

zephyr

ATMOSPHERIC ENVIRONMENT SERVICE NEWSLETTER

October-November 1991

Education leave success stories

by D. Hill AHRS

Did you know the Education Leave Program in our Service started during World War II to alleviate a shortage of meteorologists for the war effort? It proved successful then, and to this day it continues to be an effective tool for the development of AES employees.

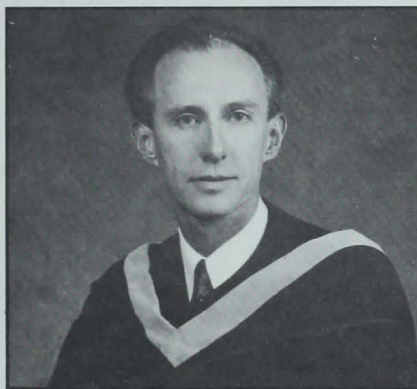
Over the last five years, a total of 197 requests for education leave have been approved. This academic year, September 1991 to April 1992, AES is spending \$1.1 million on education leave for 37 employees.

Each autumn, the ADM issues a letter inviting AES employees to apply for education leave for programs relevant to AES such as Meteorology, Computer Science, Administrative Studies and Master of Science programs. John Bendell, Sandra Buzza and Willi Purcell have recently completed education leave. Here are their stories.

John Bendell

John began his career with AES Atlantic Region as an EG. Over the past 24 years he has worked as an observer, chart plotter, presentation technician and as an instructor at TCTI. After studying math and physics by correspondence, John was able to register in business computing at the University of Winnipeg when he relocated as superintendent of the Winnipeg Climate Centre in 1987.

Once John completed the first three years of a Bachelor of Science on a part-time basis, he applied for and was accepted into the Education Leave Program for the 1990-91 academic year.



John Bendell

When John graduated in April 1991 with a B.Sc., he took the University Gold Medal and was also awarded the Canadian Information Processing Society Scholarship, the Digital Equipment Award of Merit and achieved the status of "Student of Highest Distinction." John is now reviewing communications systems in Central Region. The goal of his informatics project is to reduce communications costs while improving services. He says the Education Leave Program has given him the opportunity to do something he really enjoys.

Sandra Buzza

After completing secondary school, Sandra worked with AES as an EG in Central Region for eight years. For the final two years, she studied pure physics by correspondence. In 1989 Sandra took the plunge and became a full-time student for two years at the University of Waterloo and then York University, as part of the Education Leave Program. Sandra adapted well to the university environment and to her new life as a mature student and says her years at school "...were the best two years of her life." She found going to school more difficult than working, but also more interesting and challenging.

Sandra surprised herself with an 88% average, the highest in her class, when she graduated in May with a B.Sc. in Meteorology. This past summer Sandra worked at the Saskatoon Weather office in storm research and will attend the next Meteorologist Operations Course (MOC).

Willi Purcell

Willi joined AES as an upper air technician and later became a presentation technician and an inspector with Central Region in Winnipeg. Seven years into his career, he began studying math and physics by correspondence. After attending the University of Alberta for one year on

continued on page 2



Environment
Canada

Environnement
Canada

Atmospheric
Environment
Service

Service
de l'environnement
atmosphérique

Think recycling



PRINTED ON
RECYCLED PAPER

We have a vision

AES: People providing quality service through science, for the sustainable benefit of Canadians and our environment.

That is our vision !

On October 7, 8 and 9th fifty of the Service's senior managers met to discuss the challenges which face AES and how we are going to change to meet those challenges. Our theme was "Teaching the Elephant to Dance," a management text by J. A. Belasco.

We talked about our role within the Department, our strengths, our impressions of what distinguishes AES and what inspires AES employees. We engaged in a very lively session full of enthusiasm and creativity, and within a relatively short period of time we arrived at a statement which all present agreed captured our shared vision of a future for AES.

So why a vision?

