Meteorology and Oceanography at Defence Headquarters, Ottawa.

SAFETY FIRST

In this issue of Zephyr, we begin a column on safety and health. Through SAFETY FIRST, we will pass on information on how to attain and maintain safe and healthy practices in our lives. Through such things as minimizing the risks of hazards, using equipment and property in a safe and responsible manner, and correcting unsafe practices, we will be creating a more safe and healthy climate in which to live and work. On the job and in the home, safety comes first.

"Do you know where the first-aid kit in your work area is"?

That was the question asked of 12 of us by the St. John Ambulance instructor at a recent First-Aid course at Downsview. This was the first time I had attended a first-aid course. I never knew there was so much to being a responsible firstaider. Of course I knew that I would be learning about how to apply artificial respiration (AR), and I had heard about the Heimlich manoeuvre as a method to save a person who is choking. But when you look at a video that shows a farmer's arm caught in a piece of machinery or a worker with a severe leg wound from an axe, you suddenly realize that you could be in the situation of having to possibly save someone's life. And if you don't get it right you could do more harm than good.

I found out that when you come forward to apply first-aid, you quickly assess the environment for clues as to why the victim is injured (if the casualty is unable to speak). Then after determining if the casualty is breathing and has a pulse, you call for help very loudly. As soon as someone appears, you target them as your assistant, give them the essentials on the casualty (for example, unconscious, has a pulse, but is not breathing) and tell them to go for medical help. And, very importantly, you tell your assistant to return to help you if you need it, and to satisfy yourself that the person has really gone for assistance.

The St. John Ambulance First-Aid course gives you instructions on what to do when breathing stops, or when someone (including yourself) chokes. And you get time to practice on your colleagues, including applying AR, the Heimlich manoeuvre, and dressings and bandages. Now I know how to make a temporary arm sling, and how to roll an injured person over from their back to their stomach (which can be difficult when you are somewhat small and the victim much larger).

Now I am reasonably confident that I know what procedures to follow if I were in a situation where first-aid was needed. I can see the importance of having the first-aid kit stocked with emergency items and kept in the workplace, the home, and the car. (In fact, as a first aid attendant I am now responsible for ensuring the good order and maintenance of first aid kits, supplies and related equipment and recoreds in my work area.) I am determined to see that the list of first-aiders is kept current, and that signs indicate where the kits are located. I know why it is important that we all know

The Conference in a Nutshell

The implications, and complexities of the Conference are too vast to cover in the limited space available in Zephyr. We will therefore confine ourselves to briefly outlining the main Conference achievements, listing the principal participants, with a mention of the policy makers and organizers who shaped the Conference and delineating the key stages in the overall conference evolution. Finally, as a tribute to AES, a breakdown is given of some of the main areas from which the many dedicated volunteers were drawn.



The Metro Convention Centre Auditorium was packed for the opening session of the Conference. This was just part of the scene.

Brief Notes on some of the Main Conference Participants

B rian Mulroney, prime minister of Canada, gave the opening address at the Conference and among points raised, announced that safe consumer products in Canada would bear logos labelling them environmentally friendly.

Mrs. Gro Harlem Brundtland, prime minister of Norway, chairman of the Brundtland Commission and author of the report on Our Common Future, gave an important speech at the opening session and held several press conferences.

Tom McMillan, Environment minister, also made a speech at the Conference opening. During a four-day period he participated in a large number of conference activities and during a major press conference gave out details of the newly passed Canadian Environment Protection Act.

Stephen Lewis, Canada's recently retired ambassador to the United Nations acted as Conference general chairman. His finest hour was chairing a marathon three-hour session in which participants argued the fine points of the Conference Statement.

Marcel Masse, minister of Energy Mines and Resources and a prominent member of the final panel discussion, advocated joint energy conservation programs with Environment Canada.

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E.H.T.M. Nijpels, minister of Public Housing, Physical Planning and Environment of the Netherlands, was also a prominent panelist.

E. Salim, minister of State for Population and Environment for Indonesia presented forceful environmental arguments for the developing countries at the Conference.

Timothy Wirth, U.S. senator was an active participant in debates on the U.S. Clean Air Act and was the dinner speaker at a banquet hosted by the Canadian Government.

C. Cissakho, minister of Rural Development for Senegal, presented the case for responsible environmental development during the final panel discussion.

Howard Ferguson, assistant deputy minister, Atmospheric Environment Service, was Conference director as well as convenor of working groups on Policy Implications.

Evolution of the Conference

1. Pre-planning stage: Following the Brundtland Commission's visit to Canada in May 1986, Tom McMillan proposes that Canada host an international meeting on appropriate action to be taken on climate change. Plans are drawn up by AES and discussed with the minister. Advisory committees bring in other DOE experts and other government departments. The support of world bodies like the (UNEP) and the (WMO) is solicited. Strong links are forged between the Conference and the Beijer Institute in Sweden responding to the greenhuse gas issue. (Some 50 top scientists form a consensus on the issue.) The second Beijer workshop in Bellagio, Italy provides scientific background and some pre-recommendations for the Toronto Conference Statement. The Conference framework is drafted in the fall of 1987. By this time a Conference Secretariat has been set up.

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Minister of Energy, Mines and Resources, Marcel Masse (left) and ambassador Stephen Lewis greet each other on the stage of the Metro Convention Centre Auditorium.

Conference of Conferences

by top international experts, the preparation of proposed socio-economic responses by a dozen specialized workshops, speeches by political leaders and a major conference statement.

"Since this was a major World Conference sponsored by the Canadian government, we had to have speakers and working groups of the highest calibre", says McKay. "It was a major coup getting both prime minister Brian Mulroney and Mrs. Brundtland as well as ambassador Stephen Lewis. We also were fortunate in getting a galaxy of other prominent people (see Conference in a Nutshell). Gordon McKay says "The Conference was unique, it bridged science and policy, and it was exciting to see scientific arguments fuelling calls for political action. The Conference was timely, urgent and highly motivating."

ADMA and Mr. McKay both give much credit to the efforts of other government departments and services participating in joint planning and advisory committees. They are also grateful of the tireless efforts of AES employees. (see Conference in a Nutshell).



