



Chinese Delegation Visits Canada

— Bruce Angle



Say "Environment." Chinese delegation smiles for the camera in front of the Downsview building.

In April, 1999, a Chinese delegation visited Canada under the Canada-China Memorandum of Understanding on Cooperative Meteorological Programs. The delegation consisted of 25 members from all departments of China Meteorological Administration. The delegation toured Vancouver, Toronto, Montreal and Ottawa and visited regional weather offices, the Canadian Meteorological Centre, the Ice Centre, the Centre for Atmospheric Research Experiments, and the National Environmental Emergency Centre. They were also introduced to the work of the Canadian Space Agency and the Canadian Centre for Remote Sensing.

The delegation's main interest focused on modernisation, disaster preparedness, commercial activities and remote sensing. Other topics included climate change science, adaptation and impacts, and environmental predictions including air quality.



While in Vancouver, Environment Canada staff participated in a joint workshop/seminar with the Chinese delegation. Topics included Air Quality Forecasts, Mountain, Forest and Avalanche Meteorology and Services, Weather Buoy Technology, Commercial Weather Services, Climate Change, and Hydrology.

The Chinese delegation was interested in the operations of the National Meteorological Centre; telecommunications and satellite systems; the 1998 flood; and the work of a provincial meteorological bureau.

The delegation were introduced not only to Canadian technology and science, but to our culture and landscape through AES hosted tours. The delegation thoroughly enjoyed their visit to Canada and AES representatives enjoyed hosting them. For information contact Bruce Angle at (819) 997-3844.

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Letter from the Editor

Welcome to the summer issue of *Zephyr*, your staff newsletter. Summer is a wonderful time of year! And, this issue was a delight to prepare – thanks to your submissions.

As always, many of the articles and story ideas that cross my desk relate to recognizing employee excellence. In these pages, you will find that many awards have been presented lately, but we may have missed some!

I'm also pleased to share with you the news about Atlantic Region's meteorological internship program and the welcoming of ten fresh new faces. Finally, we included a story that celebrates our cultural and international relational abilities by hosting a Chinese delegation celebrating the "Canada-China Memorandum of Understanding on Cooperative Meteorological Programs".

We hope that you enjoy this issue of *Zephyr*. And, keep your story ideas and articles coming!

Please contact me via e-mail, Jennifer.McKay@ec.gc.ca, or by phone at (416) 739-4759.

Sincerely,

Jennifer McKay
AES Communications

THE ZEPHYR TEAM

**Jennifer McKay, Editor
and the
AES Communications Team**

Published by the Communications Directorate of AES, Environment Canada, *Zephyr* is a newsletter for and about the staff of the Atmospheric Environment Program.

Zephyr is your newsletter. We would like to hear from you. Your submissions, story ideas, graphics and pictures are most welcome. Submissions for the spring issue should be sent to us by August 6, 1999.

Reach us at:

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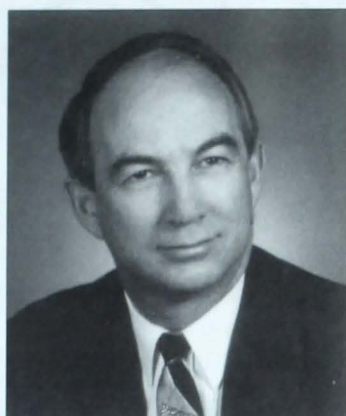
Zephyr is now available electronically on the Intranet wwwib.tor.ec.gc.ca/zephyr and the Internet www1.tor.ec.gc.ca/zephyr

Adaptation Learning Experiment

— *Melissa Choong*

The Adaptation Learning Experiment report is now available. The project primarily addresses the issues of climate change and natural disasters. The experiment was designed to discover and test what can be learned from recent experiences with natural disasters that might be useful in developing a national strategy for adaptation to climate change. Six papers reporting on disasters ranging from the January 1998 ice storm in Quebec and Ontario, to the 1997 spring flood on the Red River in Manitoba, provide data that was used as a basis for ten specific lessons applicable to climate change adaptation.

The experiment was supported by the Environment Canada Learning Fund, and Emergency Preparedness Canada in co-operation with the Adaptation and Impacts Research Group (AIR Group, formerly EARG). The Learning Fund recently announced its support for a second phase of the experiment. For more information contact Ian Burton at (416) 739-4314.



Gordon McBean

It's Summertime!

Like all of you, I'm hoping we have a beautiful summer. It is also my hope that some of you will take some time to enjoy the season and relax with family and friends.

I would like to take this opportunity to thank all of you for your dedication and hard work. AES has been focusing on some important tasks lately. With the millennium quickly approaching, AE staff from across the country have been working diligently on contingency plans. The benefits of this work will stay with us long after the clock strikes midnight on December 31st.

At the time of going to print with this issue of *Zephyr*, we were preparing to submit our proposal formally to Treasury Board. I will continue to keep you informed. Your patience and input are very much appreciated as we look for new ways to meet the needs of employees, partners and Canadians.

