zephyr

ATMOSPHERIC ENVIRONMENT SERVICE NEWSLETTER

December 1991 - January 1992

Green tips for a white Christmas

By C. Del Col CD

Some holiday statistics. Canadians cut down 3.5 million trees each year for Christmas. One-third of our household garbage in North America is packaging. And finally, conventional batteries used in toys and appliances take 50 times more energy to make than they produce.

With the holiday season fast approaching, here are 10 easy alternatives for making an environmentally-friendly Christmas a reality.

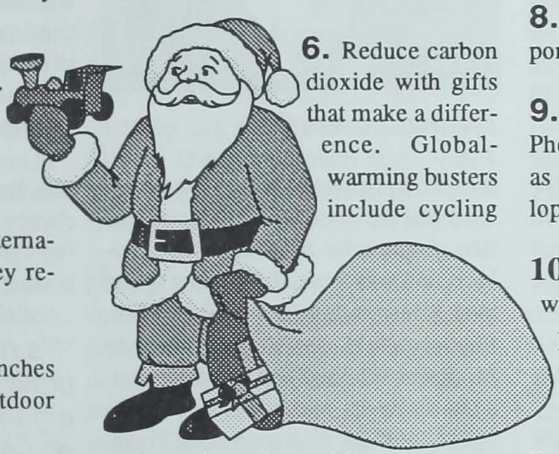
1. Consider a living Christmas tree. Firs, spruce and pines are safe indoors for two weeks but need replanting by early January.

2. Artificial trees offer another alternative; although they last longer they remain non-biodegradable.

3. After Christmas, use your branches and boughs to insulate your outdoor plants.

4. Create an edible tree decorated with popcorn chains, gingerbread cookies, chocolates and candy canes.

5. Make snowflakes and paper doll decorations with used paper from the home and office.



6. Reduce carbon dioxide with gifts that make a difference. Global-warming busters include cycling paraphernalia and monthly passes and tickets for public transit.

7. Buy rechargeable batteries and use a battery charger. Or, look for toys that run on imagination.

8. Recycle last year's cards by cutting portions to use as gift tags.

9. Design your own Christmas cards. Photocopy a favourite recipe to send out as a holiday greeting. To avoid envelopes, create a postcard format.

10. Substitute store-bought wrapping with coloured comics, magazines and potato print creations on used paper. Better yet, wrap a gift within a gift using baskets and containers.

Further suggestions can be found in "Under the Tree: Creative Alternatives to a Consumer Christmas" by David and Elizabeth Morley.

Countdown for the SX-3/44

On October 4, 1991 AES took possession of the most powerful computer used for weather forecasting in the world. The SX-3/44 supercomputer system, manufactured by NEC of Japan and housed at CMC, will improve the quality and timeliness of weather forecasts. It will also be used by AES researchers to run atmospheric models to better understand acid rain, air toxics and climate change.

The process of installing and preparing the supercomputer is long and complicated. The following is a brief schedule so you can "Countdown for the SX-3/44."

October 4, 1991 The SX-3/44 supercomputer system arrived at CMC. It took six tractor trailers to transport

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Environment Canada | Environnement Canada

Atmospheric Environment Service | Service de l'environnement atmosphérique

Service through science

In conversation with...

She's the daughter of the manse, a teacher, a couturier, an international negotiator and the ADM of AES. Her name is Elizabeth Dowdeswell.

By L. Buchanan-Jones CD

In a quiet few moments neatly scheduled into a typically hectic day, Liz, as she likes to be called, sat down with me in her sun-filled Ottawa office. My goal was to learn about the first female AES ADM and to gain a better understanding of where she is taking AES as she approaches her two-and-a-half-year anniversary.

Our meeting was scheduled well in advance, as Liz divides her time between offices in Ottawa and Toronto and engagements in other parts of Canada and abroad. She starts early in the morning and finishes late at night. It's a rigorous schedule. She attributes her energy to the strong Protestant work ethic with which she was raised. Born in Northern Ireland to a minister and a teacher, the eldest of eight says she's never known anything but work. "It's a personal choice," she explained, "I do it because I like to do it."