Copying machines were a boon at the Conference. Here is a group of AES helpers who knew this all too well, left to right: Joan Le Drew, Marion Hurlburt, Blair Kuntz, Gloria Korson.

Right in the middle was the Conference Secretariat. Four or five hard-working individuals did the bulk of the letter writing and detailed program planning as well as organizing scores of meetings to iron out the countless questions that arise when a government service ventures into areas covered by many different disciplines and policy views on a global basis. The Secretariat used people of various backgrounds, growing gradually until at Conference time they numbered about 20. Among those who devoted major portions of their time, from the start, were Nicole Sauve, Henry Hengeveld, David Phillips, Stewart Cohen, Pierre Martel and Margaret Costea.

As the Conference deadline drew closer, Secretariat work grew more hectic. "Secretaries, clerical staff and translators worked long hours and got very little sleep," adds McKay, who claims he was more a morale booster than an administrator. "They were extremely dedicated and their efforts often heroic."

Conference in a Nutshell

cont d.

2. Day-to-day preparations: The Secretariat invites participants from around the world, and makes preliminary hotel, accommodation and transportation arrangements. It produces a guide book and Conference background material and works on the myriad fine details of the Conference program. Meanwhile, Communications Directorate invites international media and prepares media accreditation documents. A graphics firm is hired to produce an impressive co-ordinated "look" for the Conference. A striking poster and series of fact sheets are produced. CD produces many press kits, press releases, and backgrounders. They arrange media interviews and stage some press previews. In short, CD begins to tell the Conference story before the Conference begins. AES scientists are recruited as advisors and dozens of other volunteers are sought.

3. During the Conference: As June approaches, final conference preparations reach a crescendo. A whole range of hard working volunteers are recruited, some to "shepherd" the VIPs, others to brief the media on their areas of expertise, still others to take care of the myriad last minute conference details. (Please see list of categories below). The speeches, presentations, receptions and workshops are a success and Environment Canada, dealing with the more than 200 media at the Conference, feels convinced that the hundreds of articles and television programs produced succeed in raising the consciousness of a considerable part of the world's population regarding life threatening dangers to the atmosphere.



More AES employees at the World Conference; left to right: Jean-Guy Cantin, Lucie Vincent, Roger Street, Monique Loiselle, Real Gagnon.

Conference Achievements

General: In a strongly worded statement, participants agreed that changes in the earth's atmosphere represent a major threat to global security and are already causing damage in many places.

They further agreed that such damages will imperil human health and well-being, diminish global food supplies, disrupt fresh water supplies by altering rainfall patterns, increase the potential for international conflict, jeopardize prospects for sustainable development and increase the extinction of species as well as alterations in forest patterns.



An informal group of AES workers and volunteers joined Environment minister Tom McMillan and ADMA Howard Ferguson on stage at the Metro Convention Centre Auditorium during a poster presentation ceremony. They are left to right: Jean-Guy Cantin, Gilles Tardif, Jeanette Carter, Blair Kuntz, Julie Young, Ed Millar, Barb Grogan, Una Ellis, Janie Hubert, Doug Russell, Jean de Gaust, Brenda O'Connor, Henry Hengeveld, minister Tom McMillan, Hans Teunissen, ADMA Howard Ferguson, Stewart Cohen, Al Godin, Theresa Hazaire, Nicole Sauve, Margaret Costea, Jean-Guy Cote, David Phillips, Heather Mackey, Andrew Budden, Darlene Lavigne, Joan Le Drew, Michael Peters, Marion Hurlburt, Gordon Black.

The Conference improved awareness of the issues and encouraged action NOW. It demonstrated a new willingness of governments and industry to work together with specialists from a broad range of disciplines and backgrounds.

Participants agreed to a strong agenda for action to avert the impending crisis. Challenging goals were set and nations were urged to develop strategies to meet them. Finally, global co-operation was called for since no one country can tackle problems in isolation.

General Recommendations: The Conference urged nations and institutions to work urgently towards an Action Plan for the Protection of the Atmosphere with an Atmosphere Fund financed partly by taxes on fossil fuel use in industrialized countries.

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This map of the world symbolizes the global aspect of Climate Change as Environment minister Tom McMillan shakes hands with E.H.T.M. Nijpels, minister of Public Housing, Physical Planning and Environment of the Netherlands.

Conference of Conferences

The small group of people at AES Downsview helped turn this need for dialogue into a major communications campaign. The media campaign was launched almost a year in advance and intensified as the conference approached. The Communications Directorate, led by Brenda O'Connor, sent out hundreds of invitations to world media, organized press briefings, media interviews and photo opportunities. The resulting media coverage was overwhelming and generated large numbers of requests for information from both public and media.

The hard-working Downsview communications group received assistance from communications officers in two Environment Canada regions.

Conference spokesman and CO₂ specialist Henry Hengeveld said, "Media interest in the Conference, whetted by Western drought and Eastern heat waves, exceeded all expectations in terms of both intensive coverage and international scope."

A summary published by Kempton Kingsley, media analysts, said that during the time frame, 68% of all Canadian media reports on the environment focused on Conference proceedings. This meant some 600 references to the Conference in Canadian print and electronic media and a grand total of nearly 1,000 world wide.

The bustling Conference Media Centre saw journalists at work from the United States, England, France, West Germany, Japan, Phillipines and Scandinavia and elsewhere. The Conference was covered by about 150 Canadians, from a huge range of publications and radio/TV public affairs programs.

Another indispensable AES group were the scientists who played a key role in identifying conference themes, from the greenhouse effect to transport of pollutants. They attended many planning meetings, using their expertise to suggest what to put on the program and whom to invite. Some AES scientists gave media briefings, Dr. cont'd on page 6

Conference in a Nutshell

More Specific Recommendations:

Greenhouse Effect; To reduce gases contributing to global warming, the Conference recommended that there should be: a 20% cut in CO₂ emissions by 2005 AD as a realistic beginning; virtual, elimination of certain chlorofluorocarbons and reductions in other greenhouse gases; protection of temperate and tropical forests (since they absorb CO₂ from the atmosphere); finally that nuclear power could be used, provided it is made safe.

