

ATMOSPHERIC ENVIRONMENT SERVICE NEWSLETTER

February - March 1993

AES' stellar attraction by Kelly Reeve

Not even the groundhog could overshadow Canadian astronaut Steve MacLean's visit to AES Downsview February 1 and 2. On February 2, Canada's third person in space addressed an attentive audience which packed the auditorium. They listened to Steve's detailed description of his recent STS-52 mission in space. His film and slide presentation allowed the audience to visualize life without gravity. Imagine ... floating around weightlessly while trying to sleep. Or using a laptop computer in zero gravity. (Guess what happens when you pop your disk out of the computer.) And think of chasing your fruitpunch as it drifts away from you!

Most amazing was the fact that aboard the shuttle Steve could see 400,000 km² of the earth at once, from the Andes mountains to the pyramids of Egypt. Steve even witnessed a volcano erupting in South America and called back to earth to report it. The spectacular

Northern Lights were in full view, too. According to Steve, even nine years of preparation for the mission couldn't do justice to the real thing!

completely vanished. (He did admit that the 16 sunrises and sunsets each day were quite romantic, though.)



Canadian astronaut Steve Mac Lean, with Drs. David Wardle (left) and Tom McElroy.

Steve described his experience as "the wildest ride you could imagine. You really knew you were going somewhere." But not everything about the mission was quite so enjoyable. His head felt like a pumpkin from changes in air pressure, and his sense of time

Unfortunately, Mrs. MacLean may have disagreed! Steve's wife Nadine, who attended the public talk, described watching the shuttle lift-off as a scary and emotional experience. But once she knew that Steve was safe, she was ready to celebrate. The couple were able to keep in touch by sending daily messages on a highpowered fax machine.

Part of Steve's work in space included an Environment Canada study

of the ozone layer. The experiment, referred to as SPEAM-2, will open up a new frontier in space-based ozone research. He took measurements of ozone levels in the outer regions of the atmosphere, using SPEAM-2 instruments developed by AES scientists.Steve then added another interesting note to the

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Canada

Service

Environment Environnement Canada

Atmospheric Service de l'environnement Environment atmosphérique



Service through science

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discussion. When asked by one employee how Canadians were regarded by their international scientific colleagues, he said: "Canadians are considered technically competent and efficient with the amount of money we have."

"No-frills" publishing

In times of diminishing resources and increased environmental awareness, it's crucial to be fiscally and environmentally responsible. In fact, since last May, it's government policy. Once departments use up present stockpiles of paper, all publications must be "no-frills".

What does this mean? It means starting to think about how we produce documents. A true no-frills publishing strategy involves careful long-term planning. But there is one great way to start yourself in the right direction. When thinking of a new publication, ask these vital questions: "Is there a demonstrated need for this? Do we have a definite audience we're going to reach? Is a publication the best way to reach the public? " Then be brutally frank. If you can't answer these three simple questions with a resounding "Yes!", then DON'T DO IT. It's that simple.But if you say "yes", or if you have an ongoing publication, there are lots of ways to reduce costs and become environmentally friendly. Here are some:

Experiment with a lighter weight of paper. Lighter paper can mean lower postal costs if you're mailing products. For a document with a big print run, this could add up to large savings. But be careful not to choose AES is very proud of Steve MacLean and his contribution to ozone research, and of our own researchers who contributed so much to the success of Steve's mission. This dedication was recognized by the Space Agency, through a presentation Steve made to Dr. Dave Wardle, principal investigator of SPEAM-2, and Dr. Tom McElroy, deputy investigator.

paper that's too thin because one side might show through the other. And recycled paper only, please!

Reduce the number of colours. The days of all-colour printing are gone, with few exceptions. Dropping one colour saves money. Fewer colours force you to be more creative, too. Using offbeat colours, like purple, can be appealing and effective. Check out the look of "EnviroCom", the departmental newsletter.

Cut down on ink! Large expanses of heavily-inked areas equals lots of dollars. They're harder to de-ink when recycling, too. Darker inks are usually more expensive than paler inks, too. Opt for minimum ink with maximum visual impact. Also avoid "bleeds", heavily-inked areas that cover the page from side to side. These are labour-intensive and expensive.

