

zephyr

ATMOSPHERIC ENVIRONMENT SERVICE NEWSLETTER

February - March 1992

Our eye on the storm

Cloud physics isn't usually considered a high-risk profession like lion-taming or tightrope-walking. Dr. Ron Stewart, Chief AES Scientist with CASP II, (Canadian Atlantic Storms Program), might disagree. Unlike most normal mortals, he flies into storms and loves it.

A joint undertaking of AES and DFO's Bedford Institute of Oceanography, CASP II, like 1986's CASP I, had the purpose of better understanding and predicting Atlantic storms. More accurate prediction of severe weather is imperative in Atlantic Canada where storms cause loss of life and interfere with the oil exploration, fishing and transportation industries. Other scientists, such as those studying aircraft icing, joined the project making it the largest study of its kind. "It's no wonder," said Stewart, "St. John's was bulging with scientists from Japan, New Mexico, NCAR and from across Canada all eager to take part."

More than 30 flights into severe storms took place between mid-January and mid-March on the NRC Convair 580 aircraft. The plane was outfitted with dropsondes and a full complement of instruments for studying clouds and tak-

ing measurements of turbulence, aircraft icing rates, electric fields and air quality.

Those actually flying into the storm were supported by many AES groups. Most Newfoundland stations and Sable Island were on alert during flights. Two extra upper air stations, at Gander and Argentia (DND), were installed. The Torbay Upper Air Station near St. John's, outfitted with Doppler radar, portable radiometers and other instrumentation, provided crucial supporting measurements. And, of course, a crack team of forecasters - most from Gander with some imports from Western Region, CMC and Halifax - gave them ample, accurate storm warnings.

Only six scientists had the opportunity to enjoy each exhilarating flight into a storm. "Science by the seat of the pants," Stewart called it. "It

was mentally trying. We recorded all the data in real time. You've got only one chance to do it right." Because most data was interpreted instantly, they needed the utmost concentration to monitor and accurately record rapidly moving gauges in a bouncing plane.

During the first CASP flight, the aircraft battled turbulence and wing-icing reaching St. John's just before the airport closed. One of the mission's great accomplishments, as always, was "that we got back alive," according to Stewart. "It was rather scary." One less eventful flight was more rewarding scientifically. Stewart tells about unique observations made off Newfoundland's north coast: "We went through a fantastic sharp storm front. On the warm side of the front, there was rain; on the cold side, snow. Right on the front line, there were huge, wet snowflakes and the temperature was exactly 0 C°.

Theoretical studies had anticipated that some fronts occur at 0 C° or close to it. The fact that we saw this up close supported these ideas."

For the patriotic Ron Stewart, the excitement of CASP II is now over but he plans future research in friendly skies:

"I'm proud to be working in Canadian storms. We're doing internationally respected work and we're working in our own clouds, it's a nice feeling."



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Service through science

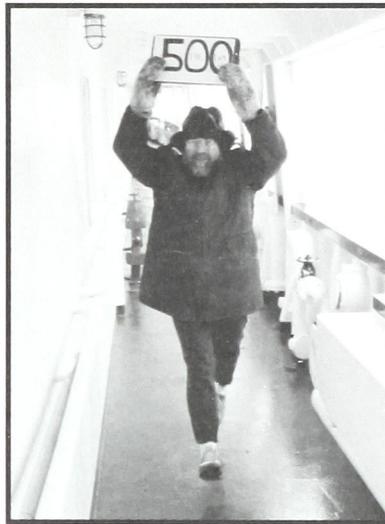
Fabulous feat saluted

If you're losing the battle of the bulge, let the story of AES Ice Service Specialist Larry Solar inspire you.

Until 1989, Larry was, as he remembers, "...350 pounds and had trouble walking up a flight of stairs." Recognizing his health was in jeopardy, Larry started a regular exercise program. Obviously, it wasn't easy. His body rebelled! While "one foot would point straight ahead, the other would point at a 90° angle as if it wanted to turn back," he recalled with a grin. But once he got his feet going in the right direction, Larry didn't stop his daily three to five mile walking program until he shed an impressive 110 pounds.