Protecting the Ozone Layer; Following the 1987 signing of the Montreal Protocol agreeing to reduce use of CFCs by 50% by 1999, the Conference recommended that the Protocol be quickly ratified by all concerned nations; that the most damaging CFCs be virtually eliminated; and that there be reductions in other ozone-destroying chemicals such as halons.

Acid Rain; The Conference urged vigorous application of existing technologies to reduce acid rain-causing pollutants.

Miscellaneous; A comprehensive Law of the Atmosphere ensuring global protection was urged; the Conference recommended that manufactured products should be labelled to help consumers identify and select items that minimize damage to the atmosphere; it was felt necessary to increase funding of research programs to fill gaps in scientific knowledge and further alternative developments like renewable energy. Finally, it was decided to increase funding for environmental education and public awareness campaigns, particularly in schools.

Lastly the policy people, planners and other major participants hold arduous meetings and hammer together the final Conference Statement.

AES Volunteers

he Conference planners, policy makers, Communications people and Secretariat worked for the longest period but as the Conference approached, more and more dedicated AES volunteers joined the fray. Here is a breakdown of just some of the areas from which volunteers were recruited. Printing experts Publications editors Translators Display people (Especially for the Ozone display) Finance officers Secretaries Warehouse personnel Scientific advisors Telephone operators Messengers Clerks Librarian Electronics technicians



An Environment Canada team welcomes prime minister Brian Mulroney to the Conference, led by deputy minister Dr. Genevieve Sainte-Marie, seen shaking hands with the PM. Others in the picture, left to right: Pierre Martel, Howard Ferguson, Gord McKay and just visible over Mr. Mulroney's shoulder, Al Malinauskas.

Conference of Conferences

Tom Brydges, an acid rain expert for DOE gave an address at two specially arranged public forums, held in the Metro Convention Centre Auditorium. Dr. Hans Martin's expertise in inter-governmental affairs was exploited fully and he also gave a breakfast talk to journalists on the Law of the Atmosphere. Dr. Alex Chisholm, director general of Atmospheric Research, and a veteran organizer of the International Ozone Agreement in Montreal last September, was a prime advisor on international protocols.

Howard Ferguson said "The major goals of the Conference were met or exceeded. We produced a strong and comprehensive consensus statement, with challenging policy recommendations to governments and international organizations. A strong call was made for initiating work on a global Law of the Atmosphere." The Conference was also an important vehicle for encouraging both north-south and east-west dialogue. An invisible achievement was the highly effective networking among countries, government, industry, Non-government Organizations, scientists, economists — all who have a stake in our future!

Partial list of outside agencies or Government Departments involved Dept. of Energy Mines and Resources Privy Council Prime Minister's Office Secretary of State Justice Department Agriculture Canada External Affairs Environment Minister's Office National Research Council United Nations Environmental Program World Meteorological Organization The Beijer Institute (Sweden) Despite its overwhelming success, pre-conference problems included some unforeseen delays in getting invitations approved and sent to major delegates. Up until the last minute there were uncertainties about the participation of the two prime ministers due to other compelling engagements. (Mr. Mulroney was at one time believed to be about to call an election).

Almost at the last minute External Affairs warned the Conference Secretariat that the Metro Convention Centre might not, after all, be available due to the Economic Summit being held there only a week earlier.

At the end of the Conference a session chaired with wit and authority by Stephen Lewis ran overtime and threatened to cut short a panel discussion of the world's most influentail environmental decision makers.

Mr. Lewis explained later that he had decided to give delegates from the floor as much say as possible in the final wording of the Statement to achieve a consensus.

Mr. McKay believes the Conference firmly put AES on the environmental map, making it far more than a world-class meteorological Service. It is now recognized for its contribution toward ensuring a better future for human kind.

With the Conference barely into its second day, Environment minister Tom McMillan was requested to join a group of about 40 AES "helpers" on the stage of the Auditorium for an informal souvenir photograph. Standing in front of the spectacular cloud backdrop, the minister suddenly stepped forward and made a short spontaneous speech. "If the Conference were to end right now, it would have all been enormously worth while", he declared euphorically, and he went on to say that the gathering's success was largely due to the efforts of the AES workers all around him.

Remarks such as these are typical of the esteem in which AES staff at all levels are now held ... thanks to their help in setting up and running the "Conference of Conferences".

The Arctic Revisited with Satisfaction

It was a few days before Christmas in 1975 when the Twin Otter departed Isachsen en route to Resolute Bay. I had just finished my tour in Isachsen and was heading South to a position in Churchill, Manitoba. It was dark and cold but I was very happy to be finally leaving the isolated weather station, and presumably the Arctic, for good.

It is now 13 years and a few Weather Stations/ Offices later and here I am, back in the Arctic again — "OIC Eureka." What the heck am I doing in this position? Life was so much more simple and easier as the Supervisor in the Toronto Weather Office. All those things that I was so glad to leave behind when I left Isachsen, wouldn't they still be there? Well, things have changed a lot since those days and probably more than anything else I have changed a lot too!

The Arctic, in particular the High Arctic Weather Stations (HAWS), is no longer the dreaded isolated place of years gone by. Although you may be up there approximately six months before you take any leave and there aren't too many places that you can go in order to be by yourself - other things have changed. Probably the two biggest changes up in the isolated North are the availability of the telephone and live television. Back in my Isachsen days the only communication with friends and family was by mail via the tri-weekly produce flight or if you were lucky enough by a phone patch on the Ham radio. All one has to do now is just dial up "Ma Bell." Having a satellite dish that allows us to view a variety of television stations across Canada and the United States certainly is a lot better than the few movies we had available to us 13 years ago. Live television where you can watch the nightly news and your latest favorite programs from soap operas to my losing Toronto Maple Leafs to Much Music is like a touch of home and a reminder of reality. After six months up here it helps to be reminded that there is still life South of Resolute Bay.

