

zephyr

ATMOSPHERIC ENVIRONMENT SERVICE NEWSLETTER
March-April 1991

Canada-U.S. air quality Agreement signed

March 13 marked a major milestone in the Canadian and U.S. efforts to find a solution to the problem of acid rain. "The Canada - U.S. Agreement on Air Quality" recognizes the necessity for nations to work in partnership to solve environmental problems.

The air quality Agreement, is supported by the measures contained in the Canadian Acid Rain Control Program and the U. S. Clean Air Act. Both countries have committed to decreasing acid rain-causing emissions to a level that will no longer threaten the Canadian environment. Progress will be reported regularly with the final report expected in the spring of 1992. The Agreement also provides a mechanism for resolving other transboundary air quality concerns such as urban smog and air toxics.

Environment Canada has been studying acid rain for the past 15 years. Damage to lakes and rivers in Canada has been well documented and has formed the basis for the sulphur dioxide controls. Decline in forests, particularly sugar maples, has also been observed. Research is continuing to determine whether the controls designed to protect surface waters will also eliminate forest damage.

Mechanisms are now in place to ensure the necessary cuts in emissions

are made. While some recovery of lakes has already been observed as a result of controls in place, it will be many years before the damage is fully repaired. Tom Brydges, ARID, member of the negotiating team says, "it will be about 20 years before the Canadian aquatic ecosystem will recover completely and it may take even longer for forests to return to their natural state."

AES members of the negotiating team included Alex Manson CCSD, Sue Milburn-Hopwood ARID and Tom Brydges.



AES adjusts to budget cuts

Public servants have been asked to make a major contribution to restoring the economic health of Canada. The Country faces a serious fiscal situation and Canadians are feeling the impact of the recession. The Public Service must do its part to share the burden and demonstrate leadership.

The measures presented in February by Treasury Board President Gilles Loiselle to control the cost of government operations, will produce savings of \$5.2 billion over the next five years. Environment Canada has been asked to make a significant reduction in its Operating and Capital Budgets. AES is of course, responsible for its share.

The Public Service will be impacted at all levels. In addition to the cuts in the Operating Budgets, the Management category will be reduced by 12 percent and salary increases for all public servants will be held to no more than three percent, per annum, over the next three years.

The departure of the 131 AES employees who opted for pay in lieu of unfulfilled surplus, the so-called "cash-out" option, and other changes in the workforce, will make some restructuring necessary. "Every effort will be made to minimize uncertainty and reduce the impacts on employees," said ADM Elizabeth Dowdeswell. (continued on page 2)



Environment
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Environnement
Canada

Atmospheric
Environment
Service

Service
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In the context of the Public Service 2000 white paper, said Dowdeswell, "Innovation, simplification, delegation, empowerment and continued investment in our people and technology must be pursued vigorously. Your efforts have helped respond to challenges in the past and I know we can count on your cooperation as we move ahead in these difficult times."

Dowdeswell continued, "AES managers recognize the hard work and professional attitude of employees as we assume an expanded role to execute the Green Plan. Perseverance during this period of adjustment is appreciated."

AES celebrates WM Day

World Meteorological Day (March 22) was an overwhelming success in Winnipeg this year, with over 250 Central Region staff and clients in attendance for a special showing of the IMAX film "Blue Planet". The film provides a unique view of the earth and its atmosphere, as well as the environmental problems facing it.

AES Communications prepared "Weather Treasures: A Salute to Canada's Weather Service" for distribution to the media. The booklet, a compendium of weather highlights, was designed to inform the Canadian public about weather and the environment. Radio, television and print journalists responded actively to Weather Treasures, resulting in significant coverage of WM Day.

Operational meteorology at Canada/U.S.S.R workshop

Pictured are participants in the Edmonton portion of the First Canada/U.S.S.R. Workshop on Operational Meteorology. The workshop, held March 3-10, also included segments in Montreal and Ottawa. AES participants pictured include: M.L. Khandekar MSRB, N. Meadows WAEM, J. Bullas AWC, F. Letchford AWC, W. Lumsden MetOC, Halifax, D. Steenbergen MSRB, M. Gerlyand PWC.

Opening the lines of communication

by Claudia Del Col



Do you recognize your communications specialist? (L to R) Heather Mackey and Claudia Del Col (Downsview), John Gray (Halifax), Gordon Black (Downsview), Jean Deschênes (Ottawa), Nancy Hnatiuk (Winnipeg), Leslie Buchanan-Jones (Ottawa), Debbie MacDonald-McGee (Ottawa), Monique Loiselle (CORE Ontario), Margaret Phelan (Vancouver), Thérèse Martine (Ottawa), Chris Hogan (CCSD)

The morning of February 17 brought a miscellany of luggage, carry-ons, briefcases, and one large yellow WSO umbrella to Econiche, a rustic retreat centre huddled in the hills of the Gatineau. The occasion was a two-day retreat, the first of its kind, for Communications Directorate employees and others with communications responsibilities to the Atmospheric Environment Service.