Wishing everyone a safe and enjoyable summer,

Gordon McBean

Y2K Contingency Plans

— Gavin O'Hara

Over the past two years, Year 2000 problem-solving has focused on ensuring that our applications will continue to work beyond Jan. 1, 2000. In our 7 days a week, 24-hour a day operation, failures do occur. Contingency plans have been developed to ensure that a minimum level of service is maintained at all times, even under extreme conditions.

Existing contingency plans deal primarily with failure at the local level. Since we depend on external infrastructure, such as public utilities and telecommunications, we must also consider their possible failure.

AE staff from across the country have been working to define, develop and resource contingency plans. Led by Abdoulaye Harou of Policy and Corporate Affairs, this team includes representatives from each region, the Canadian Ice Service, the Interagency Service Branch and the Canadian Meteorological Centre. "The team members have developed contingency plans which will ensure that the minimum level of service is

maintained during widespread failure. The minimum level of service is defined as the provision of weather warnings to Canadians (general public, aviation and marine communities). It also includes forecasts for major airports" indicated Abdoulaye. "This work will benefit the organization long after Y2K is a dim memory."

AES is also working with the department's National Y2K Project Office and with the National Contingency Planning Group (NCPG), a component of the Department of National Defense, responsible for the federal government response to Y2K situations. NCPG is responsible for ensuring that all 110 departments and agencies have contingency plans, in line

with the Emergency Preparedness Act. Besides providing our regular services to the country, we are also considered a key part of the infrastructure that the NCPG will use to address Y2K situations.

Later this summer, the NCPG will conduct a massive validation and coordination exercise to test Federal departments contingency plans. Provinces, NGOs and municipalities will also be invited to participate. The test is codenamed *Exercise Domino*.

With the combination of our dedicated staff, excellent service record, our own internal tests and participation in exercises like *Exercise Domino*, we expect to greet the New Year with confidence.

Government-Wide Mission Critical Functions	% Completed
GWMC Completion Index	95%
Information Technology (IT)	96%
Embedded Systems (ES)	93%

* quoted from government website at www1.tor.ec.gc.ca/year2000 to explain progress of Environment Canada systems

Children's Sun Awareness Program Starts Up

— Sumit Dhingra

Recently, Environment Canada started a new program to encourage children to learn about its UV Index. The *Children's Sun Awareness Program* was designed to teach children how to minimize the risk to their health from the sun's harmful rays. At the end of March, 1999, 14,000 elementary schools were sent a UV poster, including an address for an interactive website. Children are encouraged to check the UV reading on the radio, TV or newspapers and record the reading on the poster. After collecting some data, the children could

then compare their readings to the long term averages on Environment Canada's Greenlane website at www.tor.ec.gc.ca/uvindex/.

There is an increased need to teach children about the risks of UV radiation. Angus Fergusson, of the Science Assessment Group, indicated that "most of the UV radiation one receives is obtained before the age of 18. We feel that if we teach children at an early age, about the effects of UV radiation, we can help minimize the risk to their health".



This program has been proven to be very successful. F.W. Howay Elementary School, in New Westminster, has presently started the program for their Sun Awareness Conference, in which they ordered 210 posters to give out. Many schools across Quebec and Ontario have also taken an active role in this campaign. For information contact Angus Fergusson at (416) 739-4765.



Doppler Radar's Software Team

— Melissa Choong

The Unified Radar Processing (URP) Software Team has boldly gone where no software team has gone before. The URP Software Team has developed the software to process and display radar imagery. Although this mission entailed hours of development, the structured approach taken by the team produced excellent results. The software was completed and delivered on time and has not experienced any problems since installation. The dedication of the team was obvious as they developed an elaborate methodology in order to complete their complex task. Steve Lapczak, Director of the National Radar Project congratulates the team on the successful completion of the mission with "warp speed" accuracy and results.



*l to r standing: Mohammad Rezaei, Hoang Duong, Jim Roberts, Dan Magosse (fuzzy insert), Delroy Barrett, Lambros Stamadianos
l to r seated: Kal Velupillai, Marie Falla, Paul Van Rijn, Paul Joe*

KEEP ALERT Its cold up there: POLAR SUNRISE 2000 WORKSHOP

— Melissa Choong

Great scientific minds got together on May 7 and 8, 1999, at AES in Toronto to discuss plans for a major field campaign in the winter and spring of 2000 at Alert, Nunavut. Topics of this study will be Arctic Ozone depletion in the surface layer air and the role that the snow pack may play. Very recently it has become evident that such chemicals as Cl₂, BrCl, and other photochemically reactive species are being emitted from the snow pack. Hence one of the goals of the study will be to measure the fluxes of these gases from the snow pack, and determine how they vary with environmental variables, such as temperature and snowpack pH. To do this, the plans call for the operation of highly sophisticated scientific measurement equipment at the Special Studies Trailer that was installed a few years ago by AES scientists near the Alert camp. In addition an ice camp will be set up specifically for this study on the ocean near Alert.

The only major problem was the difficulty in traveling around up north on nothing but skidoos. Luckily, these scientists survived the harsh weather and traveling conditions to bring valuable scientific knowledge to this workshop.