Make no mistake, our ADM has a wide array of interests. She plays several instruments, is an accomplished singer and a clever weaver. She also confided there is very little in her wardrobe she hasn't made herself. She likes to read, enjoy art and spend time with family and friends.

Armed with a Bachelor of Home Economics, Liz began her career as a secondary school teacher in Saskatchewan. She taught home economics, industrial arts, graphics and business. She also instructed the mentally challenged and was a guidance counselor before moving on to teach economics and marketing in the university setting.

Her work enroute to a Master's degree in Behavioral Sciences led her in a number of directions including studies of value systems and adaptability to stress and fashion therapy and the mentally ill. An obvious love for diversity led this self-described eclectic through a number of interesting career assign-

Elizabeth Dowdeswell

ments. In Saskatchewan, she taught teachers, designed a consumer education program for schools in the province, and was Special Assistant to the Saskatchewan Minister of Education. She served as Saskatchewan's Deputy Minister of Culture and Youth responsible for sport, recreation, arts, heritage and culture. With the federal Treasury Board, she managed the Royal Commission on Unemployment Insurance and the Inquiry on Federal Water Policy.

Learning about new things is what motivates Liz. In her career she has moved from one project to another, to things she knows nothing about and finds that exciting. Liz says she has "always been in jobs where what she did mattered and that is a motivating force." With a smile she added, "I used to live in fear of the day I got appointed to the department of highways."

Liz's first introduction to AES was a six-month assignment under the direction of former ADM Jim Bruce. Her objective was to assess the level of service and apply a sociological, political and economic slant. She says, "This was where I first discovered AES and learned to appreciate the kind of people and service provided by AES."

Liz is excited about the opportunity AES has to be involved in a broader sphere of activity. She indicated it is not a matter of forgetting what was done in the past and moving on to something different. "What you have done is exemplary and now we need to build on that to take us further." She focused on the social sciences. For example, "...it is not only important to understand the science of climate change; we must understand how people are going to adapt." She emphasized the importance of bringing together the science and policy streams, as too often they exist together as separate entities running in parallel.

The link between science and policy is clearly evident in the new AES vision "service through science." This she says, is what AES is all about. "I guess when

"It's really about stretching and growing and many people in this organization are very capable of doing that."

you break that down I see a very capable group of scientists and technicians who really have an opportunity to do some solid work to help this country, to develop policies that are not only going to protect and enhance our development as a country, but as a planet."

"We in AES," stressed Liz, "cannot possibly deliver on our initiatives in the Green Plan, unless we do it through each and every AES employee. It is really about

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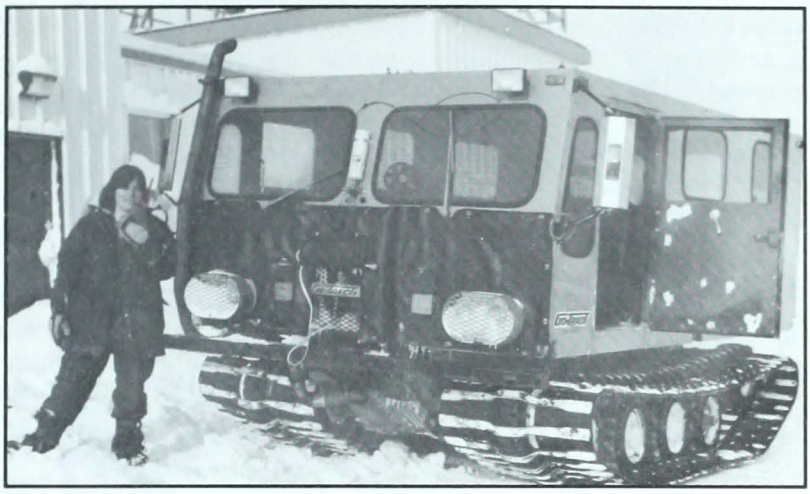
A typical day at Alert

By V. Chorney BAPMoN Technician

"It's 10:00 am here at CFB Alert and you're listening to CHAR 105.9 FM. The current temperature is -30°C and winds are calm on this balmy November morning." Zzzz... Hmmph? Oh oh. It can't be, 10:00 am! It will take a while to get used to this dark season.