The session gathered fourteen participants from both the national and regional Communications offices across Canada. The purpose was to target three key issues: what AES communications should keep doing, start doing, and stop doing. The retreat was also an opportunity to

finally place names to faces of otherwise familiar telephone voices.

Meeting the agenda required a number of intense brainstorming sessions. But over the two days, ideas for this year's communications agenda for acid rain, climate change, environmental emergencies, ozone, smog and WSO's began to emerge. Other discussions focused on how the communications offices might pool their resources to avoid overlapping projects.

All in all, the 1991 communications retreat was a step in the right direction for strengthening relationships among the communicators of AES, and hopefully it will be the beginning of a longstanding tradition.



"Petsekteq - petsekteq - petse..."

by Guy O'Bomsawin



At the Auyuittuq National Park Reserve, Sackiasie Sowdlooapik, Norman Keenainak and Hezekiah Oshutapik record forecasts for the telephone answering service now available to the people of Pangnirtung.

The 1200 inhabitants of Pangnirtung on Baffin Island can now get weather forecasts over the telephone, 24 hours a day.

Up until the end of 1990, the Inuit at Pangnirtung could only get the weather on radio and TV, and even then, what they heard was other people's weather.

Now the forecasts are available on a telephone answering machine, and for the first time, they are in Inuktitut as well as English. Aside from young people, the people here speak no language other than their own.

The number of calls is directly related

to the possibility of dangerous weather conditions. Inuit call first and foremost to find out whether there is a blizzard warning. In December, there were almost 1500 of these "life insurance" calls.

This new northern service, which follows on the heels of the 21X observation station recently installed at Pangnirtung, is an initiative of the Iqaluit Weather Office staff assisted by the people in charge of the Auyuittuq National Park Reserve.

So if you hear the word "petsekteq" (pronounced pay-say-took) in a forecast, that means there's going to be a blizzard. Don't forget!

Yukoners take to the trails

Next time you're in the Yukon Weather Centre, ask about the "Gold-pokes". Ken Clarke and Al Wallace will no doubt tell you about the triumphs of the Yukon Weather Centre and family at the Yukon Gold Loppet March 2, in Whitehorse.

AES participants illustrated the true meaning of the word loppet (long race). Ken Clarke of the Yukon Weather Centre and son Chris completed the 23 km course. Al Wallace, also of the Yukon Weather Centre did the 35 km course, while Al's wife Marcy and son Justin skied 7.5 km. Marcy won a bronze medal in the novice ladies class.

Over 230 skiers of all age groups participated. The youngest skier traveled the course on his mother's back, while a number were in the 60 plus age group. Athletes were able to choose their distance from a 35 km full loppet which included a 500 m ascent up Mount Macintyre, or 23 or 7.5 km distances.

At the banquet following the race a talk was given in memory of former AES employee Don Sumanik who passed away tragically in 1981. Don was an enthusiastic and energetic supporter of cross-country skiing in the Yukon for many years.

Life after the WSO Test-beds

While plans are progressing to implement a prototype Weather Services Office (WSO) in Kelowna in the fall of 1992, AES continues to benefit from recent "Test-bed" experiences.

After one year in operation, the Ontario WSO Test-bed was terminated at the end of March, while the Nova Scotia test-bed finished last May. Both experiments demonstrated, as expected, that while working cooperatively to provide improved local forecasts, EGs can produce forecasts and MTs can disseminate information. The Test-beds also illustrated the critical need for improved technology such as "Image Manager" and inter-active automated telephone answering devices to assist in the production and dissemination of forecast products.

Post Test-bed operations are well in place in the MWC, maintaining the successful nowcasting update forecast for metropolitan Halifax that was introduced in the Test-bed. In the MWC, the public disseminator (EG) and the public forecaster (MT) work together, sharing duties as required.

In Toronto, the OWC and the Weather Office have again become distinct entities, but the physical wall separating the two offices will remain dismantled, allowing for greater communication between the staff. MTs will be given opportunities to disseminate information and plans are being developed to give EGs more responsibility in preparing and amending forecasts.

Another step along the road to the Kelowna prototype was the execution of the Client Services Consultation Project, commencing mid-February in Southern B.C. A Pacific Region team met with 63 media representatives to discuss proposed new products and the potential for cost and technology sharing as part of the WSO concept.

