

# ZEPHYR

JANUARY 1975 JANVIER



Environment  
Canada

Environnement  
Canada

Atmospheric  
Environment

Environnement  
atmosphérique

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**OFFICIAL OPENING  
ATMOSPHERIC ENVIRONMENT CENTRE  
ATLANTIC  
BEDFORD, NOVA SCOTIA**

Madame Jeanne Sauvé, Federal Minister of the Environment, officially opened the first Atmospheric Environment Centre in Canada on January 29, 1975 at Bedford, Nova Scotia. Also present, in addition to many officials from the private sector and from municipal, provincial and federal government, were Mr. J. Blair Seaborn, the recently appointed Deputy Minister of the Department of the Environment, Mr. J.R.H. Noble, Assistant Deputy Minister, Atmospheric Environment Service and Mr. F.W. Benum, Director General, Field Services Directorate, Atmospheric Environment Service. Mr. K.F. Harry, Regional Director Atlantic was the master of ceremonies for the occasion, while Mr. G.M. Shimizu represented the Maritimes Weather Office.

The new Centre has been established to expand and improve meteorological services to Atlantic Canada, it is indicative of the changes occurring within AES to take full advantage of scientific knowledge and human resources to better serve the social, economic and environmental needs of the community. Similar centres are being planned for all the AES Regions across the country.

Following the ribbon cutting ceremony, Madame Sauvé, the official party and the invited guests were given a conducted tour of the Maritimes Weather Office and the Atlantic Regional Office. The several displays prepared for the occasion received a great deal of attention but none more so than the forecast office itself where the on-duty staff were coping with one of the fast moving storms for which the East Coast is justly famous. The visitors found participation in this real time display a very interesting experience.

After the tour, the Minister and guests enjoyed a reception in the Centre, attractively presented by the Centre secretarial, clerical and administrative staff.

**The Speakers**



*K.F. Harry, Regional Director, Atlantic Region.*

*F.W. Benum, Director General, Field Services.*



*J.R.H. Noble, Assistant Deputy Minister,  
Atmospheric Environment Service.*



*Madame Jeanne Sauvé, Minister, Dept. of the  
Environment.*

### The Ribbon Cutting



Then, the Informal Reception



**Some maintained our service during the Festivities**



**An Unusual picture: Not often are so many levels of responsibility gathered on one occasion.**



*Left to Right: J.R.H. Noble, Assistant Deputy Minister; J.B. Seaborn, Deputy Minister; G.M. Shimizu, OIC Maritimes Weather Office; Madame Jeanne Sauvé, Minister; F.W. Benum, Director General; and K.F. Harry, Regional Director.*

**INAUGURATION OFFICIELLE DU  
CENTRE DE L'ENVIRONNEMENT ATMOSPHERIQUE DE L'ATLANTIQUE  
BEDFORD, (NOUVELLE-ECOSSE)**

Le 29 janvier 1975 Mme Jeanne Sauvé, ministre de l'Environnement du gouvernement fédéral, a inauguré le premier Centre de l'Environnement atmosphérique au Canada, à Bedford en Nouvelle-Ecosse. Parmi les nombreux représentants des gouvernements municipaux, provinciaux et fédéral et du secteur privé qui assistaient à l'inauguration, on pouvait remarquer M. J. Blair Seaborn, récemment nommé au poste de sous-ministre du ministère de l'Environnement, M. J.R.H. Noble, sous-ministre adjoint du Service de l'Environnement atmosphérique, et M. F.W. Benum, directeur général de la Direction générale des services extérieurs, Service de l'Environnement atmosphérique. La cérémonie s'est déroulée sous la présidence de M. K.F. Harry, directeur de la Région de l'Atlantique, et c'est M. G.M. Shimizu qui représentait le Bureau météorologique des Maritimes.

Le nouveau Centre a été créé pour améliorer et étendre les services météorologiques dans les provinces de l'Atlantique. C'est un symbole des changements que subit le Service de l'Environnement atmosphérique pour lui permettre de tirer pleinement parti des connaissances scientifiques et des ressources humaines afin de mieux faire face aux besoins sociaux, économiques et environnementaux de la collectivité. On prévoit la création de centres de ce genre dans toutes les Régions du S.E.A. au Canada.

Après la cérémonie Mme Sauvé, les hôtes officiels et les invités ont participé à une visite guidée du Bureau météorologique des Maritimes et du Bureau régional de l'Atlantique. Les visiteurs se sont beaucoup intéressés aux petites expositions qui avaient été organisées à cette occasion, mais c'est le bureau de prévision qui a remporté le plus grand succès car le personnel de service était aux prises avec une de ces tempêtes qui se déplacent à grande vitesse pour lesquelles la côte est célèbre, avec juste raison. Cette exposition en temps réel des activités des prévisionnistes fut des plus intéressantes.