Larry is so dedicated to exercise, he continued while on ice patrol last year. Aboard the *CCGS Sir John Franklin*, Larry walked 4500 laps of the ship to cover an amazing 500 miles (805 kilometers) in nine weeks.

To accomplish this goal, he stuck to a stringent routine including 4:15 a.m. strolls and spirited 10:00 p.m. outings. At first, his goal was to complete 250 to 300 miles while on board. But, encouragement from fellow crew members made him aim higher - for 500 miles.



So, couch potatoes, what's your excuse?

Although most shipmates were supportive, some created obstacles. His sanity was questioned. Pranksters threw buckets of water in his track to stop him. Rowdy partiers even dropped lurid adult magazines in his path to slow him down! Undaunted, Larry kept walking. The weather was a tougher opponent. But, with his goal in sight and the voyage almost over, Larry had no choice but to press on - doggedly enduring rain, snow, sleet, fog, drizzle and gale-force winds.

Finally, with little fanfare on an icy Arctic evening, Ice Specialist Larry B. Solar met his goal - and raised \$250 for the Terry Fox Run in the process.

When asked for a comment at the informal finish line, an exhausted Larry could only muster: "ENDURE AND CONQUER!" Later, he said he hoped his feat would "encourage people to believe that a person can get back into good physical condition even at 45 years of age."

Transition is everyone's business

Imagine an organization where everyone has clear objectives and accountabilities, sufficient time and resources, appropriate motivation, shared values and goals - in an atmosphere of innovation and effectiveness. Imagine barriers between management and employees removed - and front-line managers with authority to be responsive to clients. Imagine having the training, administrative support and the encouragement needed to use authority effectively. The optimist might say we're getting there in AES; the skeptic might moan that such a future is an impossible dream.

This ideal is the future for which Environment Canada is striving through a process called *Transition*. *Transition* includes six interrelated elements: a department vision (complementary to the AES vision - Service through science), enhanced use

of our science and knowledge, improved management based on mutual trust, improved skills and motivation, more client-focused services and unity as a department.

As *Transition* enters year two, progress is being made. But change occurs only through cooperation. In working together, for example, Parks increasingly distribute information on the atmosphere and collect climate information. AES is making its computer expertise available to other parts of the department. C&P and AES share the management of atmospheric issues, both nationally and internationally.

John Reid, AES member of the *Transition Team* admits that *Transition* is a challenge. "AES does good work now - *Transition* is a way we can be so much better," he says.

Optimist or skeptic, you can learn more about *Transition* by requesting a copy of *Report on Transition - Year One*. Call (819) 953-3922.

Clothes encounters of a different kind

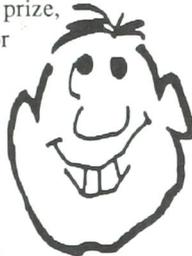
Now, there's yet another reason to be glad it's Friday. As part of a New Year's resolution, Associate Deputy Minister Lorette Goulet has declared each Friday *Dress-Down Day*. All employees not on official business are urged to cast off those restrictive ties, sport coats, suits and dresses and slip into their most comfy casuals (short of track suits) one day a week. Already, the trend is catching fire. We heartily applaud this move toward a more productive, relaxed workforce - and tinier dry-cleaning bills!

They say we're more than a weather service...

Public enquires to AES are usually standard questions about temperatures and forecasts. But apparently there are some mighty strange questions that don't relate to weather or the atmosphere. Is this truth or just a vicious rumour?

Inquiring minds want to know - **What's the strangest, most unusual and/or wackiest request for information you've ever received?** We at Zephyr want to compile the best answers in a future article. What's the prize, you ask? We're hoping you'll settle for world-wide fame and adulation!