Weather buoys: a boon to forecast accuracy

As little as one decade ago, weather reports from ships and drifting ice stations were two of the few sources of weather information over the oceans. The lack of observations made predicting marine weather difficult and land forecasts were undoubtedly skewed since little data were available over the oceans.

Presently, AES is involved in buoy programs in the North Atlantic, Pacific and Arctic Oceans and the Great Lakes. Though different, the moored and drifting buoys both collect data that allows AES to provide more accurate weather information to Canadians.

Below we examine the challenges presently facing the East Coast Buoy Program and the cooperative nature of the International Buoy Program.

East Coast Buoy Program

Efforts are underway in Eastern Canada to make the fishing community more aware of the weather buoy program.

The 'OCEAN RANGER' disaster in February 1982 highlighted the need for more marine data on the east coast. As a result, in 1988, four weather buoys were deployed off the east coast of Nova Scotia. Presently there are six NOMAD buoys moored in water depths of 1500 to 4500 meters.

The NOMAD buoys are reliable and have become a very dependable data source for the marine forecasters. They have weathered the passing of several hurricanes, severe freezing spray events and all of the other weather offered by the North Atlantic.

Unfortunately, over the past winter three of the six buoys have had their moorings severed. Reports of tuna fishing in the area of all demooried buoys point to long drifting tuna lines as the most likely cause.

Recently the design of the moorings was altered, increasing the amount of chain at the top of the rope to 200 feet. This puts the rope section of the mooring below the level of the tuna lines. Two of the moorings have been modified and the remaining will be modified during the spring and summer trips.

Through journals and trade newspapers the east coast fishing industry is presently being made aware of the value of the weather buoy program, and the efforts that must be made to preserve it.

International Arctic Buoy Program

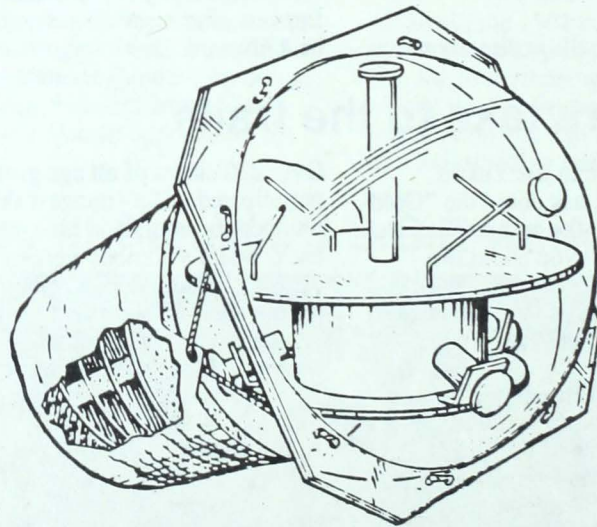
AES will soon have access to meteorological data from the Arctic Ocean, as a result of an International Arctic Buoy Program (IABP) presently in the works. Representatives from Canada (AES & Fisheries and Oceans Canada (DFO)), the U.S., Norway, the U.S.S.R. and the WMO met in Edmonton March 18-20 to develop principles for cooperation amongst participants.

The proposed IABP would ensure

maintenance of a meteorological drifting buoy network with 500 km spacing over the Arctic Ocean. Data would be transmitted in real-time on the Global Telecommunications System and used by AES in operational meteorology predictions. Once archived by DFO, the IABP data will support the interests of a number of international and research programs.

An ad hoc Steering Committee chaired by Brian O'Donnell (WAED) with representatives from the U.S., Norway and the U.S.S.R. is preparing for a September 1991 meeting at which the International Arctic Buoy Program (IABP) will be formally established.

While various countries are presently deploying buoys in the Arctic, cooperation is sporadic and not well focused. The IABP agreement is expected to change this. Deployment of the buoys should begin late this year. The AES will canvass for the support of other Canadian agencies and the committee will continue to encourage participation of other countries, such as Britain, Denmark, Germany and Japan.



Example of Drifting Buoy

Awards, awards...

Regional Citation of Excellence

Brian Hammond, Doug Lundquist, Mark Madryga, Daryl Brown, Robert Rowson and Robin Lines (Pacific Region Weather Services) - for excellent forecasting and quick dissemination during the heavy rainfall period in November 1990.

Earl Coatta, Bob Tortorelli and Carl Olsen (Climate Services Pacific Region) - for their personal response to a high demand for service and for providing this service in a timely and efficient manner. Earl Coatta was given special credit for the positive image he portrays for AES.

Ewing Poon (Pacific Region Informatic Services) - for his contribution to designing and implementing a software package on the Direct Readout Ground Station.