Be very careful calculating how many copies you need. Often 30% of publications are unused, resulting in increased storage and warehousing costs. This is a quick way to reduce publishing budgets.

These are just a few tips to get you thinking along no-frills lines.Even "Zephyr" is getting into the act. Watch for changes in the next issue.

If you want more information on "No Frills", call Catherine Young, Now that his space mission is over, Steve will continue research in Houston, since one of his experiments will be used on the next Canadian space mission. He will also have his hands full with his family, as his wife is expecting their third child soon. All at AES wish Steve MacLean and his family the kind of success on earth as he had in space. Onward and upward!

AES, (613) 996-4218 or Elizabeth Shore, DOE, (819) 994-1054.

And speaking of paper...

Iris Winston of the National Library of Canada writes us about her organization's promotion of the use of permanent paper.

Most books printed since the 1850's were printed on acidic paper. This material breaks down chemically, leaving yellowed, crumbling and brittle books. To keep our past readable, the National Library is safeguarding our published heritage by printing on permanent paper. In 1992, the Minister of Communications decreed that federal government publications of historical or informational value must be printed on permanent paper. As its name suggests, permanent paper lasts for centuries. It doesn't break down like acidic paper. It's whiter, brighter and takes ink better. It's kinder to the environment and can be recycled. (And because it's limited to special publications, it doesn't violate no-frills publishing guidelines.)

If your material has historical or archival value, it makes good sense to use permanent paper. For further information on keeping your words in good shape, call Iris Winston at the National Library of Canada, (613) 996-7401.

A debonair pair



Floyd (right) and Lloyd Rader, the men of the hour, with Minister Charest.

Things were hopping in London, Ontario in January. The WO4 officially opened on the 19th. And later the same month, the dynamic duo of weather service specialists, Floyd and Lloyd Rader, retired. These identical twin brothers have been London weather landmarks for over 25 years.

Born in 1936, they always shared similar interests, including skywatching. After pitstops in other careers, their dual career path started when they both opted for a life in weather. Floyd graduated from the basic meteorology course in 1960, Lloyd in 1961. After stops in various places like Simcoe and Windsor, they landed in London and stayed. And, following a pattern, Floyd arrived in London one year earlier than his brother - in 1965.

What makes their story more remarkable is that they are married to sisters. And Floyd relates another unbelieveable coincidence: "Our elder brother was married to a third sister but she died a number of years ago." (Just wait till the **Guinness Book of World Records** hears about this!) The two brothers also live on adjacent hobby farms in Dorchester, near London. They don't mind the closeness. As Lloyd jokes: "The big hedge with the barbed wire helps." Despite the jests, working together and living nearby never seems to grate. Their families like each other. Also, because of shifts, the brothers don't see too much of each other at work. Their shared profession strengthens that special bond between twins. As Lloyd says: "We don't have to say much to understand each other." Living next door has advantages. As Lloyd says:

"Because we work shifts, we've got built-in housesitters!"

With Lloyd's last shift on January 24th and Floyd's on 26th, retirement has arrived. Floyd looks forward to "spoiling my grandchildren a little more." Golf and travel beckon, too. Lloyd, on the other hand, plans to tend his 200 fruit trees, including pears, of course. What's Lloyd's biggest treat after 30 years of shiftwork, you ask? "Sleeping in in the morning!" What else?

A long and happy retirement to you both, Floyd and Lloyd!

CFWS and women's issues by Becky Milo

The Canadian Forces Weather Services (CFWS) employs 100 meteorologists. 13 are females, most of whom work at the junior operational levels. In 1992, the CFWS, led by Lou Ranahan, struck a blow for equity by forming the CFWS Focus Group on Employment Equity - Womens' Issues. Lou asked me to take the lead.

As a first step, representatives of CFWS' female MTs met in Halifax late last year for a workshop on women's issues and career goals. An attendee, Marie McPhee, MT, CFB Greenwood, spoke of personal experiences with harassment when she began work in 1980. Since then, changes by management have improved the situation markedly, she said. In a later presentation, Peggy Roy, HR, showed that the percentage of women MTs jumped from 6% of total MTs in AES in 1984 to 12% by 1992. The 30% public service target of females in the scientific category has not been reached but the narrowing gap is encouraging.