Après la visite, le ministre et les invités ont assisté à une réception qui eut lieu au Centre et qui avait été organisée avec beaucoup d'art par le personnel administratif et le personnel de soutien.

**THE AES BOUNDARY LAYER WIND TUNNEL**

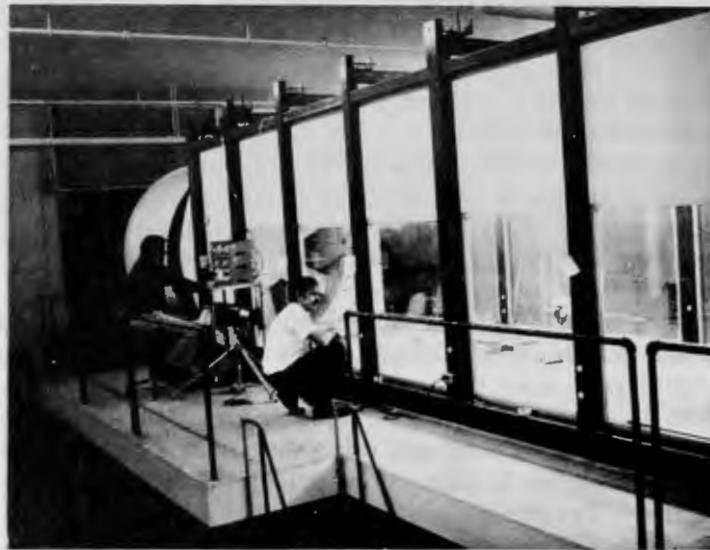
by

F.H. Fanaki

A field study of a complex meteorological phenomena is usually expensive, time consuming and of a limited extent due to the variation in atmospheric conditions. It is common, then, to describe a complex meteorological phenomena through idealized physical and numerical models, where the important factors in a particular situation can be isolated for study. Such models permit examination of the physical mechanisms involved, testing for consistency of results and prediction of parameter behaviour.

Physical models are usually installed in a controlled environment such as a wind or water tunnel while numerical models are obtained by solving governing equations using computers.

The AES, as part of its program for modelling atmospheric phenomena, has acquired a boundary layer wind tunnel located in the first floor of the Headquarters building. The tunnel is of an open-circuit type constructed from wood. It is 28.96 m long and is powered by a 55.93 kw (75 hp) motor, capable of producing winds up to 17.9 m/sec. There are three sections; the fan section, the test (working) section and the contraction section. When the fan is turned on, air enters the test section from the contraction section where the area is reduced from 5.49 m x 6.1 m to 2.44 m x 1.83 m.



*A view of the AES Boundary Layer wind tunnel during operation. Mr. J. Kovalick is measuring the wind speed while Mr. A. Blokhine is remotely positioning the wind sensor.*

To suppress the turbulence induced by the fan, the air passes through a grid of honeycomb and a series of screens installed in the contraction section. The AES Boundary Layer (B.L.) wind tunnel was given that name to distinguish it from the familiar aeronautical wind tunnel. The aeronautical wind tunnel is used to examine aerodynamic properties of aircraft while the B.L. wind tunnel because of its long test sections (18.3 m) is capable of generating a boundary layer similar to that in the atmosphere. The degree of similarity depends on the care that has been taken in following the rules of modelling. To determine the degree of simulation achieved for a particular model, a comparison of actual field data with the wind tunnel observations is required.

At present the wind tunnel is being used to examine the flow field and the dispersion of pollutants over a model of the Strait of Canso.