For two reasons. Firstly, to guide us in our decision-making. A vision points to where we want to place our emphasis by describing where we want to go and what we want to be - all decisions can now be tested for consistency with our vision. And secondly, to help us empower our people. I truly believe that the strength of our organization lies in its 2,400 employees - in their talents, creativity, energy, professionalism and dedication. That strength is mobilized when we agree on where it is we want to reach, and then get out of the way and let our people take us there.

I am committed to making the vision a reality, but I cannot do it on my own. I am going to need your help. Together we can live the vision.

Liz

continued from page 1

education leave he graduated in the spring of 1990, with straight As and a B.Sc. in Meteorology. Last spring Willi graduated in the MOC training course and received the James E. Percy Award, which is presented annually to the student who demonstrates a superior level of knowledge and skill in operational meteorology. Willi returned to Winnipeg this past summer to begin his career as a forecaster.

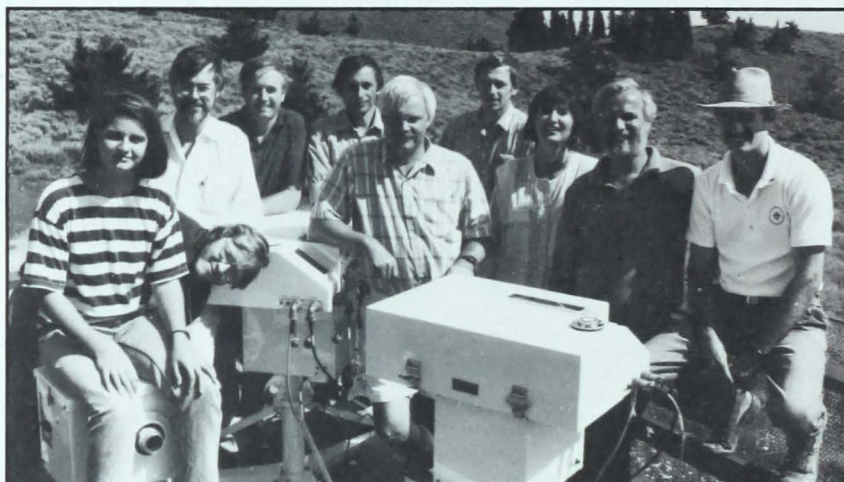
The successes of John, Sandra and Willi are just three of the many made possible by the Education Leave Program. Congratulations to them

and to the 13 other AES employees who graduated in the spring of 1991.

If you are looking for a career change, why not consider the Education Leave Program? Various financial support packages are available depending on your area of interest. For further information call **Donna Hill at (416) 739-4731** or write to:

**Human Resources Branch
Atmospheric Environment Service
4905 Dufferin Street
Downsview, Ontario
M3H 5T4
Attn: AHRS**

Measuring up



Pictured (left to right) Margaret Neidbala, Downsview; Heinz Frank, Germany; Tom McElroy, Downsview; Paul Johnstone, New Zealand; Nikkolai Elansky, USSR; Jim Kerr, Downsview; Alexander Elokhov, USSR; Margaret Phelan, Pacific Region; Clive Midwinter, Downsview; Steve MacLean, Canadian Space Agency, Ottawa.

Ozone specialists from around the world gathered on Mount Kobau in the southern interior of British Columbia for a week in August, to conduct an intercomparison of instruments that measure stratospheric nitrogen oxide.

The study involved scientists from the USSR, New Zealand, Germany and Canada including Canadian astronaut Dr. Steve MacLean. The scientists from each participating country used the equipment with which they measure nitrogen dioxide. Nitrogen dioxide plays an

important role in controlling the amount of ozone in the stratosphere and is measured in Canada using the AES-developed Brewer Spectrophotometer. Steve MacLean participated in the comparison study using the AES Sun Spectrophotometer, which is scheduled to fly on his space shuttle mission in 1992.

The project was sponsored by Environment Canada and the Canadian Space Agency and was organized under the auspices of the World Meteorological Organization.