It was agreed that rates of promoting women should correspond to numbers of women in the category being considered. If 20% of MT3's are female, then 20% of those promoted should be women, for example. But the group stressed that women should be promoted on the basis of merit only. The biggest concern was that many female MTs lack exposure to management areas and are unaware of opportunities outside operations. The MOP program, lateral transfers and temporary assignments should be officially encouraged as great ways to for women to experience the managerial environment.

Finally, the group noted no major barriers to advancement or problems with sexual harassment at the operational level within the CFWS. But they admitted their experience outside this sphere was limited. For women, access to work in management cannot be overstated as a key to achieving equity and job satisfaction. While much needs to be done, sessions like the one in Halifax make the outlook positive.

Fiddlin' around

By day, Gérard Langevin is a weather services supervisor in Edmonton. In his spare time, however, he just fiddles around. Or rather, he's a violinmaker.

Gérard grew up in Lac La Biche, a small town in northern Alberta, the home of many great fiddle players. The sound of those tunes staved with him so he vowed to have his own violin when he was older. But when he bought one, he wasn't happy with it: "It didn't sound right, but the good ones were too expensive." The solution, for a capable fellow like Gérard, was to build one himself. This was easier said than done. Information on assembly was scarce: "Violin makers are notorious for not giving out any secrets." But with a hint here, a clue there and lots of elbowgrease, Gérard got down to business : "You end up having to figure it out yourself." That meant it took ten long years to finish his first violin.

A tip of the Zephyr derby to ...

First, the staff of AES Ontario Region, Toronto (and Pearson International Airport) for possessing the true spirit of Christmas. A lot of AESers give generously during Yuletide but the generosity shown by the following story really caught our eye.

For two years before this Christmas, Ontario Region staff sponsored a needy family through a social service agency. This year, the agency folded due to cutbacks. Undaunted, staff found a single mother, "Sally", with three older children, to sponsor. The mother asked nothing for herself, just food vouchers for the children. When pressed for more details, she added warm winter clothes for all, skates and bikes for the children. She had given up hope of ever realizing her own modest dream: a Christmas snow scene that played a tune. Its



Gérard Langevin with a prized possession.

So what makes a violin great? "It has to look good and the workmanship has to be great. It has to have resonance and good tonal quality and range." The right wood is important. The back, sides and neck of Gérard's fiddles are made with hardwood (Austrian flamed maple) and the top with softwood, pine or spruce. All of the instrument is handcarved, except the sides which are bent. According to Gérard, the best

marching orders given, AES elves got busy. And despite tough times, they dug so deep they had an embarassment of riches. The excess gifts posed a dilemma: should one needy family have a great Christmas or should two families a modest one? They opted for the latter. A second family,"Donald", a single father and recent immigrant with three young boys, was added. On Dec. 18 and 22, AES "Santas" hand-delivered the two families the best Christmas ever. "Donald" and "Sally" tearfully accepted bags and bags of warm clothing, gift certificates for winter boots, food vouchers and almost \$1000 cash. "Sally's" children got retooled bikes and new skates, too. The children happily tried on donated clothes or took spins on their first bikes. "Donald", in particular, was overwhelmed that people he had never met could be so generous and caring to a stranger

violin has to look good, feel good "...and sound good. It's hard to analyze critically but if you have 3 or 4 violins and you play one all the time, the one you play the most is the best violin."

Over the years, Gérard has poured his energy into producing around a dozen violins. The last one took over a year to make. While most violins are in the hands of grateful musicians, he's kept two for himself for sentimental reasons. His next goal: "I've made ones that sound good but I'm having a hard time getting it to look exactly like I'd want. Now, I'd like to work on achieving the correct aesthetics."

Why does he do it? Easy! "When you put it all together, pick it up and draw the first note from it, it's an incredible high that lasts for weeks. Violinmaking is one of the most satisfying things I've ever done."

from a foreign country. And yes, "Sally" got her musical snow globe.

To AES Ontario Region, bravo! This Christmas story will inspire us yearround.

Ice bit ****

A new non-profit charity was started recently by Ice Recon/Ice Patrol. This organization assists Inuit newborns discharged from the hospitals at Inuvik and Iqaluit. It helps needy children serviced by the nursing station in Resolute, too. These infants and children often have nothing, so what we consider the bare essentials of young life (diapers, formula etc.) are luxuries. If you are interested in getting involved, please call Bob Zacharuk, Chief, Ice Field Services at (613)996-5064 for more information.