Individual Service Citation of Excellence

Albert Wright (Head, Publications and Cartography) - for 31 years of outstanding service in promoting efficiency, implementing innovations, and providing leadership in printing and distribution services.

Remo Massaroni (Manager, Telecommunications and Computing Services) - for long hours and personal sacrifice in implementing the AES Meteorological Information Service (AMIS)

Group Service Citation of Excellence

Ursula Telle, Theresa Feeney, Myra Kitchikeg, Mildred Bondy, Brian Campbell, Claude Paré, Michel Houde, Gilles Tardif, Anne Gravel (Training Branch),

Diane de Beaumont, Louis Vigneault (Human Resources), Alain Caillet (CCC), Ila Patel (Computing and Telecommunications) - for contribution to an ad hoc AES Working Group in support of the Intergovernmental Panel on Climate Change.

Long Service Award

Don M. Scott - 35 years
Ruth McNaughton - 25 years
Bill Jackson - 25 years
Eugene Bochan - 25 years

On the move...

Assignment

Ambrosini, A. from Sec. AWDH to AWDG
Cole, S. from Admin Clerk to Finance Clerk, Vancouver
Derham-Reid, J. from EG, Vancouver to A/OIC Cape St. James
Ellis, U. from Clerk CCAS to CD
Forbrich, S. from Shift Super. OWC to CFB Edmonton
Gergey, A. from Climate Anal. CCRM to Prod. MT. AWSC
Hosseini, M. to Sec. AWDH
Kellie, A. from CMC to Dir. WSPB, AWPD
LaBonne, C. from Admin Off. CMCAA to Health and Sec. Off. CMCI
Laurence, R. from QAEO to A/APPA
Moreno, E. from Sec. Ont. to ADMA's Off.
Mills, J. from RDG, Ont. to A/AWDG
Patoine, A. from MT CMCON to Super. Num. Fore. CMCON

Poirier, D. from MT YWC to MT CMC
Proctor, B. from MT Halifax to CFB Comox
Saunders, R. from DOT Liaison Off. AWPC to AWDH
Simard, A. from Super Num. Fore. CMCON to Chief, Op. Dev.
Traves-Metcalf, L. from Office Mgr. ACSF to Branch Admin., WSPB, AWFH
Verret, R. from MT CMCOW to Super. WX Elements
Watt, D. from Whitehorse to AWPL
Zell, C. from IRC, Downsview to Sec. AWPC

Departure

Lau, Y. from Edmonton
Lavoie, L. from MT Ontario
Sommerfeld, T. from Edmonton

Leave Without Pay

Shaw, R. REM Research

Lateral Transfer

Buchanan-Jones, L. from CD Downsview to CD Ottawa
Desautels, G. from MT QAESS to CMCOW
Falla, S. from Sec. AWDG to ADMA's Off.
Talbot, D. from MT Edmonton to Halifax
White, T. from APEC to Head Mgmt. Info. AWDH

New

Finlay, P. from C&P to CCSD
O'Kane, M. to Fin. Clerk, Ontario
Poitras, L. from Transport Canada to CMCSF
Stamadianos, L. to CS ACTP
Gravel, A. to OCE ACTD/A

Promotion

Cripps, R. from MT Namao to Edmonton
Freeman, K. from EG MWC, Bedford to

Super. MWC
Janzen, J. from Ontario to AWPC
Klakowich, R. from EG Slave Lake to
Edmonton
Kudloo, T. from EG. to OIC Baker Lake
McNair, N. from Sec. CCRN to Clerk,
AWFH
Oja, E. from Marine MT, PWC to Sr.
Strat. Adv. AWDH
Sarrazin, R. from MT ARMF to CMC
Takota, M. from Clerk to EG SSD
Ontario