Around the U.S. in 29 days

Every year, the United States Information Agency invites hundreds of foreign guests to the U.S. to discuss a wide range of topics. This past summer, Dr. Hans Martin ARQD, along with representatives from 12 other countries, were invited to meet with more than 100 experts in 10 cities during a month-long session to learn about current environmental issues, pollution control efforts and processes to resolve problems in the U.S.

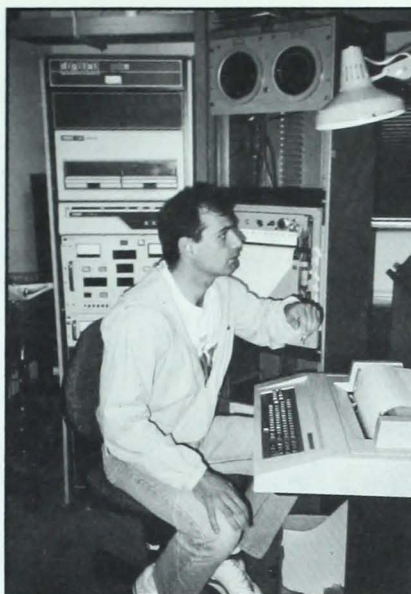
Bridge-building, image improvement and multilateral exchange were some of the goals according to Martin who called the visit "...a brilliant piece of organization and balance." In over 40 formal meetings, the group spent time with representatives from a variety of organizations such as the Environmental Protection Agency (EPA), Mobil Oil Corporation, Oregon Trout, University of Houston, Physicians for Social Responsibility and the National Governors' Association. For the most part, the visitors directed topics of discussion.

Martin found Boulder, Colorado to be one of the most progressive environmental cities encountered. The citizens drive the process which bans wood burning on high pollution days and designates one third of the transit dollars to the development of pedestrian and bike ways. A better bus system is being researched with the object of keeping cars out of the city. By contrast, the environmental problem (mainly smog) in Los Angeles may never be solved, even though they want to, while the problems in Houston (water pollution) are a tragedy.

Overall Hans Martin was struck by the complexity of the U.S. political system. It is apparent U.S. citizens have a revulsion for the slightest hint of dictatorial powers; the system allows every opportunity for individuals to intervene. Hordes of lawyers benefit from the process. The freedoms entrenched in the American constitution consequently handicap the development of uniform national policies.

Where all EGs must pass

by C. Del Col CD



Student Sylvain Juneau practices inputting data prior to an upper air balloon flight.

The Transport Canada Training Institute (TCTI) in Cornwall is a 600,000 square foot facility on a 70-acre campus with over 600 residence rooms. But it is in the northeast corner of the third floor where you will find the Meteorological Training Centre (MTC), the place AES calls home.

Fifty percent of the MTC program is structured to train "ab initios" (newcomers) and experienced EGs

who wish to upgrade their skills. The rest of the time, basic meteorology is taught to Flight Service Specialists, Coast Guard Radio Operators and Air Traffic Controllers.

As part of an effort to adapt to the changing needs of AES, MTC cross-trained 16 MTs from WSO testbeds in Ontario and the Maritimes. According to Acting Superintendent Guy Stogaitis, most participants especially appreciated the opportunity to train further on radar.

As for the almost 200 AES trainees who graduate MTC annually, a program has been set-up to recognize individual professionalism in the training courses. Pierre Lacroix, Supervisor of the Surface Data Acquisition Section and a promoter of the project believes "...the program will further motivate the trainees," since nominations are based on overall suitability and not academic achievement alone.

Recent recipients in the Surface Weather Observing and Maintenance Course awards include Gregory A. Jackson (91-1, English) and Pierre Larouche (91-2, French). Jeff Sowiak also deserves recognition for his achievement in the Weather Services Specialist Course 91-2, English. Congratulations to you all!