Another change which I have noticed up here is the tourist fascination with the Arctic. Ten to fifteen years ago the only people we saw in the Arctic were the odd D.N.D. people forced to do military exercises. Now, the Arctic is alive with scientists, tourists, adventurists, and eccentrics trying to get to the North Pole. The image of Eureka, during the Spring and Summer, fades as that of a Weather Station and takes on a different aspect — that of a tourist centre. The OIC then becomes more of a hotel manager and PR man than a Weather Station administrator. by Ron Huibers

Although there has been many changes, most of which make the HAWS less of an isolated post, the quesiton still remains — is it enough to make someone leave the comfort of down South to work a term of six months to a year in the Arctic? Well, the Arctic offers a lot more than just a few conveniences of the South. It provides an adventure; to live and deal with the uniqueness of the Arctic environment. Where else can you look out of your bedroom or kitchen window and watch arctic hares boxing, arctic foxes playing, arctic wolves stalking muskox, and on occasion a polar bear ambling by? to for wanting to come to the Arctic is the overtime. Although the Arctic is not the motherlode for overtime it once was with 60 to 70 hour work weeks it still has a guaranteed 54 hours with a few other hours available.

So, the next time you see the OIC position for either Eureka, Mould Bay or Resolute Bay up for competition give it some serious consideration. You may just like it!!

I did!!

Ron Huibers is now back at the Toronto Weather Office



Ron Huibers, left, and Doug Harrington are seen collecting ice from an iceberg at Slidre Fjord, near Eureka.

The raw beauty of the Arctic and geography is awe-inspiring. There is a peacefulness in the singularity of color in the twilight of the setting sun and in the fluorish of color under the midnight sun. To take a walk over the tundra where only a few people have ever walked before helps to explain why the Arctic is fast becoming a tourist centre. With the advent of growing public interest in the Arctic a new national park has been created on Northern Ellesmere Island is aptly named Ellesmere Island National Park. This new park is the most northern in Canada and is three times the size of Yellowstone and Yosemite Parks put together. The creation of this national park is hoped to increase the flow of visitors to the north.

The last reason which most people can relate

September 6 1979 Tropical Storm David slammed into the Maritimes causing floods and property losses of \$1 M. winds gusts exceeded 100 km/h on Grindstone Island. 1985 A funnel cloud was sighted at Vancouver. The Rocky Mountains received 20 cm of snow.

FUTURE FORUM

The Strategic Plan - Pacific Views

As Canada prepares to enter the 1990's, AES is putting the finishing touches to its all-important Strategic Plan. When completed, it will inaugurate a new, cost effective, state-of-the-art weather service, making great use of automation and requiring some adjustments in staff. Full details of the plan aren't totally known but many questions by concerned employees have been anticipated and tentative answers prepared. As a start, Ontario, Atlantic and Pacific regions are planning new, prototype Weather Service Offices (WSO's), something between current Regional Weather Centres and local weather offices.

In a new departure, Zephyr zeroes in on the Strategic Plan problems of one deeply involved group: the staff of AES Pacific Region; This region's WSO (possibly to be located in the southern interior), is a pioneer venture, scheduled to open sometime in 1991. Staff were interviewed on the Strategic Plan as a whole and how they thought they would fit in, about the new WSO Concept, about relocation and retraining concerns and about career possibilities in general.



Jim Cissell

JIM CISSELL (Weather Briefer, Lower Mainland Weather Office)

There's nothing wrong with upgrading the qualifications of Meteorological Technicians (Met. Techs.) under the Strategic Plan. But I'm not optimistic. Met. Techs are used to dealing with the public, but meteorologists may feel it's a waste of their professional skills. The Strategic Plan won't affect me personally — I retire in eight years. But for a young technician with a family it will be a struggle to get more education to survive. Too much decentralization in the weather service is as bad as over-centralization. It may take 20 years to iron out all the kinks.

PLEASE NOTE

The following are personal views on the AES strategic plan as expressed by staff of AES Pacific Region, including the Regional Director. Zephyr does not endorse any of these opinions. Persons in other regions or at AES Downsview are invited to comment in writing on the Strategic Plan and their contributions will be published in a later issue.



Gérand Neault

G. NEAULT (Marine Forecaster - PWC)

The Strategic Plan is more than setting up WSO's. It involves automating data acquisition, reducing staff levels, merging meteorologist and met. tech. career streams. The WSO itself is an interesting concept. However, how it is translated into reality is a big question mark. Smaller offices mean fewer people and less chance of meeting and consulting people of your own professional level and ultimately less chance of learning. On the other hand, they are more flexible. I do not have any objection to the merging of the meteorologist and met. tech. career streams provided it does not dilute standards. Young meteorologists, however, might find it unfair to have to compete with met. tech. who have become a meteorologist without going through the university route. Currently, I am a marine specialist but I am willing to transfer to other areas of operational meteorology. I would consider transferring to a WSO if it improves my career. I began my career in Edmonton and I have served in the Yukon, After I came to the Pacific Weather Centre, I did not expect to work in smaller offices again. If the Plan is introduced slowly, it should not cause too much disruption. If it is enforced quickly, it could cause problems and jobs could be threatened.



Brenda Metropolit

BRENDA METROPOLIT (Chief, Personnel Services, Pacific Region)

I have been very involved with the human resources side of the Strategic Plan. Staffing the new WSO's will require a whole range of new job descriptions. I am mainly concerned about employees in midcareer. Those near retirement and the new recruits have fewer worries about the Plan. The people who come most frequently to my office are Met. Techs. who will be faced with relocation or major retraining problems. I have to tell them candidly that there are big changes ahead and I know this is causing concerns on several employee levels. Of course, some Met. Techs. will be able to remain in data acquisition, go into computer sciences, or another similar field. Many will require some university training. Both staff and management personnel are beginning to see the effects of the changes. We have to offer advice all round.



Peter Richardson

PETER RICHARDSON (Regional Electronic Maintenance Officer)

As a person who contracts electronics installations and maintenance, the Strategic Plan shouldn't adversely affect my career too much. In fact, an increase in automation of data acquisition will mean more work for my section and more contracts to manage. Our section would operate most efficiently if it were located centrally to cover the entire region than to move to one or more WSO's. I like my job and am looking forward to new technologies like the DigiCora system, state-of-the-art, NAVAID based upper air observation system. In general, despite some initial unease, I now feel quite secure with the Strategic Plan.