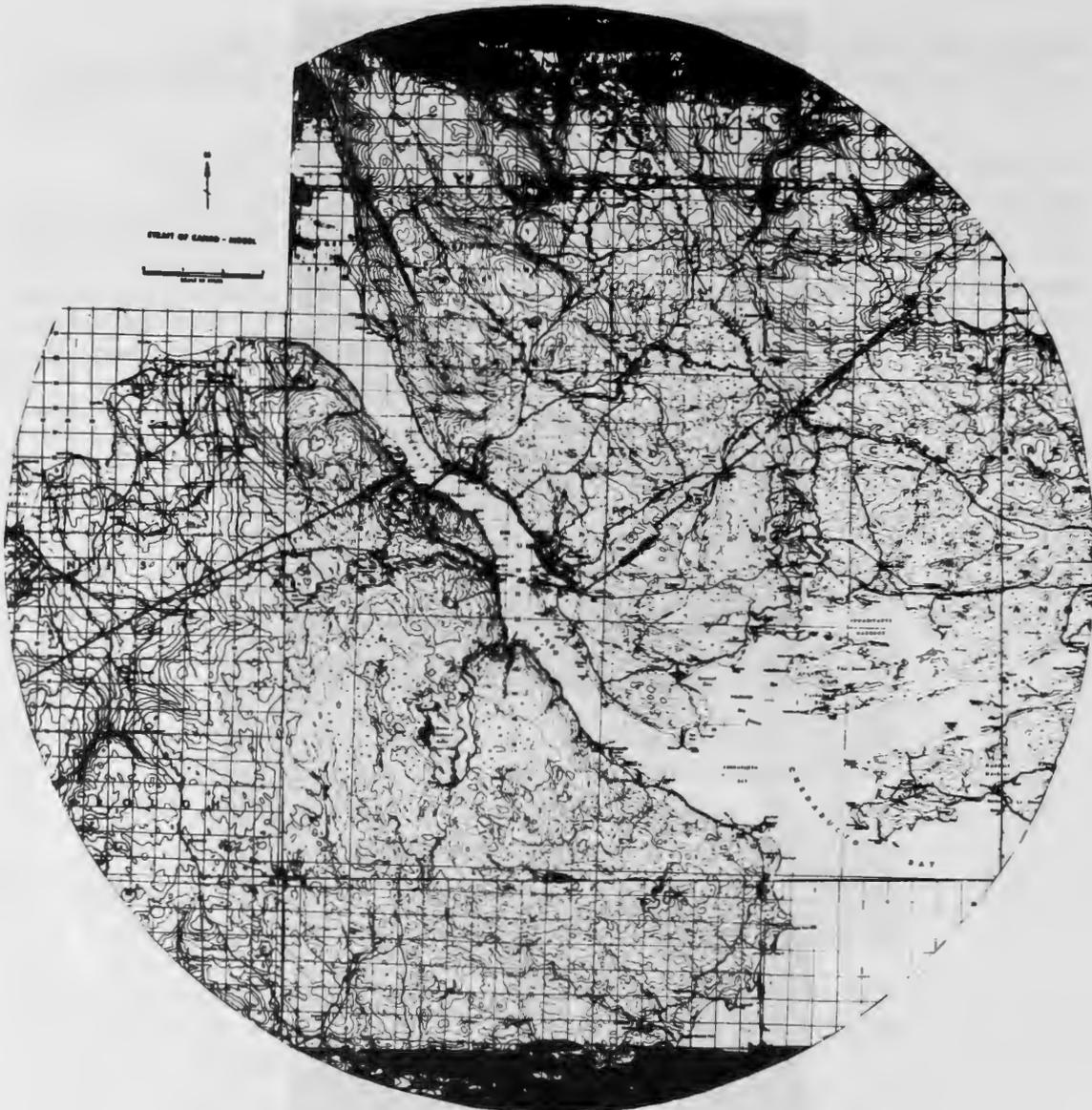
The Strait of Canso in Nova Scotia is one of the major ice-free deep-water ports in Canada. It separates the mainland of Nova Scotia from Cape Breton Island and extends for about 16 miles. Near Port Hawkesbury the Strait is spanned by a mile long causeway



*Looking into the tunnel through a honeycomb grid at the intake.  
The honeycomb is used to smooth the airflow entering the tunnel.*



*A view of the Strait of Canso model and the probe carrier inside  
the tunnel. Dr. F. Fanaki and Mr. J. Kovalick are setting up the  
probe carrier above the model.*



*Topographic map of the modelled Strait of Canso area, Nova Scotia.*

which is used for motor vehicle and railway transport. At present there are a number of industrial developments at Point Tupper, including an oil refinery, a power generating station, a pulp and paper mill and a heavy water plant. With such a dense industrial complex in a small geographical area one expects a deterioration in the local quality of air and water. With future industrial expansion the situation will worsen.

The model of the Strait was designed with a scaling factor of 20,000. The model scales a circular area 27.4 miles in diameter around the city of Port Hawkesbury. To satisfy the similarity conditions, the geometry of the model should be similar to the prototype. This requirement is easily fulfilled by constructing an undistorted scale model. But, to avoid the effects of molecular viscosity and to simulate the ground roughness the model's vertical scale is exaggerated three times. To measure the wind speed and direction, and the

concentration of pollutants at different locations in the model, an X, Y and Z probe carrier is used. In order to simulate the decay and dispersion of pollutants and visually track the plumes from different simulated industrial sources in the model, a new technique based upon the molecular property of luminescence is being developed.

The AES B.L. wind tunnel could also be used to routinely calibrate wind instruments and, to examine the aerodynamic properties of precipitation gauges and associated wind shields, of buildings and structures, and of orographic features, to name only a few possibilities. Some of these applications will be considered in the near future as staff members become more familiar with the tunnel's idiosyncrasies and potentials.