Send your wackiest request by March 31st to:
Editor, Zephyr
AES Communications
La Salle Academy, 373 Sussex Drive
Ottawa, K1A 0H3



Software that's hard to beat

When relocated north, southerners accustomed to big-city attractions sometimes don't know what to do with their spare time. As Richard Desjardins could tell you, all it takes is initiative and a little imagination.

During a recent stay in Iqaluit, Weather Service Specialist Desjardins amused himself in his off-hours with a modest project - creating two labour-saving weather software programs.

As most know, the preparation of monthly summaries is a time-consuming and tedious task. Then along came Richard and his computer programs, *Climaster* and *Translogger*. *Climaster* reads 75% of the NCCS data necessary to create monthly summaries. *Translogger*, a *Climaster* adaptation, translates rough data from CR-21X-type automated stations into data the other program can understand. *Climaster* then prepares statements in mere minutes, delivering them by 06:00 Universal Time on the first day of each month. The programs save data for over a year. The result is fewer computations and much happier staff.

For Richard, a self-taught computer whiz, creating two new programs involved great personal sacrifice. "I didn't see my wife for two years," he admits. Luckily, she understood his obsession with his "mistress with a microchip" and supported him throughout. After countless hours of work, he finished the programs and generously gave them to Environment Canada.

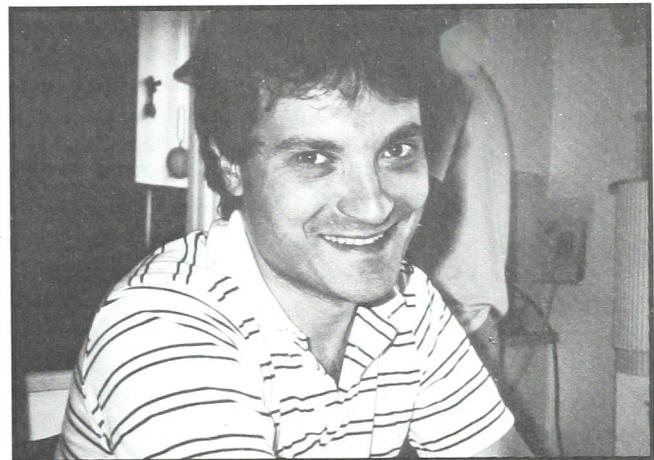
The programs are used by all Quebec weather stations. Recently, Richard translated both programs into English so he hopes other weather stations will take advantage of them soon. Richard has recently been relocated to Mirabel but he vows the southern life and its

Classification Simplification Update

As part of the PS2000 classification simplification, the new General Administration Group (GE) will consolidate the former CR, ST, DA, CM, IS, PM, AS, FI, PE and LS groups.

The new GE classification standard will be based on a point rating system, which is presently being developed. All of the positions within the GE group will be evaluated against this system. Present plans indicate that 25% of the GE positions will be evaluated by the end of December 1992. The other 75% will be evaluated by December of 1993.

During the trial evaluation period, job descriptions will continue to be written in the current format. A DOE working group will soon be set up to develop procedures to implement this conversion.



Hate doing those monthly summaries? Computer whiz Richard Desjardins (Quebec Region) can make life easier for you.

distractions will not keep him from his favourite hobby, computers.

For further information or a copy of the programs, contact:

Réal Franc,
Regional Superintendent, Standards and Requirements,
St-Laurent, Quebec,
(514)283-1104

Green store opens in Winnipeg

Environment Canada officially opened the new Winnipeg "Green Store" in November, amalgamating the Manitoba corporate functions of Communications, Partners Fund and CORE under one roof. The new office, boasting a storefront location in Winnipeg's busy downtown skywalk, is designed to raise the public profile of the Department. (The skywalk is an enclosed pedestrian corridor connecting downtown shopping and business areas). Those familiar with Winnipeg's infamous winters will

appreciate how well-used this warm, protected walkway is - especially during the chilly months.