Wanted: green achievers

To recognize Canadians who have taken responsibility for the environment and to encourage others to get involved, MPs are invited to present Environmental Citizenship Certificates to deserving individuals and groups.DOE can help MPs identify potential recipient.s.They are looking for persons or groups who have taken an active role on behalf of the environment; adopted at least one of the ten principles of environmental citizenship as part of their daily lives and/or played a leadership role inmotivating others to become more environmentally active.

If you know a group or a person meriting an Environmental Citizenship Certificate, call Green Plan Operations, Hull, Québec at (819) 953-7242.

Signs of the times



In Saskatchewan, highway signs point the way to Weatheradio.

In October 1992, 18 new signs sprang into view along the major highways in Saskatchewan to inform the motoring public of AES's Weatheradio service.

Why advertise Weatheradio with signs? Fraser Hunter, Saskatchewan Superintendent of Weather Services, offers two good reasons: "Price and exposure. The provincial highways department will erect and maintain two signs free of charge for each CRTC licensed broadcast station. And each of our nine Saskatchewan Weatheradio stations qualify for this signage." Saskatchewan travellers have to be very sensitive to rapidly changing weather conditions. So, Hunter says, the signs serve a purpose: "Our intent is to make the travelling public aware of Weatheradio." And it's working. The signs have generated many inquiries to AES's service offices.

On a related note, DOE's weather information will soon be available to over 20,000 cellular phone users throughout Saskatchewan. As of January 1, SaskTel cellular customers who call the number 333 will be directed to one of seven AES Weatheradio or Interalia automatic telephone answering devices (ATAD's). There's a reduced charge for these special calls.

Not a bad couple of ideas!

We doff the chapeau again...

For bravery, Shirley Bird, financial clerk at AES Bedford, Atlantic Region.

When Shirley and her husband, Chip, a CPS warden, travelled to Labrador in 1991 for a family wedding, they had no idea that their lives might be on the line. While out for a leisurely drive one day, Shirley and Chip witnessed a vicious hit-and-run accident that killed a young woman. After seeing that the victim was being cared for by others, the couple hotly pursued the speeding vehicle. They caught the drunken driver in his driveway, making a

citizen's arrest on the spot. The driver was later sentenced to five years in jail for impaired driving causing death and leaving the scene of an accident.

Shirley said that she and Chip didn't consider the danger to themselves, because "it was the right thing to do". For their courage, the RCMP awarded the couple special citations at a recent ceremony in Halifax. At the ceremony, Assistant Commissioner Allen Burchill acknowledged the Birds' pivotal role: "Without this kind of action, the case could have gone unsolved."

To Shirley and Chip, thanks for reminding us to always do the right thing.

AES and the Green Plan

Windsor Weathercopy

Dec. 9. 1992 - Windsor is the latest Ontario site, after Toronto and Ottawa, to provide printed information on environmental and weather hazards. Weathercopy forecasts and warnings are tailored to the specific needs and interests of a region. In Windsor, emphasis will be placed on the agricultural industry, the auto industry and mariners.

Regina - Moose Jaw Doppler

Dec. 21, 1992 - Environment Canada announced that a \$3.5 million Doppler radar, providing up to 30 minutes advance warning of tornadoes and other extreme weather events, will be installed in the Regina- Moose Jaw area by 1995. Doppler radar allows forecasters to identify rotating wind patterns inside clouds before tornadoes become visible and strike the ground. More timely, precise warnings can then be issued to areas in the storm path.

Montréal Weathercopy

Jan. 11, 1993 - Minister Jean Charest inaugurated the Weathercopy service for the Montréal region. 30 representatives of interested organizations, including police and fire departments, transport groups and utilities, attended the ceremony. Montréal is Québec's fourth site in the growing Weathercopy network.

New London Weather Office

Jan. 19, 1993 - Minister Charest officially opened the London Weather Office, operated by AES, at its new location on Bessemer Road in the southeast corner of the city. Previously located at London Airport, the new urban location features modern surroundings with adequate floor space to ensure the continuation of quality service to clients.



Awards,awards...