## **RAPPORT D'UN VOL DE FAMILIARISATION ENTRE CORNWALL ET LES ESCOUMINS, LE 17 JANVIER 1975**

par

**Eddy Walsh**

Le départ se fit par un beau matin ensoleillé et une température extérieure de -23 C. L'avion, un Load Star, de la compagnie Photo-Air Laurentides, transporte un équipage de trois personnes: le pilote — le co-pilote — le navigateur-photographe. Le but de ce vol était de photographier l'état des glaces sur le fleuve St-Laurent de Cornwall à Trois-Rivières, ensuite de Québec aux Escoumins pour le ministère de l'Environnement. Le vol se faisait à 9,500', hauteur idéale pour ce genre de travail. Les conditions météorologiques requises ne sont pas aussi rigoureuses que celles pour la photographie aérienne conventionnelle, c.a.d. demandant de forts contrastes lumineux car la glace ayant un pourcentage d'albédo grandement supérieur à l'eau, il faut beaucoup moins de lumière pour avoir de bons contrastes; les conditions requises sont qu'il n'y ait pas de nuages en-dessous de la hauteur opérationnelle et que la couverture nuageuse au-dessus soit nulle ou complètement couverte car avec une condition de ciel fragmenté, il se fait de trop grands contrastes lumineux et la caméra ne peut s'ajuster pour ces différences, ce qui donne des photos de pauvre qualité.

Au point de vue météorologique, une haute pression contrée en Pensylvanie se dirigeait vers l'est, se prolongeant au nord-est par une crête qui influençait tout le Québec. Un ciel clair était prévu, ainsi que des vents du nord-ouest de moins de 10mph, devenant 10-15 en après-midi.

Dans la matinée, le vol se fit en direction de Cornwall. Les conditions furent extrêmement bonnes, le ciel était clair et la visibilité illimitée. En après-midi, ce fut en direction des Escoumins, il fallait photographier la rive nord du St-Laurent à partir de Québec vers l'est. Les conditions furent très belles jusqu'à l'île aux Oies; à cet endroit la glace cessant brusquement pour faire place à l'eau libre. A partir de ce point la rive sud du fleuve était couverte de cumulus, avec quelques cumulus bourgeonnants, qui s'étendaient quelques milles à l'intérieur des terres, tandis que la rive nord était complètement dégagée. Cette condition était due au vent du nord-ouest qui poussait l'air très froid au-dessus de l'eau beaucoup plus chaude, la convection résultante formait ces nuages.

Ce fut un voyage très enrichissant, tant au point de vue météorologique qu'au point de vue de mieux comprendre certains besoins spécialisés des usagers de nos services.

## LAKE BREEZE STUDY WILL BENEFIT SAILING OLYMPICS

The eastern basin of Lake Ontario, i.e. east of Prince Edward County and north of Main Duck Island, has a very pronounced lake breeze. Based on long-term records from some land and island stations in the area, the wind is southerly or southwesterly up to seventy percent of the time during the hours 1000 to 1500 EST in July. It was decided to make over-water observations of this phenomenon using equipment which had been deployed during the International Field Year for the Great Lakes.

During the summer months of 1973 and 1974, an instrumented Bedford Tower was operated in those waters. Because of its proximity to the site of the 1976 Olympic Sailing Events, the data from the instruments are of intense interest to the organizers and the potential competitors. An abstract of the 1973 data from July and August has been issued as a supplement to an earlier document providing background climatological data for the area.

Because of instrument problems experienced during 1974, there will be little new information published in a similar form. However, in 1975, the analysis program will be arranged so that certain of the data can be made available early in the fall. A further aspect of the 1975 program will be to describe the gusts over the water associated with the lake breeze. It is suspected that they will differ somewhat from other types of gusts, but the data will clarify this.

The work has been carried out by the Lakes and Marine Applications Section of the Meteorological Applications Branch of Central Services Directorate. The Instruments Branch has contributed heavily to the data acquisition system development and deployment. The Prescott Marine Agency of MOT has installed and removed the Bedford Tower. Ontario Regional Staff at Kingston Airport, where the data telemetered from the tower are received, have also made major contributions to the study.

### Aids to Forecasting or Hindcasting Waves

In theory, it is possible to estimate wave conditions in a water body if one knows the wind speed, how long it has blown (the duration), what length of water surface it has acted on (the fetch), and other factors such as water depth. If these items are forecast, then one may forecast wave conditions. If, however, real data from the past are used, one may derive a wave hindcast.

There are many approaches to translating the wind data, including fetch and duration, into wave information. A number of nomograms, tables and other diagrams have been prepared by a variety of workers in the field. Over a period of time, the Lakes and Marine Applications Section of Meteorological Applications Branch (Central Services Directorate) has sought ways to make the use of these diagrams easier for the forecaster. In some cases, this has led to the redrawing of complex nomograms in more convenient forms.

As examples of this, Lakes Erie, St. Clair and Winnipeg, among many others, require a consideration of the water depth in wave forecasting. For each of these lakes, certain critical areas and wind directions were selected. Then, the Bretschneider nomograms were redrawn with wind speed along one axis and duration along the other; wave height could be determined. Finally, for the critical areas and wind directions, the upper limit of

wave height as dictated by the fetch and the water depth were calculated. With these diagrams, the forecaster can very easily make the wave forecasts for the critical areas once the wind and duration are known.