Patrick Pender

PATRICK PENDER (AES Regional Director) Most major concerns about the AES Strategic Plan are occurring on the human resource level. This spring we set up a Strategic Plan Information Team (SPIT), with members undertaking to explain as much as possible about the Plan to colleagues on all levels. A major project is to establish a prototype Weather Service Office (WSO) by 1991. This would involve transfer of some staff and considerable retraining. Our Training Branch is now developing upgrading plans for both meteorologists and technicians. For example, financial support for technicians pursuing a B.Sc. in meteorology has been raised to 100% in the final year; 70% in the third year and 50% in the second year of a 4-year B.Sc. course. Naturally, everyone, including the Director, is still a little uneasy about the Plan. But in the long run, I'm optimistic. Eventually, we should have about 5 WSO's in the Region. Overall, we should be able to put out a better weather product, and we'll have golden opportunities to modernize, automate and enter fully into the field of mesoscale meteorology. Not everything will be decentralized. Our satellite program will probably remain in Vancouver, as will ODIT and Climate Services. Generally, the Service will be more professional and have closer contacts with the user.



Bruce Lohnes

BRUCE LOHNES (Met. Tech. — Vancouver International Airport)

The Strategic Plan and the proposed new WSO's could offer me good opportunities. Though trained as a briefer, I've spent much of the past six years at the airport observation station. I would like to get into forecasting ... it would be a positive step up the ladder. The main stumbling block is training. There has been talk about offering sixteen-week upgrading courses in Cornwall, Ont. I hope these provide a good enough start. If it's a question of attending university, I'd gladly go, provided the government finances me. In general, I believe the Strategic Plan should be brought in gradually. If they implement automation too quickly, there would be a surplus of personnel. I like the idea of having an allpurpose group at each WSO. I'm quite versatile myself, I've done a variety of technological work across the region.



Robert Rowson

ROBERT ROWSON (Shift Supervisor, Met. Tech.)

I can see some very positive things in the Strategic Plan, provided the implementation is handled properly.

This region already allows technicians to do some forecasting in local weather offices. The Strategic Plan will reinforce this trend by re-routing much forecasting work to the WSO's.

Weather Services has been seeing many PY cuts over the past few years. The move to the WSO will help reduce the impact on the user.

To facilitate this type of change, I feel management has to make a commitment to retrain the EG group with full financial support. It is not a good approach to suggest a person's job will disappear in a given length of time but to restrict their access to training with outdated policies.

One of the major problems to face is the relocation of staff. Historically, the MT group has been reluctant to move and has congregated in larger centres, while the EG group has been more flexible in moving. This will cause complaints about "enforced" transfers.



Eric Taylor

ERICTAYLOR (Forestry Meteorologist, PWC) In this region, I feel that it is essential for both public safety and the enhancement of the primary industry of British Columbia to have meteorologists providing professional support to the forestry community. Currently, I provide fire weather forecast support to all regions within the Pacific Weather Centre area of responsibility and am ably assisted by AES weather technicians in each of six forestry offices throughout the province. It is unclear how this would change under the WSO Concept. Either the status guo would be maintained with weather services being provided to the forestry sector from a central location, or each WSO would assume the duties now performed by the PWC forestry meteorologist

The main problem with the Strategic Plan is the move towards splitting up groups of skilled meteorologists who are now able to pool their talents and resources. This will inevitably lead to poorer communications between meteorologists and a lower professional standard. Also, I have worked in a number of AES and DND weather offices and do not relish the thought of more moves to WSO offices.

A positive aspect of the WSO Concept is the improvement of communication between the forecaster and client. Another good move is the promise of improved automation support for the meteorologist, but I hope that this does not include the loss of the excellent NWS products that are certainly relied upon heavily at the PWC.

cont'd on page 10

strategic plan cont'd



Fred Herfst

FRED HERFST (Chief, Weather Services)

I have been assigned to do long term planning on the Strategic Plan as well as to set up AES's first full-fledged WSO. It has to be operational in three years or so and it will go further than the "testbed" operations, slated for Ontario and the Atlantic Region. Overall, the new WSO's should improve our efficiency and effectiveness, especially regarding weather forecast dissemination. Automation will be a big new factor but it won't be the whole story. We will always need people in weather services, including data acquisition personnel, and in future, tasks are likely to be less repetitive and more diverse. As regards to employment possibilities as a whole, we can't make blanket statements. Each individual case is different. It will be a challenge for us to train new recruits and current staff for new opportunities and satisfying careers. I've always been challenged in AES and that challenge is continuing.



Brian Hammond

Dr. Fouad Fanaki

Z ephyr notes with deep regret the passing of Dr. Fouad Fanaki, research scientist with the Atmospheric Processes Research Division, Downsview.

A person of many accomplishments in both the scientific and artistic fields, Fouad was best known to us as a cartoonist. Many of his satirical drawings appeared in Zephyr on a wide variety of topics over several years. His humor was so well appreciated, the entire cover page of Zephyr was twice given over to one of his cartoons.

In January 1986 Fouad was named Zephyr Contributor of the Year. At a special reception to honor him ADMA Howard Ferguson praised his scientific work in Air Quality as well as his brilliant work as añ illustrator for service-wide displays and official reports which he had a special knack of brightening up.

Dr. Fanaki joined the weather service in the nineteen sixties after obtaining his Ph.D. in Physics from the University of Western Ontario.

Fouad was a serious artist, engaging in everything from portraits and sculpture to theatrical design and murals. Even when on scientific missions in the Arctic, he loved to paint the everyday life of native Canadians. He held several art exhibitions and was generous enough to auction off some of his paintings for worthy causes like the Society for Deaf Children and the AES Day Care Centre.

Before illness struck him down, Fouad led a very active life. In addition to all of the above, he played the guitar, swam, played volley ball and soccer.

In a Zephr article, Fouad was once described as a "Renaissance Mah". Dr. Ted Turner who oversaw many of his AES projects, says he was "an extremely versatile, sensitive and talented person who will be badly missed at AES". Fouad Fanaki died on July 4, 1988.

Gordon Black



This giant weather satellite dish in front of the Pacific Weather Center building in Vancouver doubles as the emblem of the regional head office.