When I first arrived at Canadian Forces Base (CFB) Alert, less than 805 kilometres south of the North Pole, there was still the luxury of 24 hour daylight. Gradually the sun appeared for fewer and fewer hours until it sank below the horizon on October 9th. Since that day we've had a few hours of twilight daily, but by the time you read this we will be total darkness until March 1992.



Valerie Chorney in Alert

I've missed breakfast at Igloo Gardens, the most popular eating establishment in Alert, so I'll head to the Weather Station where I work. The Weather Station is a 20 minute walk - five if there's been a wolf sited in camp!

The trek to work is one of the few outdoor excursions at Alert. Most of the time is spent in the main complex where we sleep, eat, party at the Junior Ranks Club or The Legion, shop at the Canex (including monthly Midnight Madness sales), watch movies at the theatre, read books from the library, borrow movies from the TV station and make phone calls, all without going outside. The scary part, is there have been people here who have gone outside the main complex only once - when they left Alert.

I made it to the Weather Station in tact. Actually, the wildlife indoors is more frightening than the local inhabitants. Many Arctic hare and foxes live in and near the camp. They are usually tame and allow humans to get quite close. They are great for photos during the light season. I have never seen a wolf, but I understand they rarely bother humans. Polar bears are a rarity, as are mosquitoes, especially in the dark season.

Well, I really must get to work now. Thanks for joining me on a walk at Alert.

(SX-3/44 from page 1)

pieces flown into airports in the United States.

October 16, 1991 (11:52 am) The mechanical assembly of the SX-3/44 was completed and engineers from HNSX, the U.S. division of NEC, began three weeks of tests to the complex system.

November 8, 1991 AES began one month of acceptance tests, running programs, checking output times etc.

December 8, 1991 CMC staff began the 10 month process of converting from the Cray to the UNIX operating system at the Dorval site.

Autumn 1992 The new supercomputer will officially be in operation, ready to provide more accurate forecasts for Canadians.

(Liz from page 2)

stretching and growing and many people in this organization are very capable of doing that." She continued. "What we have to do is help those who can grow and for those who are happier doing what it is they do best, make a place for them to feel comfortable."

According to Liz, the AES team does not have a long road to travel; AES service to the public is an example for other organizations and our science is renowned. She confesses, "I well up with pride when I hand out twenty-five or thirty year awards, when I see the challenges endured by our technicians in the High Arctic, when I learn that employees on the east coast have helped rescue passengers from vessels off Sable Island. There are very few places in government where you will find stories like that every week, if not every day."

Season's Greetings from the ADM

I am pleased with the way AES has accepted me with open arms. For this, I would like to thank you. It has been a full year, and for many employees it has been stressful. But together, we have been able to accomplish a tremendous amount and we are going to need all these energies and talents in the coming year. I am proud of the work you have been doing and I am thankful for your continuing support. Best wishes to you and your family.

Liz

Help us find a name!

Weatheradio is entering the forefront of telecommunications in the 21st century.

A bit about the new technology...

Weather information is now available in digital as well as audio form through a new type of weatheradio receiver. This added feature empowers the user with greater options for accessing weather information.