More and more offices are now using small computers for many tasks which can be automated. The wave calculation is one such task. To assist those offices so inclined, the Lakes and Marine Applications Section has written FORTRAN language sub-routines to calculate wave heights and periods using both the Bretschneider and Pierson-Moskowitz models. Also, the limiting fetch distance for the various combinations of wind speed and durations have been graphed in a more usable form following the work of Bretschneider.

The Section staff that have been involved in these activities are Section Head, J.A.W. McCulloch and Project Meteorologist, M.E. Lalande.

### ARE YOU A GOOD AMATEUR METEOROLOGIST?

*(With permission of the editor of Weather, where this article appeared in its original form)*

1. It is time for the 0900 GMT observation. It is raining heavily and blowing a gale. You are just recovering from influenza and have recently broken an ankle. Do you
  - (1) think of those pioneering amateurs of the 19th century and go outside,
  - (2) resolve to save up for autographic equipment,
  - (3) think of those pioneering amateurs of the 19th century and stay inside?
2. Your local newspaper rings you up in September to ask if it is likely to be a white Christmas. Do you
  - (1) work out the odds over 100 years,
  - (2) tell them that it is a 50/50 chance,
  - (3) tell them that you haven't the faintest idea?
3. The early evening CBC TV forecast has just begun and one of your children flits across your line of vision. Do you
  - (1) remonstrate with the child,
  - (2) remonstrate with the child's mother,
  - (3) write to the CBC?
4. You have been left a small fortune by a relative. Do you
  - (1) re-equip your station with every conceivable instrument,
  - (2) buy the latest issue of *Canadian Weather Review*,
  - (3) buy a better house?

5. Your morning observational routine is disturbed by a gaggle of jeering schoolchildren at a nearby bus stop. Do you

- (1) invite them over to explain the complexities of weather observing,
- (2) send for the police,
- (3) go indoors until the bus has gone?

6. Headquarters writes to you asking for your rainfall return for April, 1928. Do you

- (1) send it off,
- (2) explain that you didn't realize that they needed it so quickly,
- (3) tell them that you were born in 1932?

7. Your grass minimum thermometer shows a phenomenally low reading. Do you

- (1) compare thoroughly with previous readings,
- (2) write to *Atmosphere* about it,
- (3) try to remember at what angle you carried the thermometer from screen to ground the previous evening?

8. The trace on your thermograph chart shows an evening rise of 20 deg C in less than half-an-hour. Do you

- (1) send the instrument back to the makers,
- (2) write to *Atmosphere* about it,
- (3) ask your neighbour to burn his rubbish at the other side of his garden?

9. You are re-setting the maximum thermometer when your attention is distracted by your neighbour, resulting in an accidental collision between thermometer and leg of screen. Do you

- (1) laugh,
- (2) cry,
- (3) ask your neighbour to burn his rubbish at the other side of his garden?

10. A friend asks you why the United States Weather Bureau never seem to forecast an extreme month in their long range forecasts. Do you

- (1) explain (by clever manipulation of the data) that they do,
- (2) tell him to write to the U.S. Weather Bureau,
- (3) point out that extreme months don't occur often enough to take a chance on forecasting one?

Score one for answer 1), two for 2), three for 3). How did you score?

10-16: you are a good amateur meteorologist.

17-23: you are average.

24-30: you are very sensible.

## TWO NEW DIRECTORS

The Assistant Deputy Minister, Atmospheric Environment Service has announced the appointment of Mr. Roy Lee as Director, Administration Branch, A.E.S. effective February 3, 1975.

On completion of his Master's Degree in Applied Mathematics at the University of Toronto in 1948, Mr. Lee joined A.E.S. as a weather forecaster at Gander, Newfoundland. He subsequently served as a Research Meteorologist, Supervisor of Field Training, Supervisor of Scientific Development and Evaluation and Special Lecturer in Physics at the University of Toronto. His most recent post was Chief, User Requirements Division, Field Services Directorate, A.E.S.

Mr. Lee has authored 55 scientific papers on many subjects related to Meteorology. He was awarded the First Darton Prize of the Royal Meteorological Society in 1954 and again in 1955, and the Canadian Branch President's Prize in 1956.

Mr. Lee's community activities include membership in La Chasse - Galerie and Water Rats. He is an Elder in Willowdale Presbyterian Church. He enjoys languages, philosophy, history, music, volleyball, swimming and squash. Mr. and Mrs. Lee have three sons.



Le sous-ministre adjoint a annoncé la nomination de M. Roy Lee au poste de directeur de la Direction administrative du S.E.A. à partir du 3 février 1975.