BRIAN HAMMOND (Shift Supervisor, Meteorologist, PWC)

Meteorologists may not have as many retraining problems under the Strategic Plan as Met. Techs. but they still have to familiarize themselves with presentation techniques and how to deal with the public. Having more contact with the user will be good for meteorologists. One question concerns me, however, will I be forced to move, or will I have a choice of staying in Vancouver? I personally wouldn't mind going to a smaller place, but I am not so sure about my family. Over the long term, these problems will solve themselves. Younger MTs will be prepared to move, and there will be attrition. The more gradual the change, the less hurt there will be. Personally, I do not see how decentralizing to smaller offices will allow for a reduction in resources.

Safety First cont'd.

the procedures to follow in reporting an illness, accident or incident. And it is important to practice what one has learned in order to be ready when an emergency happens.

Oh yes, about the first-aid kit. I found it in the office of our AES National Safety Officer, John Keefe. Now to ensure that all the workers in my area know where it is...

Jan Glover

September 15, 1984 Pope Jean Paul celebrated mass for 500,000 people at Downsview Airport (Metro Toronto) under cloudy, cool and windy weather conditions. The ground was soaked from a week of rain.

September 23, 1986 At Whitehorse nearly 7 cm of snow fell on this day, 16 cm on the next day and 9 cm on the third day for a 3-day total of 32 cm — more than the average for any month and about a quarter of the normal winter total.



Delegates to the World Conference on the Changing Atmosphere attended an opening reception atop Toronto's CN Tower which dominates the Metro Toronto Convention Centre, scene of their deliberations.

ZEPHYR BREEZES

Dennis Stossel, who for quite a while has been AES's Arctic coordinator, based in Winnipeg, has for the past nine months been acting as AES's unofficial Antarctic ccordinator. Last January he and Dr. Peter Suedfeld, dean of Graduate Studies at the University of British Columbia were invited by the Argentine government to see their meteorological headquarters in Buenos Aires, then to visit a number of military and civilian-run science and weather stations in their country's Antarctic peninsula. His furthest south expedition was to a station called Primavera, below the Antarctic circle. While in the area he also got a chance to visit a Spanish research station and while aboard an icebreaker, sailed past stations operated by China, South Korea, Britain, the United States and the USSR. Two things he remembers: during the Austral summer, day-time temperatures went as high as 5 degrees C; also that the icebergs were "monstrous", some over 5 kilometres long!

Dennis has recently made a return trip to the southern hemisphere, this time to Tasmania to attend the Scientific Committee on Antarctic Research (SCAR) Conference, bringing together scientists from 30 countries. Dennis is the Ione Canadian observer and is reporting back to several federal government departments. He believes that Canada with all its Arctic experience has a future in Antarctic research. "If Brazil, South Korea and Ecuador can be there, so can we", says Dennis.

Besides their traditional role as scientific and weather observing centres, AES's High Arctic Weather Stations are becoming places to celebrate non-AES events. A good example was the reception organized by staff of the Eureka station last June for the joint party of Canadian and Soviet skiers who crossed the North Pole after a gruelling three month trek.

In addition to the team of nine Soviet and four Canadian skiers led by Russian Dmitry Shparo, the official party consisted of the Soviet ambassador to Canada, Alexi Rodionov, Ken MacRury, the Regional Director for Baffin Region, Ludy Pudluk, the High Arctic MLA, several sponsors and representatives of Conexus Research, organizers of the Polar Bridge expedition, a contingent of Canadian and Russian media, representatives from External Affairs, and Canadian customs, wives of the Canadian skiers and members of the First Air/Bradley air crew.

Some of the guests stayed over night at the station and all sat down to a welcoming supper organized by station personnel.

Nancy Knight of the National Centre for Atmospheric Research (NCAR) in Boulder, Colorado, claims to have discovered two snow crystals that are to all intents and purposes alike. Writing in the May issue of the Bulletin of the American Meteorological Society, Mrs. Knight says, "In many years of snow-crystal collection the author has seen no other examples of such crystals." She added that the two crystals were seen side by side on a glass slide exposed in a cloud at 7,000 metres on a research flight over Wasau, Wisconsin in November, 1986. She waited until the aircraft returned to the ground to photograph them. The matching pair of crystals were column-shaped with vase-shaped hollow centres, only about .25 millimetres in length.

"When you say no two snow crystals are identical", adds her husband, Charles Knight, also an NCAR researcher, "that's a sort of philosophical question. There have been an awful lot of snow crystals over the history of the Earth".

While the World Conference on the Changing Atmosphere with its strong emphasis on future climate change, was in full swing in Toronto another international climate conference was being held in Ottawa. This time the theme delved deep into the past. It was entitled, 1816, the Year without a Summer. Sponsored by the National Museum of Natural Sciences and supported by a number of other institutions including AESs Canadian Climate Centre (CCC), the organizers challenged scientists to suggest key factors that might have influenced that year's unusual weather when hardly any staple crops were produced. In particular they asked how important was the eruption of Tambora volcano in these events. Dr. R.K.R. Vupputuri of the CCC attended for AES and presented a paper. Granting that the Toronto conference was about man-made threats to the atmosphere, Dr. Vupputuri said the major influence of natural phenomena on climate change must not be forgotten.

We don't usually run classified ads, but Lewis Poulin of Experimental Studies (Downsview), an ardent supporter of AES's successful series of ski trips (see his article in the May-June Zephyr Breezes) submits the following notice in "ad" form: AES 1989 SKI TRIPS (downhill and x-country) — Mont Tremblant: Jan. 13-15, \$190-210 (bus, meals, accomod., lift)

- Jackson Hole, Wyoming, country and western special: Feb., approx. \$850 (flight, accomod., lift), Yellowstone park
 All AES regions can participate, book
- early
- contact Sandra McGuire, AAFA, 416-739-4621



For twenty years, Mr. Charles Milner of Middle Musquodoboit, twice daily, went to his backyard and took observations for Environment Canada's Atmospheric Environment Service. On the 30th of May, Mr. Milner was recognized for his active participation in this voluntary service by Mr. John Elliott, Chief of Data Acquisition, by being presented with an Award of Merit and Longevity Award.