Under the sign of excellence by Guy O'Bomsawin

Last December 22, the AES Québec regional team gathered for an interesting annual exercise. It was in an uplifting atmosphere that Jacques Vanier gave out Citations of Excellence for initiative. dynamism and expertise to those deserving of attention in 1992. Mr. Vanier underlined that "above all, it is the constant presence of excellence in the hearts of each team that gives rise to this official celebration." According to him, excellence is not an accident, it's an attitude. The following award winners would probably agree:

Citations of Excellence To Martin Bartczak, Ouébec Weather Centre Severe Weather Team (Henri-Paul Biron, André Cotnoir, Gaétan Deaudelin, Mario Gaudette, Denis Jacob, Jean Morissette, Stan Siok, Viateur Turcotte, Pierre Vaillancourt), Diane Bouchard, Guy Chartier, Denise Comeau, Marie Lussier, Pierre Ducharme, Jean-Marie Dumont, Michel Elie, Bernard Girard, Renel Lagacé, Yves Landry, Michel Larivière, Jacques Marcoux, Michel Martin, Lorraine Provost, René Servranckx and Gérald Vigeant.

25 year service awards To Denis Besner, Guy Borne, Maurice Dubé, Manon Gauthier, William Horrocks, Denis Poupart and Marcel Sevigny.

On the move...

Appointment Krauss, T. to Head of Canadian GEWEX Secretariat

Assignment

Aguilar, D. from QAEOO to **QAEOI** St-Laurent Bernard, J.P. from WS Spec. St-Hubert to WO Chief Sherbrooke Bover, K. from APDG to ADMA Ottawa Chen, T. from APDG to SA ADMA Ottawa Dawson, B. from MT MWC Bedford to CCC Halifax Dawson, D.K. from DG CCC Downs. to A/ADMA Ottawa Dulude, S. from QAEOI to Partner. Proj. St-Laurent Dussault, L. from Insp. to Geog. Sys. Proj. St-Laurent Farrell, C. from Super. METOC Halifax to MT Bedford Faust, L. to CS CMC Funnell, L. from ADMA Ottawa to DA Min. Off. Hull Gagnon, M. to CS CMC Girard, B. from QAEOI-P to QAEOI-I St-Laurent Girard, G. from OAEOI-I to **QAEOO** St-Laurent Hewson, M. from CCPA Downs. to APDG Ottawa Howg, M. to CR AES Edmonton Hunter, C. from ADMA to Env. Cit. Ottawa Kindree, L. from HR Vancouver to AHRS Downs. Mainville, S. from MT CMQ to **OWC** Toronto Marcoux, J. from MT CMC to CMC/CMDW McWhirter, C. from SCY West. Econ. Div. to AES Edmonton Michaud, R. from MT Trenton to CMQ Montgomery, C. from Stats. Can. Halifax to CR Bedford Weagle, S. to CS Bedford

Departure Simmers, A.G. from DGMETOC Ottawa

Promotion Balthazar, M. from CS to Chief, CS CMC/CMDS Beaubien, R. to MT Edmonton Bourque, A. to MT CFB Trenton Everett, K. to MT CFB Edmonton Larochelle, B. to MT Edmonton MacPhee, J.P. to MT CFB Greenwood McMurtry, W. to MT Edmonton Morrison, D. from Super. WO4 Vancouver to OIC WO4 Terrace. BC Murtha, C. to MT METOC Ctr. Halifax Smyth, J. from C&P to AES CCD, Ottawa Sowiak, J. to EG Edmonton Thomas, V. to MT Edmonton Townsley, D. to MT Edmonton Van de Mosselaer, A. from OIC Terrace, BC to AES Downs. Wait, T.R. to MT CFB Greenwood Retirement

Woodman, R. from MT CMC

Passings Brushell, J. from Gander

Transfer

Bullas, J. from OIC, AWC
Edmonton to Mgr., WSO Saskatoon
Davidson, C. from FI Saskatoon to
AES Edmonton
Dunbar, S. from Oper. Tech. Wpg.
Pool to Admin. Supp. Off. Winnipeg
Howe, B. from Wx. Serv. Spec.
Calgary to Clim. Tech. Edmonton
Johnson, K. from MT Downs. to
Edmonton
Murtha, J.M. from MT Bedford to
CFB Edmonton

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Special thanks this issue to Therese Martine and Yvon Bernier.