Working Towards More Responsible Environmental Management

— Dorothy Culic

AES is now implementing an ISO 14,000 based Environmental Management System (EMS) within its operations and facilities. EMS is the tracking, evaluation and communication about 23 environmental "aspects". EMS is a commitment to continuously improve environmentally responsible management.

Environment Canada's priority aspects over the next three years include: remediating potentially contaminated sites, fleet management, greener procurement and solid waste management. Energy conservation and air emissions are also important, especially given the growing focus on climate change. In addition, hazardous material management and spills prevention are key areas for AES.

There are five stages to establishing an EMS. As a service, AES is now entering the "Implementation" phase. This follows the Commitment & Policy and Planning

phases, priorities identified in the AES Environment Management Program. The last two stages, Measurement & Evaluation, and Review & Improvement, will be addressed in coming years.

What does this mean for AES employees? In future, you may be asked to submit data with respect to an environmental aspect, collect new information, re-think a procedure or actively participate in establishing a new one. All these efforts will help bring AES operations in line with the International Standards Organization 14,000 standards.

Dorothy Culic, the Service's EMS Coordinator, describes EMS as "the current method to manage an organization's environmental agenda and one that is being used by both industry and government". EMS is also a deliverable under the department's Sustainable Development Strategy. For more information, contact Dorothy Culic at (416) 739-4651.

INFORMATION NUGGET



How Zephyr came to be

— Sumit Dhingra

According to Morley Thomas, AES's resident historian, "*Zephyr* was developed in 1972 and came from the Monthly Report of the Meteorological Branch". Berneice Brent, *Zephyr*'s former editor, adopted the name *Zephyr* but it's unclear why the name *Zephyr* resonated with him.

The Downsview Library holds a complete set of *Zephyr* newsletters from January 1972 to the present day. It's interesting to see the different styles used over the years compared to its present day format. We've come a long way. Here at AES, *Zephyr* remains an important and vibrant part of our history and culture.

Nuclear Emergency Plan

— Melissa Choong

Ontario Hydro's Darlington Nuclear Power Plant in Toronto, on April 27 - 28, 1999, was the site of a simulated nuclear accident for a CANATEX (CANadian NATional EXercise) demonstration in coordination with Emergency Preparedness Canada.

Testing and evaluation of Canada's Federal Nuclear Emergency Plan (FNEP) was the major objective of this two-day exercise. This exercise was impressive for staff from the Canadian Meteorological Centre and Ontario Region, as this hypothetical accident scenario was run under real-time meteorological conditions. In fact, the expected transport and distribution of airborne radioactive material required the

assistance of CMC's CANadian Emergency Response Model (CANERM).

The FNEP, run primarily by Health Canada, worked with Environment Canada in order to aid in the provision of meteorological support with respect to long-range atmospheric transport, and to aid in the coordination of monitoring and sampling of water, soil, and vegetation. Michel Jean, Chief, Environmental Emergency Response Division, and a member of the federal team, concluded that this exercise proved that "the meteorological service is ready to face emergency situations like this one."

Communications played an important role in the coordination of many aspects of the

tests. The Public Affairs Group (PAG) played an active role throughout the exercise "it lets PAG put its organizational abilities to good use. By handling the situation professionally and calmly, PAGs tactics proved to be successful," said AES Communications Director, Linda Larocque. Also, students from Carleton University posed as journalists during the exercise to provide a sense of authentication for these tests. During the two-day intensive exercise, the federal and provincial teams present experienced a real life simulation of the Nuclear Emergency Plan and obtained important information in regard planning to for crisis situations.

INFORMATION NUGGET



Pronunciation: 'ze-f&r'

Function: noun

Etymology: Middle English Zephirus, west wind, from Latin Zephrus, god of the west wind and zephyrus west wind, zephyr from greek Zephyros and zephyros.

Definitions:

- (1) a) a breeze from the west
b) a gentle breeze
- (2) any of various light weight fabrics and articles of clothing

Zephyr in History

- In Greek mythology, "Zephyrus" was the god of the west wind. Zephyrus was said

What does Zephyr mean?

— Melissa Choong

to be the husband of Iris, the goddess of the rainbow, and a messenger of the gods.

- Washington's NBA team was once named the "Chicago Zephyrs".
- In the 1930s, the Burlington Railroad Company won attention for its well-designed, streamlined passenger train, the **Zephyr**, the cars of which were made of stainless steel.
- Veron Duke, a Russian born American composer noted for his sophisticated melodies also composed the ballet **Zephyr** et Flore (1925) for Serge Diaghilev's Ballet Russes.
- Famous Canadian author of *Anne of Green Gables*, L.M. Montgomery, lived in

the hamlet right next to **Zephyr** after getting married in 1911 and was a frequent visitor to the **Zephyr** hamlet.

Where is Zephyr being used today?

- The New Orleans Zephyrs are an AAA baseball team affiliated with the Houston Astros.
- The **Zephyr** Newspaper is a well-read paper from Galesburg, Illinois.
- Located in Ontario, **Zephyr**, is a hamlet of the township Uxbridge. Settlement in the area was originally simulated by the arrival of Quaker families from Pennsylvania.