Atmospheric Environment Service is the federal agency responsible for the collection, archiving and provision of weather data in Canada. A very important part of the national climatological data base is obtained through the efforts of volunteers.

Observers such as Charles Milner are dedicated individuals who, regardless of the weather conditions, prepare daily reports on the weather parameters, compile them into monthly reports and send them to Bedford, N.S., for entry into the national data base.

Left to right: John Elliott, Charles Milner.

We now present two short items from the 1989 Weather Trivia Calendar.

Some 155 million litres of water normally flow over the Horseshoe Falls at Niagara every minute, but on the night of March 29, 1848, this enormous cascade of water eased to a trickle and then ceased altogether. Local residents were first aware that something had happened when they were awakened by an overpowering silence. Inspection of the river by torchlight revealed only a few puddles of water in the dry river bed.

The next day, spectators converged on the river bank. For some the event was an interesting curiosity, and they took the opportunity to inspect the river bottom or cross from shore to shore without getting their feet wet. A squadron of cavalry varied its usual routine and enjoyed the novelty of a ride down the river bed. But for others, the unusual silence was a portent of divine wrath or impending disaster. As the day wore on, fear and anxiety spread, and the churches began to fill. The tension grew until late that night, when a low roar from upstream announced the return of the waters.

The cause of the event, it was discovered later, was an ice jam which had formed on the 29th near Buffalo. Heavy winds had blown ice from Lake Erie into the river entrance and blocked it completely. It was only when the ice shifted on the 30th that the water resumed its flow.

Will Niagara ever run dry again? Probably not, at least, not of its own accord. Nowadays, a boom at the entrance to the river prevents the formation of ice blockages. With much of southern Ontario and New York State depending on power from the Falls, an interruption of its flow would be a major crisis instead of being a mere curiosity. The names of Atlantic hurricanes are provided by the U.S. Weather Service, which began the practice in 1953. Originally, all hurricanes were given women's names, but since 1979 the lists have incorporated men's names as well. Short, distinctive names are preferred because they are less easily confused. Names are repeated every five years, although those associated with particularly infamous storms are retired.

Allison	Hugo	Opal	
Barry	Iris	Pablo	
Chantal	Jerry	Roxanne	
Dean	Karen	Sebastian	
Erin	Luis	Tanya	
elix	Marilyn	Van	
Gabrielle	Noel	Wendy	



ADMA Howard Ferguson makes some presentations to Jim McCulloch (right) who retired in July as director general of the Canadian Climate Centre after more than 35 years with the weather service. A crowd of well wishers gathered in the AES Downsview cafeteria for a short send-off ceremony. In recent years Jim McCulloch has also held the posts of director general of **AES Central Services Directorate and** of AES Weather Services Directorate. For more details of Mr. McCulloch's career, please see awards article on pages one and three of the last issue of Zephyr.



After the Conference ended, it was time for AES personnel and CD to relax. Seen here at a barbecue picnic at the Ross Lord Conservation Park near AES Downsview headquarters are, left to right: Don Scott, Howard Ferguson, Real Gagnon, Stewart Cohen, Heather Mackey, Nicole Sauve, Tom Brydges and Margaret Costea.



Dr. Wayne Evans, left, explains AES's ozone instruments during a media tour of AES Downsview headquarters organized specially for Conference journalists.

September 7, 1985 A warm spell at Toronto saw 30° + temperatures and 40° + humidex values. Many warm overnight temperature records were set during the heat wave.

STAFF CHANGES / CHANGEMENT DE PERSONNEL

Nominations/Avancements Appointments/Promotions

F.J. Lemire Directeur régional/Regional Director, QAED, St-Laurent, Qc/Que.

K.J. Johnstone (MT-7) Chef/Chief, Services scientifiques/Scientific Services, Vancouver, C.-B./B.C.

W.J. Hayward (EG-8) Chef, normes B.M./Supt. W.O. Standards, Vancouver, C.-B./B.C.

E. Robilliard (EG-6) Spéc. service mét./Wea. Service Specialist, Vancouver, C.-B./B.C.

T. Duffy (EG-6) Spéc. service mét./Wea. Service Specialist, BM3/W03, Victoria, C.-B./B.C.

D. Robinson (EG-6) Spéc. service mét./Wea. Service Specialist, BM4/WO4, Prince George, C.-B./B.C.

A. Van de Mosselaer (EG-5) Instructeur/ Instructor, Vancouver, C.-B./B.C.

D.D. Watson (EG-8) Chef opér. station/Supt. Stn. Operations, Vancouver, C.-B./B.C.

K.R. Banks (EG-8) Chef serv. Insp./Supt. Insp. Serv., Vancouver, C.-B./B.C.

E.D. Taylor (EG-1) Techn. en mét./Met. Tech., Vancouver, C.-B./B.C.

L. Stedel (EG-1) Techn. en mét./Met. Tech., Vancouver, C.-B./B.C.

D. Greer (EL-4) Électronicien/Electronics Tech., Halifax, N.-É./N.S.

L. Dussault (EG-6) Inspecteur/Inspector, St-Laurent, Qc/Que.

P. Dubreuil (SM)Chef/Chief, CMC, Dorval, Qc/Que. A. Cardinal (EG-5) Techn. des glaces/lce Tech., ACIF, Ottawa, Ont.

A. Langlin (EG-5) Techn. des glaces/lce Tech., ACIF, Ottawa, Ont.

C. Hunter ((SCY-3) Secrétaire/Secretary, APDG, Hull, Qc/Que.

M. Jean (MT-6) Météorologiste/Meteorologist, QAES, St-Laurent, Qc/Que.

R. Franks (ST-OCE-2) Opér. trait. de textes/Word Processor Operator, ACSF, Downsview, Ont.

P. Emmett (EG-3) Techn. en aér./U/A Tech., SM2/WS2, Norman Wells, T.N.-O./N.W.T.

G. Carpenter (EG-3) Techn. en aér./U/A Tech., SM1/WS1, Cambridge Bay, T.N.-O./N.W.T. R. Fleetwood (MT-2) Météorologiste/Meteorologist, ARWC, Edmonton, Alb./Alta. J. McIntyre (EG-6) Techn. en prés./Pres. Tech., BM4/WO4, Calgary, Alb./Alta.