M. Lee est entré au S.E.A. comme prévisionniste à Gander, Terre-Neuve, après avoir obtenu en 1948 une maîtrise en mathématiques appliquées à l'université de Toronto. Il fut ensuite, tour à tour, chercheur en météorologie, superviseur de la formation en service réel, superviseur du perfectionnement scientifique et de l'évaluation et chargé de cours de physique à titre particulier à l'université de Toronto. En dernier, M. Lee occupait le poste de chef de la division des demandes des usagers, direction générale des services extérieurs, S.E.A.

M. Lee a publié 55 études scientifiques sur de nombreux sujets qui touchent à la météorologie. En 1954, il s'est vu attribuer le premier Prix Darton de la Société météorologique royale. Ce prix lui revint encore en 1955 et, en 1956, il obtint le Prix du président de la direction canadienne.

M. Lee participe activement aux activités communautaires. Il est membre de la Chasse - Galerie des Water Rats et du conseil d'administration de l'Eglise presbytérienne de Willowdale. Il s'intéresse aux langues, à la philosophie, à la musique et pratique le volley ball, la natation et le squash. M. et Mme Lee ont trois fils.

\* \* \* \*

Mr. Robert E. Vockeroth has been appointed to the position of Director, Atmospheric Instruments Branch, Atmospheric Environment Service, Downsview. Immediately prior to his appointment, Mr. Vockeroth was Acting Director of the Branch since December 1973.

Mr. Vockeroth, 49 was born in Outlook, Saskatchewan and attended the University of Saskatchewan, graduating with a B.Eng. (Physics) in 1946. Upon graduation, he joined the Northern Electric Company and worked as a Production Engineer in the Electronics Division and in the Communication Equipment Division, both in Montreal and Belleville, Ontario. In 1949, on leave of absence from Northern Electric, he was a Senior Laboratory Instructor in Physics and Engineering at the University of Saskatchewan. He joined the then Canadian Meteorological Service in 1950, enrolling in the Meteorology Program at the University of Toronto. On completion of his Masters degree, he accepted a posting to Goose Bay, Labrador as a Meteorologist and later as a Shift Supervisor. In 1957 he returned to Headquarters in Toronto as an Engineer in the Instrument Division. In 1960, he became the Superintendent, Research and Development Section, and later Chief of the Design and Development Division.

Mr. Vockeroth is a member of The Canadian Meteorological Society, the American Meteorological Society, the Association of Professional Engineers of Ontario and the World Meteorological Organization. In the latter he has been a member or chairman of several Working Groups, and is now the Canadian representative on the Technical Commission for Instruments and Methods of Observation.

He is married and has four children.

Mr. Robert E. Vockeroth vient d'être nommé au poste de directeur de la Direction des instruments du Service de l'Environnement atmosphérique à Downsview. Il était directeur intérimaire de cette Direction depuis décembre 1973.



M. Vockeroth est né à Outlook, en Saskatchewan il y a 40 ans. Il a fréquenté l'Université de la Saskatchewan et a obtenu un baccalauréat en génie (Physique) en 1946. Muni de son diplôme, il se fit embaucher par la Northern Electric Company en qualité d'ingénieur de production à la division de l'électronique et à la division de l'équipement des communications à Montréal et à Belleville en Ontario. En 1949, ayant obtenu un congé sans solde de la Northern Electric, il fut instructeur principal dans un laboratoire de physique et de génie à l'Université de la Saskatchewan. Il entra au Service météorologique canadien en 1950 et se fit inscrire au programme de météorologie de l'Université de Toronto. Après avoir obtenu la maîtrise, il accepta un poste de météorologiste à Goose Bay dans le Labrador où il fut, plus tard, superviseur d'équipe. M. Vockeroth retourna à l'Administration centrale à Toronto en 1957 en tant qu'ingénieur à la division des instruments. En 1960, il devint surintendant de la section de la recherche et du développement puis, chef de la division de la conception et du développement.

M. Vockeroth est membre de la Société météorologique canadienne, de l'American Meteorological Society, de l'Association of Professional Engineers of Ontario et de l'Organisation météorologique mondiale. Il a été membre ou président de plusieurs groupes de travail de l'OMM et est actuellement le représentant du Canada auprès de la Commission des instruments et des méthodes d'observation.

M. Vockeroth est marié et père de quatre enfants.

## LONG SERVICE AWARDS TO WEATHER WATCHERS

In what may well be a 'first' in Canada's Public Service, the entire staff of the Estevan based Weather Observing Station were last week presented with 25 year service pins and certificates.

For the occasion, two officials of Central Region Headquarters, Winnipeg, were on hand to present the awards. J. Frank McIsaac, Regional Superintendent Observational Services and Joe Gleason, Chief Inspector, both expressed the belief they were participating in a unique ceremony.

Following a dinner at which all recipients and their wives were present, Mr. McIsaac briefly mentioned details of the service to Canada of Estevan's four 'weather men.'