Not your basic display

— Susan Edwards

There was a 4.5 metre tall, bright yellow weather buoy to the right, a fully-inflated weather balloon stuck to the ceiling and a digital weather sign hanging from the girders. Obviously, this was not your average government display. This was the first year Ontario region took part in the Cottage Life show and of course, the staff wanted to make a good impression.

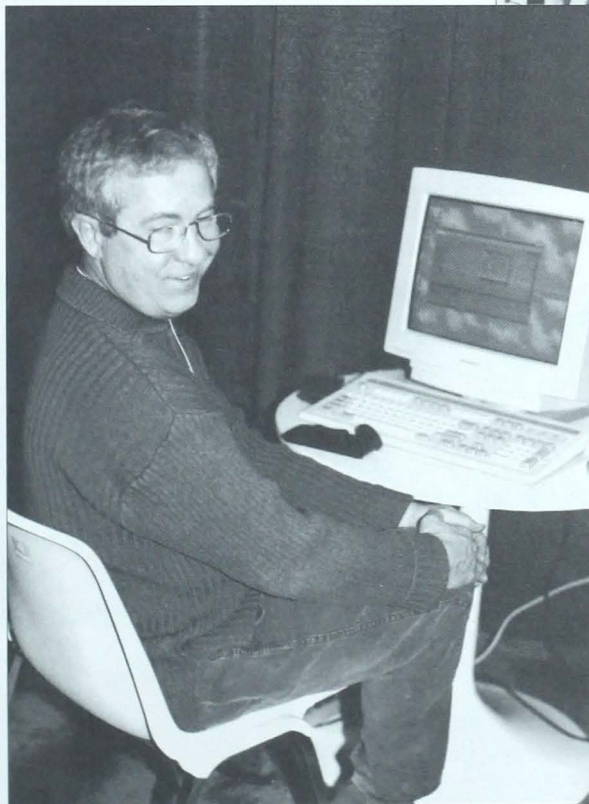
The three-day trade show in March attracted more than 33,700 people, several thousand of whom stopped to talk to EC staff. "Visitors took close to 18 boxes of brochures, fact sheets and flyers," said a much relieved Randy Mawson, who carried those boxes into the International Centre near the Lester B. Pearson Airport and did not relish the thought of carting them out.

Most people who stopped by Environment Canada's display asked questions about severe weather and water levels. "They were very worried about the water levels because of the critically low levels on Georgian Bay and Lake Huron," said Randy who organized the display while working at his day job in Agreements and Partnerships in the region's Atmospheric Environment Branch.

Randy teamed up with Vic Tyrer of the Ontario Science Centre to pull together the Cottage Life Science Centre display. In addition to the Environment Canada display, the centre also included a section on astronomy by Robin Tapley, a well-known astronomer and a

geological exhibition by the Ontario Science Centre, Royal Ontario Museum and the Bancroft Chamber of Commerce.

Randy readily admits that organizing a display for an up-market trade show such as Cottage Life takes time, thought and energy. But the meteorologists, hydrologists and others who staffed the booth had the opportunity to talk to people and listen to their questions. "This is an invaluable experience for an organization like Environment Canada which serves the public," said Randy.



Randy Mawson, who organized Environment Canada's display in the Cottage Life show takes a break from working on the laptop computer which was used to run the digital weather sign.



Judith-Anne Smith, who helped to organize Environment Canada's exhibit at the Cottage Life show, answers questions about the inner workings of the department's new marine weather buoy. The buoy is one of three which Ontario Region will deploy this year in the North Channel, Lake Simcoe and Lake Nipissing.

9th International Weather Festival, Québec City

— Jennifer McKay

Occurring for the first time in its history outside of France, the 9th International Weather

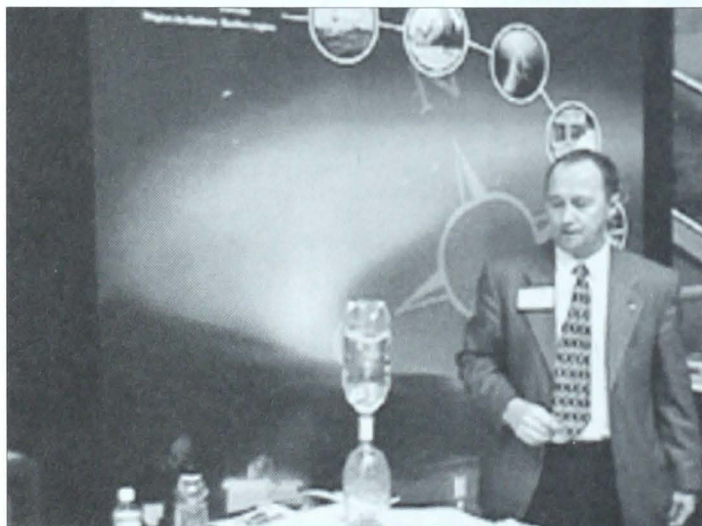
Festival was held in Québec City in April, 1999. Environment Canada was one of the main sponsors of the Festival in which weather journalists representing some 120 radio and television stations from 60 countries participated. The theme of this year's festival was climate change, a topical subject given the government's commitment to fulfilling to objectives of the Kyoto Protocol. Gordon McBean, honorary president of the festival, opened the session.