M. Morency-Gilkie (EG-5) Techn. en prés. /Pres. Tech., ALWC, Edmonton, Alb. /Alta.

G. Bechard, (PE-3) Agent du personnel/Personnel

Officer, WAED, Edmonton, Alb. /Alta. T. Woytiuk (FI-1) Agent financier /Finance Officer,

WAED, Edmonton, Alb. /Alta.

Postes temporaires ou intérimaires/ Temporary or Acting Positions

P. Aber (EX-2) Directeur général int./A/Director General AWDG, Downsview, Ont.

L. Berntsen (EX-2) Directeur int./A/Director, AWPD, Downsview, Ont.

R. Tortorelli (EG-6) Techn. en mét./Met. Tech., SSD, Vancouver, C.-B./B.C.

S. Guzylak (AS-2) Agent d'administration/Admin. Officer, AWDH, Downsview, Ont.

J. Coté (CF-3) Commis/Clerk, ACDG, Downsview, Ont.

A. Scarlato (ST-OCE-3) Opér. trait. de textes/Word Processor Operator, ACSO/P, Downsview, Ont.

A. O'Toole Affectation P.I.G./MOP Assignment, Ottawa, Ont.

E. Gola (EG-6) Inspecteur/Inspector, St-Laurent, Qc/Que.

S. Burns (SCY-2) Secrétaire/Secretary, ACSO, Downsview, Ont.

H. Mackey (IS-5) Directeur/Director, Communications Directorate, Downsview, Ont.

Mutations/Transfers

R.B. Thomson (MT-6) Météorologiste/Meteorologist, SSD, Vancouver, C.-B./B.C.

R. Bentley (EG-2) Techn. en mét./Met. Tech., SM3/WS3, Estevan, Sask.

J. Carrière (CS-2) Programmeur/Programmer, ARMF, Downsview, Ont.

T. L. O'Connor (ST-OCE-3) Opér. trait. de textes/ Word Processor Operator, ARQP, Downsview, Ont. L. Tailleur (EG-3) Techn. en aér./U/A Tech.,

BM4/W04, Sept-Iles, Qc/Que. R. Picard (EG-4) Techn. en aér./U/A Tech.,

SM1/WS1, Inukjuak, Qc/Que. A. Drouin (EG-6) Techn. en prés./Pres. Tech.,

Dorval, QC/Que.

J. De la Sablonniere (EG-2) Techn. en mét./Met. Tech., SM3/WS3, Chibougamau, Qc/Que.

Y. Pedneault (EG-2) Techn. en mét./Met. Tech., SM3/WS3, Baie-Comeau, Qc/Que.

F. Aronson (EG-6) Spéc. prés./Special Pres., BM4/W04, Iqaluit, T.N.-O./N.W.T.

Y. Landry (EG-7) Spéc. prés./Special Pres., BM4/W04, Iqaluit, T.N.-O./N.W.T.

F. Richardson (EG-6) Techn. climatologie des glaces/lce Climatology Tech., ACIC, Ottawa, Ont. J. Roy (EG-2) Techn. en mét./Met. Tech., QAEOO, SM3/WS3, Ste-Agathe, Qc/Que.

R. Lalonde (EG-2) Techn. en mét./Met., Tech., QAEOO, Dorval, Qc/Que.

N. Charbonneau (EG-3) Techn. en aér./U/A Tech., QAEOU, BM4/W04, Sept-Iles, Qc/Que.

K. Wilkes (EG-1) Techn. en mét./Met. Tech., SM3/WS3, Fort Reliance, T.N.-O./N.W.T.

M. Edwards (EG-4) Techn. en aér./U/A Tech., SM2/WS2, Whitehorse, T.N.-O./N.W.T.

L. Fehr (EG-2) Techn. en mét./Met. Tech., Edmonton, Alb./Alta.

L. Libby (EG-2) Techn. en mét. /Met. Tech., ALWC, Edmonton, Alb. /Alta.

D. Ingstrup (EG-1) Techn. en mét./Met. Tech., SM3/WS3, Slave Lake, Alb./Alta.

S. Collins (EG-5) Techn. en prés./Pres. Tech., ARWC, Edmonton, Alb./Alta.

C.E. Holmberg (EG-5) Techn. en prés./Pres. Tech., Edmonton, Alb./Alta.

Départs/Departures

I. Morrison, SM3/WS3, Revelstoke, C.-B./B.C. S. Halliday, ARMF, Downsview, Ont. au/to MDN/ DND, Halifax, N.-É/N.S.

O. Gagnon, AHRL, Downsview, Ont. à la/to Société des loteries de l'Ontario/Ontario Lottery Corp.

T. Forget, AHRS, Downsview, Ont. au/to Gouv. de l'Ontario/Ontario Govt.

L. Gaudreau, SSD, St-Laurent, Qc/Que.

R. Dobinson, ACIR, Downsview, Ont.

D. Foulem, QAEOO, Chibougamau, Qc/Que.

B. O'Connor, CD, Downsview, Ont. au /to Communications Directorate, Ontario Region, Toronto, Ont.

N. Somji, Edmonton, Alb./Alta. au/to Pêches et océans/Fisheries & Oceans

S. Hardy, Edmonton, Alb./Alta. au/to Travaux publics/Public Works

P. Graham, Slave Lake, Alb./Alta.

Retraites/Retirements

E. Stasyshyn, ACIR, Downsview, Ont. mai/May 1988.

A.P. Gibb, PAEO, Vancouver, C.-B./B.C. juin/June 1988.

W. Frymire, Serv. météor./Wea. Services, Vancouver, C.-B./B.C. juin/June 1988.

D. Faulkner, SSD, Vancouver, C.-B./B.C. juill./July 1988.

T. Gigliotti, Serv. météor./Wea. Services, Vancouver, C.-B./B.C. juill./July 1988.

Décès/Deaths

M. Woodhead, ACSL/M, Downsview, Ont.

F. Fanaki, ARQP, Downsview, Ont.

A. Baron, AWPD, Downsview, Ont.

E. N. Holmberg, Whitehorse, Yuk. /Y.T.