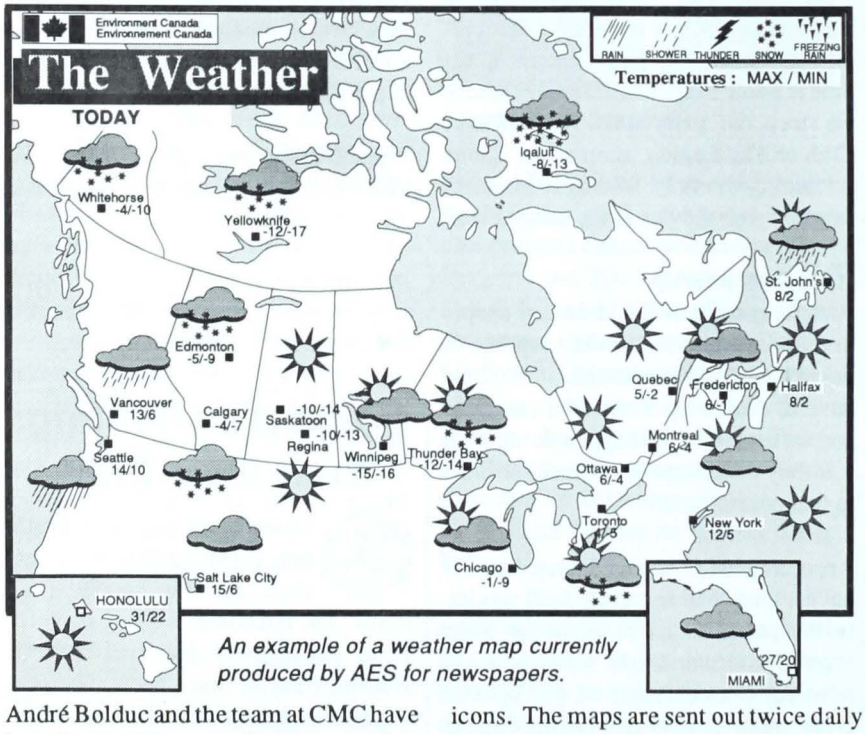
The new unit can either be used as a conventional weatheradio or when hooked up to a PC or a printer, digital signals of weather forecasts, warnings and graphics can be displayed or printed. Installation will begin in Quebec, and will be available in other regions next year.

The contest...

We need your help in finding a name for our state-of-the-art weather information receiver. This official challenge is open to all AES employees and the winning entry will be selected by the Regional Weather Services Chiefs. The winner will be awarded their own receiver - a grand prize valued at $500!

After some creative thought, mail your name suggestions to *Claudette LeBlanc, 100 Boul. Alexis Nihon, Suite 300, St. Laurent, Quebec, H4M 2N8*, before midnight January 10th 1992. For further information call (514) 283-1102. The winner's name will be published in Zephyr.

New weather maps for the media



An example of a weather map currently produced by AES for newspapers.

André Bolduc and the team at CMC have been busy with a creative new weather graphics package that takes a giant step towards improving the portrayal of weather information in newspapers.

The weather maps are created at CMC with a software package which extracts information from regional weather bulletins and interprets it on maps using icons. The maps are sent out twice daily through Presslink, an electronic bulletin board to which most Canadian newspapers subscribe. In addition to the national, provincial and area maps, accompanying tables list forecasts for Canadian, U.S. and international cities in both official languages. Long-range forecasts are available for specific sites.

Photo opportunity:

International Photographic Competition on the Environment

By C. Del Col CD

UNEP and Canon are inviting amateur and professional photography buffs to submit photos, by February 1992, reflecting the theme "Focus on Your World." The photographs should present images of our environment that require preservation and improvement. The aim is to draw attention to the environmental issues which will be addressed at the United Nations Conference on Environment and Development (UNCED).

Mostafa Tolba, UNEP's Executive Director, explains "this photo competition is based on the belief that the way in which we see our precious planet, as revealed through the eye of the camera, can inspire high social commitment and a driving sense of mission."

In total, 206 photographers will be awarded prizes amounting to US $147,000. Professional and amateur Gold Prize winners are eligible for US $20,000 and US $10,000 respectively. Winning photographs will be displayed throughout the world in a travelling photo exhibition while other entries will be preserved in UNEP's photographic library.