Officer-in-Charge Gordon Knight began his service in April, 1949 and except for brief periods in Regina and Ottawa, all his service has been at Estevan.



*Left to right: Frank McIsaac, Gordon Knight, Jim Mcmanus, Jim McCall, Bernard Jesse and Joe Gleason, Winnipeg.*

Bernard Jesse served with the Winnipeg Grenadiers from September, 1939 to October, 1946. Taken prisoner at Hong Kong on Christmas Day 1941, he was a POW in Japan until late in 1945. He joined the Meteorological Service at Estevan in 1949.

Jim McCall served with the Royal Canadian Artillery from 1942 to 1946 and was in the Northwest European Theatre of war. His service as a weatherman began in June, 1952.

Jim McManus joined the RCAF in June, 1942, and was on eight bombing missions over Germany and received his discharge late in 1945. On July 1, 1952 he joined the Meteorological Service at Estevan.

Pins and certificates were then presented and Mr. McIsaac passed on the congratulations of the Regional Director.

(Estevan Mercury – Dec. 11, 1974)

#### RETIREMENT: H.W. JOHNSTON

An informal luncheon was held on February 5 to wish Harvey W. Johnston bon voyage on the occasion of his retirement after 32 years as a meteorologist.

After a brief career as a school teacher in rural Saskatchewan Harvey joined the Meteorological Branch Department of Transport in September 1942. His work with the R.C.A.F. raised the teaching of meteorology to an unprecedented high standard and earned him acclaim as the foremost Canadian Authority in meteorological training for both military



*Left to right: H.W. Johnston, G.L. Pincock, and R. Lee.*

and civil aircrew. As author of "Weather Ways" and "Weather Work", he became known on an international basis, and in particular to airmen of other NATO countries who won their wings in Canada. His former R.C.A.F. students including some now serving at the rank of General in the Canadian Forces, still inquire about his welfare, and recall his remarkable ability to make meteorology a lively subject.

In 1966 Harvey joined the Training and Development Branch of the new Ministry of Transport. Returning to the AES in 1972 he was engaged in the preparation of "Weather I" a new training manual for use by private pilots.

Out of town guests included D.B. Kennedy, D.G. Black and O.J. Andres of Ottawa. Messages were read from J.R.H. Noble, H.V. Tucker and former colleagues across Canada. A scroll was presented by D.G. Black on behalf of former colleagues in the Ministry of Transport. A present consisting of three books was made by G.L. Pincock on behalf of former colleagues in the AES.

#### PACIFIC REGION RETIREMENT PARTY

Four long-time employees of the Atmospheric Environment Service, Pacific Region, retired in December 1974. They were J.R. "Jack" Hamilton, Regional Supervisor of Station Operations, W.H. "Bill" Mackie, Regional Superintendent of Observational Services, H.C. "Henry" Belhouse, Regional Superintendent of General Weather Services and J.R. "Roy" Taylor, Presentation Technician of the Vancouver Aviation Weather Office.

All had joined the Canadian Meteorological Service between 1940 and 1942, so we have lost over 120 years of experience.

A retirement party held on December 2 in the Stanley Park Pavilion was attended by 150 friends and colleagues. Many messages of congratulations were received from colleagues throughout Pacific Region and across Canada.

**J.R. "Jack" Hamilton:** Jack joined the Canadian Meteorological Service in 1941 and took training in Toronto and in the U.S.A. as an Upper Air Observer. He served at Patricia Bay, Fort St. John, Prince George and Ocean Station Papa. Jack Hamilton became Port Meteorological Officer in the early '50's and then assumed his present position of Regional Supervisor of Station Operations in 1965.

**W.H. "Bill" Mackie:** Bill Mackie joined the Service in 1942 and, after completing post graduate training in Toronto, he served at RCAF Stations at Claresholm, Rivers, Brandon, Boundary Bay and Comox. Bill was one of the group of 14 meteorologists who volunteered and were taken into uniform with the RCAF. He became the Inspector for Pacific Region in 1946, and then served as Officer-in-Charge of the Victoria Weather Office from 1951-1966 when he returned to Pacific Region Headquarters, as Superintendent of Observational Services, the position he now holds.



*From left to right: W.H. "Bill" Mackie, J.R. "Roy" Taylor, H.C. "Henry" Belhouse and J.R. "Jack" Hamilton.*



*From left to right: John Knox, Mrs. Knox, Mrs. Mackie, Bill Mackie, Mrs. Taylor, Roy Taylor, Mrs. Belhouse, Henry Belhouse, Mrs. Hamilton and Jack Hamilton.*

**H.C. "Henry" Belhouse:** Henry joined the Service in 1942 and after post graduate training in Toronto, he spent nineteen years as a forecaster in Vancouver before moving to a senior position in Instruments Branch at AES Headquarters. Henry returned to Vancouver in 1972 as Regional Superintendent of General Weather Services.