The Québec Region also organized several workshops for the general public, including: Climate change in Québec (Gérald Vigeant); Weather and Health (Gilles Brien); The basics of meteorology

(Gilles Brien); and Weather Alert Services (Gilbert Filion).

Several AES staff participated in the Festival's scientific and public lectures. Presentations on weather and climate change issues were made by Gordon McBean, Henry Hengeveld, David Phillips, Sylvie Gravel, André Sévigny and Gaétan Deaudelin.

AES exhibits included a meteorological buoy, a Brewer spectrometer, weather balloons and a fully operational weather station – the commanding presence which attracted many people to our booth. The impressive sight of large and complex weather equipment was definitely an eye-catcher and helped to make the 9th International Weather Festival its best yet.



André Sévigny is showing visitors the formation of a vortex (tornado shaped whirlpool) with a simple home-made device -- two one litre plastic bottles taped neck to neck and containing one litre of water. The instrument is set in motion like an hourglass.



AES exhibition booth in the Musée de la Civilisation where visitors could consult EC weather information on two on-line computers.

Hurricane Hunters Blow into Halifax

— Paula Kennedy

Thursday, April 29th marked the first visit to Canada of the U.S. National Weather Service's hurricane hunter aircraft. Halifax was the only Canadian stop on a tour of five hurricane-vulnerable communities along the Atlantic coast. The visit, organized by the Canadian Hurricane Centre and the U.S. National Weather Service's Hurricane Centre, was designed to increase public awareness of the hurricane threat and strengthen local and international links that aid the storm-warning system and emergency-response capabilities.

Bill Appleby, Director, AEB, Atlantic Region, and Martha McCulloch, Manager of the Canadian Hurricane Centre, welcomed a flight crew of U.S. Air Force Reserves from Biloxi, Mississippi, along with senior representatives from the U.S. National Hurricane Center in Miami, including its Director, Jerry Jarrell.

The U.S. Air Force WC-130 aircraft was fully loaded with advanced weather monitoring equipment capable of bringing back wind, temperature, humidity and pressure data from the centre of the giant storms into which it regularly flies. "That data is an invaluable resource in helping American and Canadian forecasters track the strength and moment of storms as they move up the coast," indicated Martha McCulloch, Manager of the Canadian Hurricane Centre.

The visit generated substantial local interest. The event was covered by all three television stations in the Halifax area, as well as two local dailies and a number of



Member of the U.S. Air Force WC-130 flight crew demonstrates how hurricane data is collected for a group of grade 5 students from Sackville, Nova Scotia.

radio stations throughout Nova Scotia. The coverage highlighted the importance of hurricane prediction and preparation.

Visitors to the aircraft and its crew gained a very realistic understanding of how hurricanes are tracked and the danger that they pose. A constant stream of aviation and weather enthusiasts of all ages took advantage of the guided aircraft tours given by those who actually perform the hurricane reconnaissance missions throughout the afternoon.

It was also a very special experience for the students of a local grade-five class which had recently taken part in a weather prediction project. Their project was broadcast on the evening news, and this provided them with an exciting way to expand their knowledge of meteorology.

Early predictions indicate that 1999 may be an above-average year for hurricanes. Thanks to the hurricane hunters, some folks in Atlantic Canada just may be a bit better prepared.

INFORMATION NUGGET



Weather on the web

On May 5th, 1999, the Canadian Wheat Board introduced a new weather service called "Enviro-check" on its public web site at: <http://www.cwb.ca>. This service features Environment Canada's current weather and forecasts for 115 sites across the Prairie

provinces and Northeastern British Columbia as well as some satellite and radar imagery. The information is provided as a co-branding service by the PYR Commercial Weather Services. The Canadian Wheat Board is very satisfied with this service and has already received hundreds of favourable comments. For information contact Dale Marciski at (204) 984-1189.

LOOK UP! LOOK OUT! ...before lightning strikes

— Nancy Hnatiuk

Summer Severe Weather Awareness Week 1999 was held from May 3 to 7 in Prairie and Northern Region. This year's slogan "Look up! Look Out! ...before lightning strikes" was used to promote lightning safety and awareness. Print, radio and TV media were mailed or faxed packages leading up to the week, encouraging them to participate in a trivia contest and interviews with Prairie Storm Prediction Centre's four Warning Preparedness Meteorologists (WPM's). Across the three prairie provinces, prizes were provided to 17 interested media outlets who ran the trivia contest during the week. 18 television outlets (including 3 national), 48 radio stations and 11 newspapers took advantage of interviews given by the local WPM's. Some of the radio interviews spanned hour-long open-line shows and many of the radio interviews were cut into sound bites and played multiple times throughout the week. The tragic tornado outbreak in Oklahoma and some early season Severe Thunderstorm bulletins during the week enhanced the media and public's interest regarding tornado safety.