For contest rules and entry forms contact Barrie Doyle, Corporate Communications, Canon Canada, tel (416)795-2072, fax (416)795-2047. Or write to Environment Canada, Departmental Library, Place Vincent Massey, 351 St. Joseph Boulevard, 2nd Floor, Hull, Quebec, K1A 0H3

The Prince George Citizen began using the CMC graphics in early November and others are expected to do so over the next few months. In the meantime, Pacific Region has already developed a local package tailored to meet the needs of a specific newspaper and CMC is examining ways of making its products available to the regions.

The legend of Sable

By C. Del Col CD

It was May 21, 1966. Two men from Dartmouth cast their sails for Bermuda. They decided nothing would stop their voyage. What could be out there anyway? Imagine their surprise when at three a.m. in the dark Atlantic Ocean, they awoke to the thundering crash of a boat. Their very own boat in fact, colliding with something they hadn't anticipated in their wildest dreams. That something was Sable Island.

With their vessel caught in the grips of Sable's sandbars, they would find little solace knowing they had collided with an island 160 km off the coast of Nova Scotia, legendary for its shipwrecks and rescues. So much so, it had earned the deadly nickname "graveyard of the Atlantic."

At the same time, we can envision their awe as they stared out at the fog-shrouded island before them. Crescent-shaped like the moon that hung above it, Sable's menacing exterior would transform itself once the pair ventured to land. It is from this perspective the shipwrecked sailors would have sighed with relief at the comforting sight of the AES weather station. It is also the perspective from which the magic of Sable unfolds.

Sable staff enjoy their Thanksgiving feast. From left to right; Mary-Jane Peters, Paul Liska, David Fisher, Paula Sutherland, Fred Androschuk and Linda Googoo. OIC Gerry Forbes and Fred Morton are absent.

Twenty-five years later, AES still maintains its vital presence on Sable Island. Here the station coexists with an almost mythical environment that sustains some 400 wild horses, but only a single pine tree despite massive attempts at forestation.

With a history of continuous weather observing dating back to 1891, AES began its contribution in 1944 with the establishment of an "upper air" site. Today a dedicated crew of seven operate the 15-building-compound, 24 hours a day, seven days a week. Despite the small number of staff (Sable's entire human population), their island observations from winter storms to summer hurricanes, remain invaluable for solving the forecasting puzzle of Atlantic Canada.

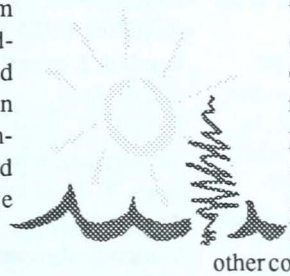
Living on the 40 by 1 kilometre wide island also brings with it the responsibility of maintaining a communications centre, finding safe make-shift runways on the beach and applying first aid to the occasional shipwrecked visitor.

With emergency assistance some eight hours away, these AES staff are to be admired for the professional and personal challenges they accept from Sable daily. Since tourists are restricted from the island, there is also reason to envy these individuals for their opportunity to live in an atmosphere so rare and uncommon by everyday standards. After all not everyone, as can Gerry Forbes, boast of an ocean view from both sides of the house.

As for our shipwrecked friends, we can only guess they found their destination safely. The Sable residents later received in gratitude, a bottle of Bermuda rum.

AES and the Green Plan

October 29, 1991 - Energy Efficiency - Energy, Mines and Resources (EMR) Minister Jake Epp tabled the National Energy and Alternative Energy Act which will "...provide the means to help the Canadian consumer make better choices when buying equipment better for themselves in terms of lower energy costs, and better for the environment as energy demand is reduced." The legislation calls for the replacement of the existing Energuide appliance label with a new, more easily understood label. The Act delivers on the Green Plan commitment that legislation be introduced to allow the Federal government to set minimum energy efficiency standards on equipment and to gather information and data on Canadian energy consumption and the use of alternative energy.



November 19, 1991 - Smog - An international protocol which calls for regulations to reduce emissions of smog-causing pollutants was signed by Canada, the United States and most European countries. The protocol is designed to reduce volatile organic compounds (VOCs). Highlights of the protocol include a commitment by many countries to achieve a 30 per cent reduction in VOC emissions by 1999 in areas where ground-level ozone is high and in locations that affect air quality in other countries, because of transboundary air flow. The protocol commits Canada to a national freeze on VOCs emissions at 1988 levels to be achieved by 1999.