**J.R. "Roy" Taylor:** Roy joined the Canadian Meteorological Service in 1940, took initial training as a Meteorological Assistant in Vancouver and then spent several years at the R.C.A.F. Station at Ucluelet. When M.O.T. took over stations on the Canol Pipeline, Roy and Hank Matthison spent a number of months at stations such as Fort Simpson and Norman Wells. Roy became the Administrative Officer at the Airport Office after the war and was a Charter Member of the staff when the Aviation Briefing Office was established at Vancouver Airport in 1963.

**PERSONNEL**

**The following are on temporary duty or special assignments:**

N. Barber	From: Toronto Weather Office To: ARD, HQ.
E. Spira (Mrs.)	From: Toronto Weather Office To: ARD, HQ.
T.G. Medlicott	From: Regina Weather Office To: ARD, HQ.
O.L. Shewchuk	From: CFB Portage la Prairie To: CSD, HQ.
C.K. Cherney (Miss)	From: CFB Moose Jaw To: CFB Portage la Prairie
W. Rolph	Head of Reader Services, LS-3, HQ Library

**The following have accepted positions as a result of competition:**

73-DOE-WIN-PSC-475	EG-ESS7 Upper Air Inspector	B. Kahler
74-DOE-WIN-WC-629	CS1 Computer Programmer	J. Armstrong
74-DOE-WIN-CC-567	AS4 Regional Manager Arctic Stations	D.L.C. Stossel
74-DOE-TOR-CC-288	MT9 Head, Computer Systems, FSD	D.S. McGeary
74-DOE-TOR-CC-289	MT7 Senior Staff Officer Meteorology	D.A.R. Mettam
74-DOE-TOR-CC-268	MT6 Head, Hydromet, Stream Flow Studies Unit	L. Mapanao
74-DOE-WPNA-CC-162	MT8 Chief Meteorologist, Arctic Weather Office	A.F. Ingall

74-DOE-TOR-CC-165	EG-ESS6 Met. Instructor, MOTTI	S.J. Metcalfe
74-DOE-TOR-CC-165	EG-ESS6 Met. Instructor, MOTTI	R. Van Humbeck
74-DOE-TOR-CC-364	EG-ESS6 Position: DOE-914-7652	P.A. Learmouth
74-DOE-WPNA-CC-180	CM6 Communications Supervisor, Arctic Weather Office	A.R. Bradshaw
74-MDE-Q-CC-67	MT9 Chief, Analysis and Prognosis Division	W. Gutzman

**The following transfers took place:**

J. Decorby	From: Central Region To: Ontario Region
A.M. Russell	From: Central Region To: Ontario Region
F.J. Sebastian	From: Training Command, Winnipeg To: Prairie Weather Central
C.J. Brosch	From: Prairie Weather Central To: Winnipeg Weather Office
J.T. Kotylak	From: Training Branch, CSD, HQ To: Met. Applications Branch, CSD, HQ

**Separations**

Dr. R.D.S. Stevens	ARD, HQ
Dr. J.W.S. Young	ARD, HQ

**Retirement**

R.W. Miller	Toronto Weather Office
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**TRIVIA**

Opportunists take now for an answer.

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Insurance is what protects you against everything except the agent.

\* \* \*

The amount of leisure time a person has is not so important as his profitable use of it.

\* \* \*

**Unusual Requests**

Climatic data requested – to be used for a correlation of temperatures and beer consumption – for Labatts Breweries.

Received by the London Weather Office

Whether pressure rising or falling as you cannot make mayonnaise if it is falling.

Received by the Castlegar Airport, B.C.

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**Selections from the Encyclopedia of Graffiti**

Ecology, the last fad.

Visit your mother today; maybe she hasn't had any problems lately.

Is there life before death?

George Orwell was an optimist.

Life is a hereditary disease.

Reporter: Mr. Gandi (sic), what do you think of Western civilization?

Mr. Gandi: I think it would be a good idea.

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### Une liste d'expressions diverses

<b>Expression</b>	<b>Signification ou équivalent</b>
En arracher	Avoir des difficultés
Il vient de se faire embarquer!	Il vient de se mettre dans le pétrin
On sait de quel bois il se chauffe	On sait ce dont il est capable
Dans les petits pots les meilleurs onguents	Se dit des personnes de petites tailles
C'est un Roger Bontemps!	Personne bohème, non prévoyante
Avoir la bosse des affaires	Avoir des aptitudes pour les affaires
La bosse des maths	Facilité à apprendre les maths
Avoir les deux pieds dans la même bottine	Manquer de débrouillardise
Perdre la boule (la tête)	Devenir fou ou ne plus se maîtriser
Passer au batte	Recevoir une raclée
Rapporter quelqu'un	Dénoncer
C'est son père tout craché	Il ressemble à son père