New lightning safety posters were produced and will be distributed shortly to golf courses, recreation facilities and leisure centres. These posters explain the do's and don't associated with lightning safety as well as helpful guidelines regarding when to take action as lightning threatens.

FRESH NEW FACES

— Paula Kennedy

Atlantic Region welcomed 10 new employees into its Meteorologist Operational Internship Program in October, 1998. The meteorology internship is a program designed to give university graduates in meteorology the skills to become operational weather forecasters with Environment Canada.



Dan Fulton, Alex Fischer and Kasey Thomas examine the morning weather map.

Atlantic Region's internship program has evolved from similar training courses that were once offered at the AES Training Branch in Downsview. In April 1999, interns began leaving for postings at the Newfoundland Weather Centre in Gander, and Interagency Services Branch offices in Trenton, Greenwood and Halifax. Additional training took place at these locations, where each of the interns was teamed up with an experienced forecaster for about eight weeks before becoming fully operational.

The group of interns enjoyed their time in Nova Scotia, and the learning experience that accompanied the internship. The group of fresh new faces were welcomed by the staff at Nova Scotia who appreciated the candor and enthusiasm of the young interns.



The Atlantic Region Internship Class of 1998-99:
Back row: Alex Fischer, Steven Kozak, David Aihoshi, Dale Foote, Dan Fulton, Jason Higgins
Middle Row: Karen Kilcup, Steve Miller (instructor), Kasey Thomas
Seated: Doug Mercer, Chris Murphy

Buoys are these heavy

— Susan Edwards

For the first time, Ontario region will anchor marine weather buoys in some of the province's large lakes. According to Ron Fordyce, of the Port Meteorological Office in Hamilton, the region plans to have three of the new lightweight buoys in the water this summer in Lake Simcoe, Lake Nipissing and the east basin of the North Channel. By 2000, the region will deploy three more buoys, one each in Lake Nipigon, Lake of the Woods, and the western basin of the North Channel.

The new buoys are constructed of plastic, stand 4.5 metre high, measure 1.75 metres across and weigh 540 kilograms and their sensors record air pressure, temperature of

the water and air, speed and direction of the wind, height of the waves from trough to crest, and position of the buoy. The buoys are Canadian through and through - from the tip of their anemometers to the bottom of their anchors.

The Marine Weather Office in the Thunder Bay uses the additional information provided by the new buoys for the recreational boating forecast for boaters and sailors on Ontario's larger lakes.

Ontario region has seven marine weather buoys located the Great Lakes region. The two largest weigh about 54 tonnes and are anchored all year in western and eastern Lake Ontario. The other five buoys weigh



Buoy is that a nice site.

only 1.75 tonnes each and are in service from about mid-April until late November in Lake Erie, Georgian Bay and Lake Superior.

International Arctic Buoy Program

— Ed Hudson

Weather hindered travel to and from the site near Eureka and made for adverse installation conditions of two data buoys in March. Mark Pyper, Monitoring and Systems Technician successfully completed the deployments aided by excellent pilots and other contributors.

The buoy installation, currently in its fifth year, is part of an ongoing Environment Canada contribution to the International Arctic Buoy Programme. This Programme maintains a network of automatic data buoys in the Arctic Basin which monitor synoptic-scale fields of pressure, temperature, and ice motion to support real-time operations and meteorological and oceanographic research.

The buoys deployed were designed and assembled in Edmonton by monitoring and

systems staff, Luke Lukawesky and Jeff Sowiak. The buoys provide data on surface atmospheric pressure and surface air temperature. This data will be collected, processed, and put onto the global telecommunications system by the Edmonton Environment Canada polar orbital satellite acquisition and processing system.

Thanks are extended to the Twin Otter pilots Karl Zberg, veteran pilot, and Jason Miller, co-pilot, for the deployment flight and for all their help.

In addition, as a result of partnering with Dr. Humfrey Melling,

Institute of Ocean Science, Darren Tuele of Melling's group used the deployment flight as an opportunity to conduct an ocean sounding to 600 metres.



Scientists drill water sounding holes in spite of strong winds, blowing snow and reduced visibility.

Calling all Food Lovers!!!

— Melissa Choong

Hydrometric Survey Technologist Al Chomica from Calgary has traveled to various geographical areas of Canada and as a CIDA Hydrometric Specialist to some very different watersheds around the globe. He has concluded that



Al and Gloria Chomica - Luangwa River, Zambia

there is one common bond that links and unites all working people. That is, of course, the enjoyment of a good meal after a hard day's work, whether it be from a fancy restaurant in a big city, concocted over hardwood coals on the African Savannah, or on a Coleman stove in a remote line cabin.

Thus, Al Chomica is on the lookout for recipes. The idea is to assemble a wide range of recipes from gourmet delights to camping treats to desserts. As a water surveyor, Chomica would like to assemble a "water survey recipe book," but he will not screen out any good hearted people who submit from other groups.

Chomica requests that you send him three of your favourite recipes in MSWord or text format. The recipes as well as any appropriate suggestions concerning the title of such a book, interesting anecdotes, or any other comments can be made to Al Chomica at (403) 292-5470.