On the international front

Third Session of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change - September 9-20, 1991, Nairobi, Kenya

The third negotiating session towards a climate change convention was marked by slow but deliberate progress. There continued to be major differences of view across a wide range of issues between developed and developing countries. The

United States stood alone in resisting targets and schedules and Japan's position still has inconsistencies. Developing countries, notably India and China, insisted global warming was caused by developed countries who, therefore, are liable for resulting impacts. A great deal of work is needed this fall to crystalize Canada's position prior to the fourth round of negotiations scheduled for December in Geneva.

High Arctic synergism

By C. Del Col CD



Mr. Toby Price presents OIC Rolf Jors at Mould Bay with a gift of appreciation for the AES hospitality demonstrated throughout the trip.

Synergism of High Arctic research projects is becoming a reality through the interest and actions of a diverse group, indicated Dennis Stossel trip coordinator for the August 23-28 Polar Cap Campaign.

The 14 member Polar Cap team included representatives from a number of government departments and international and intergovernmental agencies as well as Toby

Price, Chief of Staff to Minister Charest. The group visited several Arctic sites and discussed opportunities for increased cooperation and partnership in northern activities of AES.

Topping the agenda, representatives from the U.S. National Science Foundation (NSF) visited potential locations for a Polar Cap Observatory. The establishment of the U.S.

observatory is essential for further understanding the sun's influence on the atmosphere. Also on the agenda was a stop at Eureka, the future site of the Arctic Stratospheric Ozone Observatory, announced in August as part of the Green Plan. Members of the Environmental Protection Service noted the recently constructed access road to the observatory, was completed with little damage to the surrounding environment.

Representatives of UNISYS, makers of wind profilers, were on hand to assess the potential use of these radars in polar areas. Joint ventures with the Government of the Northwest Territories' Science Institute, which has research laboratories and bases across the Arctic, were also discussed.

The last leg of the tour brought members to the Special Studies Trailer at the Atmospheric Research Laboratory (BAPMoN) in Alert, the monitoring base for the upcoming International Polar Sunrise Experiment (December 1991 to April 1992). German, U.S. and Japanese scientists are expected to participate in the first-ever profile measurements mounted by Canadian or foreign aircraft during the dark period.

Awards, awards...

Air Quality and Inter-environmental Research Branch - All Seasons Research Awards

Dr. Janus Pudykiewicz, who developed a large scale atmospheric transport/deposition/dispersion model which is now used in CMC operations. This innovative model is an essential component of CMC's EER system, which supports the needs of Canadians. Because of this model, CMC has been able to accept an international role as backup centre for the WMO/IAEA Nuclear Emergency Response arrangements.

Dr. Neil Trivett, who over the past several years has contributed significantly to developing and fulfilling Canada's role in Arctic air pollution monitoring, including establishing and expanding the Alert BAPMoN Program. Dr. Trivett has demonstrated exceptional effort in promotion, collaboration, cooperation, care and commitment to good formal and informal relations with other scientists through his energetic efforts to strengthen and expand programs at

Alert on behalf of AES and international Arctic science. He has also exercised care and commitment to all staff involved.

Albert Wright, who through his management of the service that processes slides for professional presentations, prints for journal publications and typesetting/printing of special reports, has contributed considerably to the efficient execution of Research Branch.

To all AES employees:

The Public Service has recently come through a tumultuous period. I would like to commend AES employees and managers alike for the patience and courtesy displayed during the recent strike and for efforts to restore normal operations.

Liz

Meteorology 101

by C. Del Col CD

When Deputy Minister Len Good requested a one-day course in meteorology, AES specialists from across the country heeded the call to strut their stuff.

On September 6th at La Salle Academy, Michel Béland (RPN), Don Clark (CFWS Trenton), Ken Macdonald (MWC), Anne O'Toole (ACTP) and Steve Ricketts (ArWC) shared their expertise with the DM, Yvonne Stefancic (Minister's Office Caucus Liaison) and David Low (Green Plan Implementation). Topics ranged from satellite imagery to thunderstorms and tornadoes.

Organizer Anne O'Toole explains that the course was designed not only to help the participants "understand some basic aspects of meteorology" but also to "better appreciate the inherent beauty and complexity of the atmosphere."