Retirement

Aitken, F. from Winnipeg
Alleyne, H. from EG CMC
Armstrong, J.T. from CS Central
Arvidson, N. from EG Central
Attfield, B. from ACPF
Baerg, I. from MT Pacific
Bahnsen, L. from EG Western
Baldwin, D. from EG Western
Bauer, D.J. from MT CCC
Beaumont, G. from EG Quebec
Bernachi, D.A. from MT DMETOC
Black, G. from CD, Downsview
Blackburn, L.G. from EG Atlantic
Blackburn, N. from CM Ontario
Blacklock, G. from EG Atlantic
Blackner, J. from EG Central
Boehmer, D. from PE Central
Bourque, R.S. from MT DASB
Brooks, A.A. from EG Ontario
Brushett, J. from EG Atlantic
Burge, P. from ST-SCY CSD
Bush, H. from MT Pacific
Carr, D. from EG CCC
Cassidy, D. from CR CCC
Clark, C. from CR F&A
Coolen, R. from EG Atlantic
Colpitts, R. from MT DMETOC
Connelly, M. from CS CCC
Coté, J. from MT Quebec
Crowley, W. from MT ACSD
Davies, C.R. from EL Research
Davis, N. from DA-PRO CCC
Degrace, J. from EG Atlantic
Der, J. from MT CMC
Dmytriw, J. from MT WSD MT
Donahue, G. from CM Atlantic
Dressler, N. from MT Pacific
Eddy, F. from MT Pacific
Eensalu, E. from CR CCC
Elliott, A. from EG Atlantic
Ferguson, A. from EG Atlantic
Flynn, B. from EG, MAES
Fraser, D. from AWDH
Faseruk, A. from PG Central
Fedurco, A. from DA-PRO Computing

Flynn, B.L. from EG Atlantic
Foote, F. from CM Atlantic
Gagnon, R. from MT CSD
Garrison, P. from MT CMC
Gayton, W. from TI DASB
Getman, W. from AS Research
Godson, W.L. from RES Research
Gosse, D. from CM Atlantic
Grandy, W.G. from CM Atlantic
Haering, P. from MT Pacific
Haché, B. from EG Quebec
Harvey, R. from MT Pacific
Hawthorne, E. from EG Western
Heaney, S. from EG Central
Hines, A. from CM Central
Hines, C. from EL Central
Irbe, J. from PC CCC
Jecks, R. from CM Pacific
Johnson, D.E. from CM Central
Johnstone, K. from MT CMC
Kawamoto, M. from CR Pacific
Kearey, G. from EG Pacific
Kenny, E. from CM Pacific
Khaja, N. from ST-OCE CCC
Lanning, M.K. from EG Atlantic
Leek, K. from EG Central
Lefebure, P. from CM Pacific
Lemire, F. from QAED
Lewis, A.J. from CS Research
Lochner, F. from EG Ontario
Lukasevics, R. from CR CCC
Lupack, S. from AS WSD
Mace, R. from CR Pacific
MacDonald, K.M. from MT DMETOC
MacLeod, A.F.J. from EG Atlantic
MacLeod, A. from CM Pacific
MacNaughton, M. from CM Western
Mapanao, L.O. from MT CCC
Mariano, C. from CM CMC
McBain, D. from EG Pacific
McBride, J. from WSD
McKenney, J. from ST-SCY Atlantic
McLaughlin, P.A. from EG Ontario
McGregor, T.I. from EG Ontario
Mohr, J. from EG Pacific
Mosher, D.E. from CM Atlantic
Mossison, L.R. from EG Research
Mulvenna, J.R.E. from EG Central
Murdoch, D. from SSD Ontario
Nelis, R. from MAEW xx Atlantic
Olafson, R.A. from RES Research
Owen, R.S. from TI DASB
Page, R.E. from EG Atlantic
Paquette, R. from EG Quebec
Paulin, G. from ACTR
Pearce, H. from EG Western
Reynolds, G. from EG Pacific
Piska, T. from EG Western
Rogers, K. from EG Western
Porter, R. from SI F&A

Proxny, G. from EG Western
Prusak, W. from EG Western
Sandford, A.M. from DA-PRO CCC
Scott, D. from CD Downsview
Shah, G.M. from PC Research
Shimizu, G. from Spec. Ad. ADMA
Stauder, M. from MT DASB
Summers, P.W. from RES Research
Szekely, F. from CS CCC
Thibeault, C. from CS RPN
Tinck, M. from FI Pacific
Tremblay, R. from CM Quebec
Verge, J.A. from FI Atlantic
Voss, E.M. from CR CCC
Vupputuri, R. from SE-RES CCC
Walbourne, F.K. from CM Atlantic
Walsh, W. from FI Western
Webster, D. from CCAD
Wensveen, Q. from EG Western
White, Y. from CR Atlantic
Whyte, E. from FI Research
Wilson, D.C. from DA-PRO CSD
Wilson, J. from EG Atlantic
Wilson, J. from EG Western
Wpak, S. from AWDH
Yacowar, N. from MT CMC
Yasui, R. from MT Pacific
Yorke, B. from EG CCC
Zapp, J. from DA-PRO CCC

Transfer

Bourque, A. from MT CMQ to CFB
Trenton
Broekstra, J. from EG Winnipeg to Sault
Ste. Marie
Browne, G. from Inst. ACTD to WAED
Montpetit, J. from MT CMQ to CFB
Trenton
Nichols, T. from Inst. ACTD to WAED

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