Learning Through Participation

— Christine Best

In Ottawa, Ontario, from April 17-24, 1999, Christine Best from Policy and Corporate Affairs, (AES), was one of nine volunteer counselors at the 'Forum for Young Canadians'.

The Forum for Young Canadians, established in the 1970s, has a mandate to teach high school students about the Canadian government system. The public service participates by providing volunteer counselors selected from the government sector. Students had opportunities to learn in an intimate environment as they were given access to normally restricted areas of Parliament thus allowing for the chance to interact directly with government leaders.

Activities during the week long forum consisted of interacting with speakers and participating in simulations of political processes. The Speaker of the House was

the first to address the students at the forum, and the students showed enthusiasm through their questions regarding the relevance of the Senate. Likewise, the Deputy Minister of Finance (DM) discussed the role of the DM in the public service and in the political process.

The first simulation exercise entailed reproducing the running of an election. Elections Canada staff helped run the process, while the students formed parties and then coalitions in an attempt to win various events. Jean-Pierre Kingsley — the Chief Electoral Officer for Canada — assisted with the process by announcing the results of the student run elections.

Additionally, the students participated in: a public consultation process, a statement from members session, and a question period. The final exercise, a Federal-Provincial Conference, led by a student from Nunavut First Nations, provided an inspirational speech on national unity and inclusively.

This forum provided an excellent opportunity to observe the election process that exists with the workings of government in Canada. More information detailing the 'Forum for Young Canadians,' can be obtained from their website at www.forum.ca.

Spring Fair hits Riverdale

— Melissa Choong

*"Oh, give us pleasure in the flowers to-day;
And give us not to think so far away
As the uncertain harvest; keep us here
All simply in the springing of the year"*

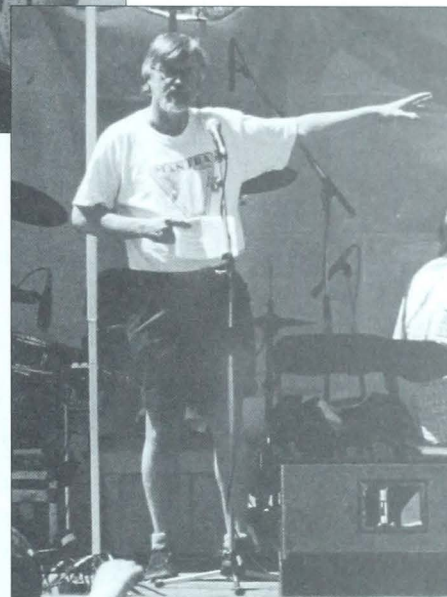
As poet Robert Frost so eloquently reminds us to cherish the springtime, the Festive Earth Society held a Spring Fair on Sunday May 2 to raise awareness, appreciation, and stewardship of the spring environment.

Held at Riverdale East Park in Toronto, 'Faces of the Don,' was the theme of the Spring fair. 'Catch the Spirit of Spring' appeared to be the focus of the day, with particular attention being paid to the celebration of spring and of course promoting awareness of a healthy planet.

The spring fair was organized by the Festive Earth Society, a not-for-profit organization established in 1998. The connection to AES? Well, the Society's president is our own Dr. Tom McElroy from the Air Quality Research Branch. For more information regarding the Festive Earth Society contact by email information@festiveearth.com or phone (416) 469-2977.



Kids learn and have fun as they examine ozone balloons and airplanes.



Tom McElroy points to where the fun is. (Taken at Spring Fair '99).

THE LEARNING CENTRE — your window on career planning

— Melissa Choong

Thanks to efforts of the folks at the Downsview Library and Human Resources, employees can now visit the new "Learning Centre". There you will find information on everything from career management and job hunting to leadership, self-development, and personal health. The best part? You don't even have to visit in person. The Learning Centre can be accessed directly from your desktop at <http://wwwib.tor.ec.gc.ca/learning>.

For more advanced information, try the "Career Planning" website at

<http://wwwib.tor.ec.gc.ca/careers>.

This comprehensive website contains information on resume and cover letter writing skills, how to network and job search; how to market yourself; and information on putting it all together.

These sites also give information on the job successes of several Environment Canada employees and how they made their leaps on the career chessboard. These new sites are an excellent resource for employees exploring their career options in the ever-changing world of work.

And, the Award goes to...

Awarded for his networking expertise in climate modeling, **Mike Lazare** was this year's recipient of the CARD Merit Award. The CARD Merit Award recognizes excellence in research. Lazare was a key player in the development of the global circulation model (GCM3). His technical knowledge of the model was said to be "well beyond what might be normally expected of a research meteorologist." As a scientific colleague, Lazare fully participated in the technological and problem solving aspects of the model's development which led to the successful completion of a very complex project. Finally, Lazare's colleagues also recognize his integral role as the "principal person for all aspects of support. ...With the advent of the Canadian Climate Research Network, he de facto became the network resource person."