Judging from the positive response, the course was a success and congratulations to all those who contributed to the day's event.

AES services to the public

The current Weather Services plan calls for the centralization of synoptic-scale forecasting functions at CMC and the decentralization of the issue of local forecasts and warnings. As a result, WSOs and WO4s would maintain the expertise for local forecasts up to 24 hours and the expertise for longer-range routine synoptic scale forecasts would reside with CMC. The plan also calls for improved services and the addition of visible and viable Climate and Air Quality Services with the traditional weather programs.

The Weather Services plan was developed with the assumption the AES resource base would remain constant, or slowly decline over a period of several years. The thrust of the plan is still quite relevant, but the question is how to implement it in the current atmosphere of fiscal restraint?

An evolutionary approach is one that merits discussion. It focuses on the improvement of AES services to the

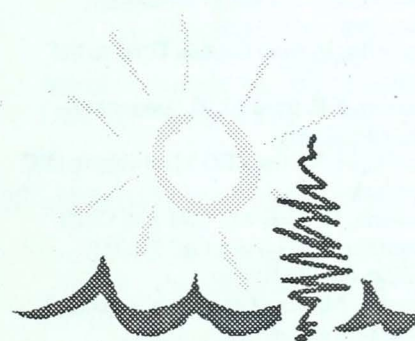
public through the co-location of forecasters with presentation technicians at local Service Offices. The Service Offices would be created through a restructuring of existing weather offices and weather centres with the integration of scientific services, largely air quality and climate. A limited number of Service Offices would be created at strategic WO4 locations, while others would result from the conversion of existing weather centres. Some WO4s would remain and receive forecast support from a nearby Service Office and CMC, while other smaller WO4s could disappear through consolidation or, to maintain AES presence and visibility, be replaced by a District Officer.

This approach is consistent with the AES strategic direction and minimizes disruption to employees. It also allows flexibility to adapt to resource restraints, take advantage of changing technology and facilitate employee input to the process.

AES and the Green Plan

August 25 - Ozone - Environment Minister Jean Charest announced \$25 million in Green Plan funding to strengthen Canada's fight against ozone-layer depletion. The increased funding will allow Canada to accelerate the domestic regulatory control program, support the recovery and recycling of ozone-depleting substances and strengthen Canada's ability to verify the effectiveness of the controls. A High Arctic Ozone Observatory will be established at Eureka, N.W.T., and be a focal point for domestic and international research and monitoring of the Arctic ozone layer. This most northerly observatory will use Canadian high-technology instruments for measurements and make a major contribution to international efforts to study ozone depletion.

September 23 - Acid Rain - Environment Minister Jean Charest announced \$30 million of Green Plan



funds will go towards Canada's acid rain control program. Funds will be used to implement the federal/provincial commitment to permanently cap SO₂ emissions in Canada and to verify the effectiveness of Canadian and American actions contained in the Canada/U.S. Air Quality Accord. The funds will also support scientific efforts to improve our understanding of the effects of acid rain on forests, fisheries and human health.

PS 2000: delegation

Delegation is an integral part of Public Service 2000. The first in the series of bulletins on management change in Environment Canada provides an updated summary on actions the Department has taken with regard to delegation of authority to members of the management category. The following are some highlights from the bulletin. Contact your supervisor for further information.

Citation of Excellence Awards may now be awarded by members of the management category to an inventive and resourceful employee in recognition of his or her outstanding service

to a client. The total value of the award must not exceed \$200.

Staffing authority has been sub-delegated to Assistant Deputy Ministers and department-wide implementation is now under way.

Classification authority has been delegated to Assistant Deputy Ministers and can be sub-delegated to Directors General and Regional Directors General

Serving non-alcoholic beverages is permitted at departmental meetings attended by Environment Canada employees only. It should be re-

stricted to formal occasions where there is a need to avoid dispersal of participants during a break period. This type of hospitality should not be offered during meetings of close colleagues working together on a regular basis.