Christmas spirit

By C. Anker AWFH

The Rain is down pouring,
The Bears are snoring.
The Wind is not still,
In the Air is a chill.
Jack Frost is calling,
The Leaves are gently falling.
Soon the Snow Flakes will flutter,
And freeze in the gutter.
The Children will frolic and play,
And make Snowmen and Snowballs all day.

The Children they will try to be good for goodness sake,
And their Parents will bake cookies and cakes.
For they know soon one day,
Santa Claus & his Reindeer will be coming their way.
The Children will address their letters to the North Pole,
And on Christmas the church bells will loudly toll.
Church they will attend to worship & adorn,
For on December 25th Christ their saviour was born.
The Sermon will preach "Good Will toward all Mankind,
And keep Generosity & Co-operation at Heart and in Mind."

In the morning Parents everywhere will wake up,
By the Hustle and Bustle and Screams of Delight,
For Santa Claus visited and left his Presence and Gifts,
Under the tree in the night.
The Children playing with their new toys while giggling in glee,
Are again as Happy as can be.
"Merry Christmas to all and to all a Happy New Year!"

Do you want to be a meteorologist?

Qualified applicants are invited to apply by December 31, 1991 for the next MOC/COM course to commence in September 1992. Applicants must hold a university degree in Meteorology, or in Physics, with a diploma in Meteorology. See the competition poster or for further information contact: *Ken Daly (416) 739-4704 or Louise Kindree (416) 739-4725*

PS2000: Career Development Project for Women

In the context of PS2000, Environment Canada has launched a pilot project aimed at recognizing the Department's talented women. Some 50 women from DOE including approximately eight from AES are set to take part in the pilot Career Development Project for Women.

Aimed specifically at women in junior administrative and administrative support positions, participants were selected based on their readiness to assume greater responsibilities and an above average job performance. The objective is to allow the women selected to re-orient their career through various job assignments designed to enhance their work experience.

Participants will undergo personalized training sessions to encourage the completion of progressively challenging assignments that develop management skills and a deeper awareness of the operation of the Department. It is expected the program will last two years after which counseling services will be made available to assist participants in accessing more responsible positions within the Department.

On the move...

Assignment

Adamson, E. from MT APEC to MOP AAF
Allsopp, D. from Data Proc. CCC to CCID
Criddle, D. from Wx Obs Gander to Surf Obs Churchill Falls
Kocot, K. from Tech CCC to QC Tech CCID
Liska, P. from Surf Obs to Aero Obs Sable Island
Paola, R. from MT OAEM to CCAD
Verge, M. from Stn Ops Bedford to SFC Obs Churchill Falls

Promotion

Bentley, R. from Wx Obs. Winnipeg Pool to Wx Spe. Churchill
Majcher, M. from Wx Obs Winnipeg Pool to Wx Spec Churchill
Zaluski, D. from Wx Stn Mgr Wynyard to Insp Stan Off Saskatoon

Retirement

Bochan, E. from Contracts Clerk AAM
McNaughton, R. from Customs Clerk AAM
Wallworth, B. from MT MWC

Transfer

Ang, L. from Syst Anal AWDH to Syst Anal/Prog CCID
Bendell, J. from Supt Winnipeg Clim Ctr to Syst Anal
Davies, G. from Wx Spec Churchill to Surface Insp Winnipeg
Jang, T. from Syst Anal CCRD to Syst Anal/Prog
Michaud, R. from MT MWC Bedford to CFFC Trenton
Ouellet, D. from MT Halifax to MWC
Steeves, D.G. from MT NWC to MWC

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Communications Directorate, AES
373 Sussex Drive, La Salle Academy,
Block E, First Fl., Ottawa, K1A 0H3
Editor: Leslie Buchanan-Jones
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