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As a research scientist with AES, **Dr. Terry Bidleman**, in conjunction with Dr. James Pankow, developed a technique for sampling both the gas and particle phases. This procedure has been recognized and used all over the world. In recognition for his work, Terry jointly received the 1999 American Chemical Society Award for Creative Advances in Environment Science & Technology and the 1999 Varian Lectureship in Environmental Analytical Chemistry. Congratulations Terry!



Terry Bidleman of AES accepts the 1999 Chemical Society Award.

Scientists Applauded for Efforts

— Melissa Choong

At the most recent session of the Joint Scientific Committee (JSC) of the World Climate Research Program (WCRP) in Kiel, Germany, Canadian climate scientists were applauded for their active participation involvement and leadership roles in virtually all WCRP activities. For information contact Doug Whelpdale at (416) 739-4869.



For her work on the ASD study, Joanne Heller is presented with the Merit Award from Gordon McBean.

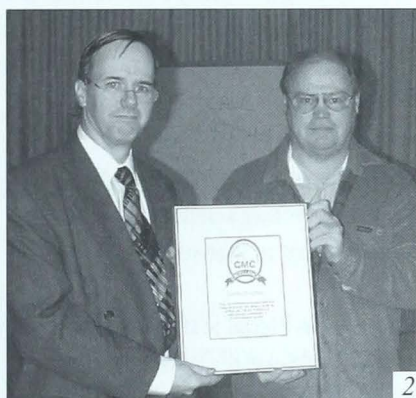
CELEBRATE

the good times Awarding excellence at CMC

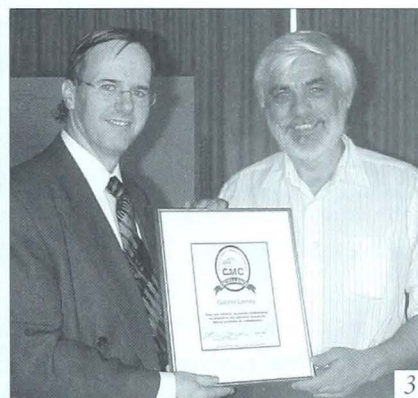
On March 4th, Excellence awards were presented to staff by Pierre Dubreuil, Director General of the Atmospheric Environment Prediction Directorate at the Canadian Meteorological Centre (CMC).



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1. Pierre Dubreuil presents award to Denis Bachand.
2. Gabriel Lemay and Pierre Dubreuil after Gabriel is presented with his award.
3. Gene Drapeau receiving his award from Pierre Dubreuil.
4. Sharing the spotlight. Award winners beam after winning CMC awards of excellence.
5. Smile, you're on camera. Pierre Dubreuil (right) presents Josee Fortin (left) with her award.
6. Pierre Dubreuil presents Marie-France Turcotte and Vahn Souvanlasy with their awards.
7. The line up. Who do you recognize? Réjean Dumas, Jean-Francois Gagnon, Pierre Dubreuil, Michel Dansereau, Peter Silva, and Deric Sullivan.

Patterson Medal awarded to Dr. Peter Taylor

— Melissa Choong

On June 3, 1999, Professor Peter Taylor was presented with the 1998 Patterson Distinguished Service Medal for exceptional service to meteorology. The award was presented in Montreal at the Canadian Meteorological and Oceanographic Society (CMOS) Congress.

Dr. Taylor has maintained Canada's reputation for eminence in meteorology both at home and abroad through his 25 years of dedicated and enthusiastic service to the area of boundary layer meteorology. He has a reputation as a first-class educator and researcher.

In particular, his groundbreaking work with the Askervein field experiments with the Canada Atlantic Storms Program has

been used as the official model for the past 15 years.

Professor Peter Taylor's career in meteorological leadership has been vast. He was a Senior Research Scientist in the former Air Quality and Inter-Environmental Research Branch, AES, and is now a professor of Atmospheric Science and Applied Mathematics at York University. Canada's success in the 21st century is going to depend on our ability to generate new knowledge and the education of young scientists will be a crucial element to that success.

The Patterson Medal is the Atmospheric Environment Service's most prestigious award and is presented annually to

individuals in recognition of their distinguished service to meteorology in Canada.

The medal, created in 1954, is named in honour of Dr. John Patterson, distinguished meteorologist and Director and Controller of the Meteorological Service of Canada from 1929 to 1946.

Onto future endeavours...

— Sumit Dhingra

After 24 years of experience in atmospheric research, **Dr. Raymond Hoff's** research interests included optical properties of aerosols and gases in the atmosphere, and the pathways and fates of toxic, organic, chemicals and elements in the environment. Dr. Hoff was the lead scientist at AES in research into toxic chemicals in the atmosphere. Dr. Hoff recently left AES to further his career at the University of Maryland Baltimore County, as a Professor of Physics and Director of the Joint Center for Earth Systems. Best of luck Ray!

Claudia Del Col, AES Communications has moved on to seek new challenges with the Canadian Automobile Association. Claudia joined AES Communications 9 years ago as a co-op student. Over the years, she became a much valued senior member of the communications team. Although she will be sadly missed, we wish Claudia all the best!



Claudia DelCol at her going away party.