The Green Store's glassed-in foyer and information centre face onto the walkway. Inside are public exhibits on issues such as global warming, brochures and fact sheets, and a television and VCR displaying weather information and environmental videos. The convenient location next door to Central Region AES has strengthened the sense of family in the corporate

and AES offices and promotes an internal awareness of Environment Canada activities.

Special thanks go to AES Central Region's Brent McVean and his staff in Finance & Administration and Bernie Aftanas and the Informatics crew for all their help in planning and setting up the new office and computer systems.

Awards, awards...

Departmental Citation of Excellence

Brian Hammond, Doug Lundquist, Mark Madryga, Robert Rowson, Robin Lines and Daryl Brown (Pacific Weather Centre/Lower Mainland WO4) - for excellent forecasting and quick dissemination during the heavy rainfall period in November 1990. (These employees received Regional Citation awards in March 1991).

AES Citation of Appreciation

To the following AES employees who have made an outstanding contribution in the area of Air Quality, leading to the successful conclusion of the Canada-U.S. Air Quality Accord -

Dr. Tom Brydges, Sue Milburn-Hopwood, Anne Tortolo ARID; Ruth Tung, Dr. Richard Leaitch, Bob Schemenauer, Walter Strapp, Steve Bacic, Cathy Banic, Mark Couture, Dr. George Isaac, Richard Poersch, Jack Power, Mohammed Wasey ARMP; Margaret Hannah, Bill Hart, Dr. Hans Martin ARQD; Jim Arnold,

David Davies, Ken Oikawa, Marvin Olson, Balbir Pabla, Alain Sirois, Dr. Peter Summers, Dr. Doug Whelpdale ARQI; Sadiq Ahme, Len Barrie, Jan Bottenheim, Al Gallant Armand Gaudenzi, Syed Iqbal, Tina Knott, Wes Kobelka, David MacTavish, Stu McNair, Dr. Marlene Phillips, Chu-Un Ro, Bill Sukloff, Bob Vet ARQM; Len Guise-Bagley, Kurt Anlauf, John Deary, Gerrit den Hartog, Bob Mickle, Harold Neumann, Dr. Keith Puckett, Yen-Art Tham, Maurice Watt, Dr. H. Alan Wiebe, Sandra Woodhouse ARQP; Frank Froude,

Ray Hoff, Brian Martin CARE-Egbert, Billie Beattie MAESQ, Steve Beauchamp MAESL, Gilles Desautels CMDW

Regional Citation of Excellence

Roy Wilson, Linda Reber, Harry Baptist, Shirley Pecht (Pacific Region Communications Division) - for dedication to maintaining 24 hour operation during a severe staff shortage

Arlene Omen, Violet Roberts (Pacific Region, Pay and Benefits) -

for contributions during the March 1991 Workforce Adjustment Exercise

Jack Bowling (Prince George WO4) - for exceptional dedication to maintaining operations for the B.C. Forest Service during the summer of 1991. Jack worked a stretch of 49 days straight!

25 Year Service Award

Bob Loveless, Stan Stobbe, Lawrence Chu, Carl Olsen, Bob Tortorelli, Dave Phillips, and Jim Cissell

*Loyal Zephyr readers will remember that veteran Halifax meteorologist Reuben Hornstein (employee of the Meteorological Service 1938-1972) was awarded the Order of Canada. At a recent investiture ceremony, Hornstein's pioneering role in Canadian meteorology was saluted. Part of the citation read: "Although he can no longer be blamed for the weather, he is still fondly remembered throughout Atlantic Canada as *Your Weatherman*, the popular television personality who made the forecast understandable, if not always agreeable." The citation also honoured Mr. Hornstein for his other important work - as a reader of "talking books" for visually-impaired students. Bravo!



AES and CPS cooperate



A new era of cooperation in Ontario Region began on December 4th, with the signing of a Memorandum of Understanding (MOU) by AES and the Canadian Parks Service (CPS).

Together, AES and CPS will supervise a new weatheradio station in northwestern Ontario's Pukaskwa National Park. The station will conveniently provide both AES weather forecasts and Parks'

announcements on the same radio frequency.