Hospitality at recurring functions such as monthly or quarterly meetings may be extended under a blanket authority. This can be obtained by submitting a written request to the appropriate departmental official giving details of the circumstances, costs and frequency of the hospitality. All hospitality over \$5,000 must be pre-authorized by the Minister.

On the move...

Assignment

Beauvais, A. from EG to OIC La Grande 4
Belisle, S. from Res. Off. WSD to Allot. Cont. Off. AAFP
Burton, I. from Director CCSD to CCAD
Comeau, D. from Train. Off. to Class. Adv. St. Laurent
Courbin, P. from MT CMQ to Scient. Services St. Laurent
Gaudette, M. from MT OWC to CMQ
Friesen, B. from MT to SSO MT Winnipeg
Gosselin, D. from Captain DND to MT CMQ
Landry, J.F. from EL St. Laurent to education leave
Larocque, M. from EG Maniwaki to OIC Inukjuak
Loiselle, M. from MT OAEP to CMQ
Lumsden, W.G. from OIC METOC Halifax to SSO Halifax
Lussier, M. from Class. Adv. to Dir. of Pers. St. Laurent
Martine, T. to SCY CD Ottawa
Maxwell, B. from Superintendent to Deputy Director CCAD
Morneau, J. on educational leave from CMQ
Morneau, J. from MT OWC to CMQ
Morrison, A.W. from SWO to WWSO North Bay
Oates, C. from HRMIS Proj. Off. AHRO to Mgmt. Info. Off. AWDH
Pedneault, Y. from EG to OIC Maniwaki
Racine, L. from FI AAFP to Res. Off. WSD

Departure

Finch, B. from EG to Airport Mgr. TC Sault Ste. Marie

McGuire, E. from Chief, Pers. St-Laurent to Dir., Pers. Hôpital Ste-Anne-de-Bellevue

New

Gilgan, T.M. to System Anal. METOC Halifax

Passings

Gunst, P. Central Region

Promotion

Abramowski, O. from Comp. Prog. APEC to EDP Sup. Anal. AWDH
Bouchard, G. from EG Maniwaki to Baie Comeau
Chen, P. from MT OAEP to CMQ
Dyck, L. from Reg. Staff Rel. Adv. to Chief, Human Res. Winnipeg
Goalen, B. from AS to Super. Aero. Stns. Winnipeg
Gurdebeke, T. from Weather Svcs. Spec. to WO Mgr. Churchill
Kertland, P. from Asst. to Advisor to Clim. Change Off. COCO
Lemyre, A. from EG Inukjuak to Baie Comeau
Onofrio, R. from AS CCAD to Chief, Admin. Office CCPA
Sawchuk, J. from Clim. Data Tech. to AS Winnipeg

Retirement

Fedyna, N. from Edmonton
Newark, M. from MT CCC

Secondment

Devine, K. from MT AWPC to Superintendent CCID/S

Transfer

Alexiuk, D.A. from MT PRWC to METOC Halifax
Brook, J. from Edmonton to MT Downsview
Doyle, C. from MT CF METOC Halifax to Bedford
Kirkwood, K. from MT Gander to Bedford
Lanoue, R.M. from MT PWC to CFB Baden
MacPhee, J. from EG Edmonton to Greenwood
MacPhee, M. from EG Edmonton to Greenwood
Newhook, J. from EG Gander to Bedford
Peterson, R. from MT Edmonton to Winnipeg
Tatar, D.G. from MT Whitehorse to Pacific Region
Wowryk, K. Weather Off. Mgr. Churchill to Dist. Off. Swift Current

Zephyr is a staff magazine for employees of the **Atmospheric Environment Service, Environment Canada**, produced by Communications Directorate of Environment Canada.

Please address correspondence or article contributions to : Zephyr, Communications Directorate, AES 373 Sussex Drive, La Salle Academy, Block E, First Fl., Ottawa, K1A 0H3
Editor: Leslie Buchanan-Jones
Special thanks this issue to Claudia Del Col and Thérèse Martine.