Jane Roszell RDG (CPS) hopes this will be the first of many such collaborative ventures. She said, "I look forward to seeing more service links established in the future."

Bryan Adamson, A/RDG (AES) shares Jane's enthusiasm. According to Bryan, "By combining the efforts of our two Services, we offer a superior product to the client and pave the way for other opportunities for cooperation."

The official opening of the weatheradio station in spring 1992 will coincide with the seasonal opening of Pukaskwa National Park.

Career project participants

In the December/January issue of Zephyr we told you about the pilot Career Development Project for Women. The objective of the departmental project is to allow women to re-orient their careers through various job assignments designed to enhance work experience.

Attached are the names of the AES participants who will be taking on new assignments or training over the next year. Join Zephyr in wishing Good Luck to: Annette Goessl (Human Resources Downsview), Susan Falla (ADMA Downsview), Lana Birmenn (Ice Branch Downsview), Caroline Schmidt (Ice Branch Ottawa), Lucille d'Auteuil (Central Region RDGs Office), Patricia Mohen (Finance Central Region) and Monique Martine (Human Resources Central Region).

AES and the Green Plan

December 5, 1991 - Emergencies

Canadians will be better protected from environmental threats such as severe weather, toxic gas clouds, nuclear accidents, flooding and icebergs as a result of a \$40-million Green Plan initiative to improve warnings of environmental emergencies. The package includes five major components: storm detection - radars and research (\$14.5 million), nuclear, volcanic and toxic gas response (\$12.4 million), dissemination and service delivery (\$6.7 million), flood forecasting and warnings (\$3.4 million) and iceberg surveillance (\$3.0 million).

December 6, 1991 - Smog

\$30 million in new resources made available through the Green Plan will enable Environment Canada to meet its commitments under Phase I of a federal-provincial Management Plan to reduce emissions of nitrogen oxides and

volatile organic compounds - the main cause of ground-level ozone and a major component of smog. The goal of the plan is to resolve Canada's number one urban air-quality problem by the year 2005. It sets out detailed initiatives to be implemented by the federal government, the provinces and industry.

December 11, 1991 - Green Plan 1st Anniversary

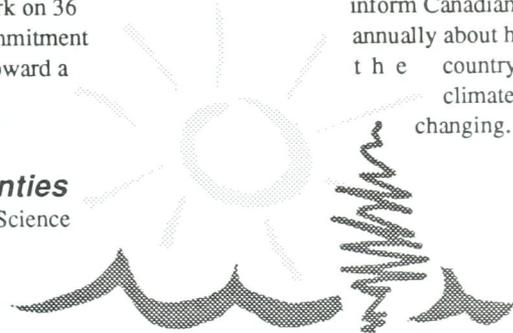
Minister Charest released a report highlighting the achievements which include the beginning of work on 36 major initiatives and the commitment of more than \$1.16 billion toward a healthier environment.

January 27, 1992- Reducing Uncertainties

An \$85 million Green Plan Science Program to reduce the uncertainties surrounding global warming in Canada was unveiled. The Science

Program - an essential part of Canada's strategy on global warming- will focus on the regional patterns, speed and extent of global warming in Canada and its effects on the climate system. The Program includes support for Canadian participation in international experiments to improve our understanding of the climatic roles of oceans, forests and the global hydrological cycle. An expanded

climate monitoring and reporting system will be put in place to inform Canadians annually about how the country's climate is changing.



Abby?

It's not often that AES personnel grace the pages of Dear Abby (except perhaps as anonymous letter-writers). So when we saw this in a recent advice column, we knew we just had to pass this excerpt along...

Dear Abby:

My husband and I travel the highways a lot and listen to the radio for weather reports. This can be very frustrating. The station call letters are broadcast, but never do they disclose their

location. They give weather alerts and name the affected counties, but never the cities they are near or in... There should be a regulation that forces radio stations to include their location and, if a weather alert arises, announce which main highways are included in the alert area. Please have pity on the poor traveler. I'm sure others feel as we do.
Indiana Travelers

Dear Travelers:

Your transmission has been received

loud and clear. This information could be a lifesaver.

In Canada, weather warnings are given for specific geographic areas - the Lower Mainland, for example, or the east coast of Vancouver Island. "We don't think in counties- we use the same areas we use for public forecasts," says Anne McCarthy, a weather services specialist with Environment Canada, which supplies radio stations with forecasts and warnings.

On the move...

Assignment

Aber, P. from DG ACDG to Spec. Asst. ADMA
Andrews, H. from Instr. Cornwall to EG Iqaluit
Aguilar, D. from Proj. Super. to Surf. Super. St-Laurent
Aronson, F. from EG St-Hubert to Instr. Cornwall
Beauvais, A. from EG La Grande 4 to Inukjuak
Champagne, L. from EG Inukjuak to Maniwaki
Charette, C. from TCTI to EG Sable
Craig, S. from CR to AS Vancouver
Daoust, R. from Instr. Cornwall to Clim. Tech. St-Laurent
De La Sablonnière, J. from EG La Grande 4 to Inukjuak
Desjardins, G. from Surf. Super. to Aero. Super. St-Laurent
Dupuis, R. from Proj. Tech. to Proj. Super. St-Laurent
Gauthier, R. from Clim. Tech. to Clim. Super. St-Laurent
Gélinas, F. from EG Sept-Iles to La Grande 4
Goessl, A. from Pay and Ben. AHRD to Clim. Asst. CCC
Googoo, L. from EG Sable to Gander
Horne, R. from APDG Ottawa to OSA Hull
Lafontaine, J.Y. from Aero. Super. to Asst. Dir. St-Laurent
Lesieur, J. from EG Inukjuak to Sept-Iles
Méthot, A. from MT CMQ to CMC
Miron, J. from Clim. Super. to Clim.

Proj. St-Laurent
Michaud, E. from TCTI to Aero. Obs. Sable
Patry, M. from EG Maniwaki to Iqaluit
Reid, J. from APDG Ottawa to Trans. Team
Tailleur, L. from EG Iqaluit to Transport Canada

Departure

Hochban, F. from Aero. Obs. Wpg. Pool

Leave without pay

Lachapelle, A. from MT ALWC
Niniowsky, E. from CR Fin. Edmonton

Maternity Leave

Langlois, D. from MT ARWC

New

Boyer, K. SCY Ottawa
Juneau, S. EG Inukjuak
Michel, J. EG Kuujuak
Sweet, P. CR Vancouver
Talbot, A. Elec. St-Laurent
Young, C. to CD Ottawa

Promotion

Grosnegger, G. to CS Winnipeg
Lloyd-Walters, K. from EG Wpg. Pool to Surf. Insp. Saskatoon
McNaughton, W. to CS Winnipeg
Milton, J. to MT CMQ
Morrison, A. from Staff Weather Off. to Wing Weather Off. CFB North Bay

Simard, G. from Instr. CFB Winnipeg to Staff Off. CFB St-Hubert
Wallace, A. from OIC Whitehorse to Mgr. WSO Kelowna
Yelland, G. to CR Winnipeg

Retirement

Cross, G. from Pay and Ben. AHRD

Transfer

Beauchemin, M. from MT Edmonton to Toronto
Doherty, F. from MT Gander to Vancouver
Everett, K. from MT Edmonton to Ottawa
Frenette, R. from MT Greenwood to CMQ
Hoas, K. from Surf. Tech. Wpg. Pool to CR Winnipeg
Langis, G. from MT Edmonton to Ottawa
Ling, A. from MT Namao to ARWC
Mercier, L. from MT Trenton to CMQ
Wnuk, D. from CR CEIC to Edmonton

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
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Special thanks this issue to Thérèse Martine, Yvon Bernier and Joan Badger.

