



Canadian Meteorological
and Oceanographic
Society

La Société Canadienne
de Météorologie et
d'Océanographie

C.M.O.S. NEWSLETTER / NOUVELLES S.C.M.O.

DECEMBRE / DÉCEMBRE 1984 VOL. 12 NO. 6

THE PRESIDENT MEETS WITH AES MANAGERS

On October 30, 1984, Dr. Neil Campbell and Rick Lawford met with the Management Committee of the Field Services Directorate of AES. Dr. Campbell made a presentation on the new CMOS initiatives which will strengthen CMOS support to operational meteorology. This presentation was followed by a discussion on the role of CMOS and on additional ways the Society could better support operational meteorologists.

In his introductory remarks, Dr. Campbell outlined the activities of the Society and expressed appreciation for the support which CMOS receives from AES. He noted that, in the past few years, the Society had become more concerned about transferring its scientific knowledge to the users of meteorological and oceanographic research and information in a way which addresses their needs and that Congresses had provided a good forum for operational meteorologists to meet and exchange information on new technological developments. In addition, he reviewed the steps being taken to upgrade "Chinook" so that it will allow meteorologists and oceanographers to convey popularized scientific information to a large and more diversified audience.

Dr. Campbell draw special attention to the developments arising from the Professionalism Committee and noted that the Society may soon have accreditation procedures in place. This latter development will enhance the Society's role as a forum where meteorologists from the government and the private sector can meet to discuss their mutual concerns.

Dr. Campbell also noted that SIGMET had been revitalized. He noted that the role of Interest Groups was under review and that they would be a subject for discussion at the 1985 AGM.

A number of members of the Field Services Management Committee expressed support for the CMOS initiatives. Mr. Mike Balshaw noted the need for professional forecasters to belong to a professional association because it provides a forum which the government does not provide. He expressed his support for SIGMET and noted a proposal which had been developed in the Central Region of AES for a joint AES/CMOS workshop on operational meteorology. It should be noted that the Executive is supportive of this proposal and is now in the process of following up with Dr. Ian Rutherford, the Director General of the Field Services Directorate.

In summary, the meeting was felt to have been a success. From the comments at the meeting, it is evident that CMOS has the support of AES Field Services Directorate's management for its new initiatives. The Executive looks forward to continued and strengthened participation by operational meteorologists from AES in the Society.

HIGHLIGHTS FROM COUNCIL NO. 1

The first meeting of 1984-85 Council was held on October 22 and 23, 1984 in the board room of the Ministry of

State and Technology in Ottawa with eight members in attendance. Dr. Neil Campbell chaired the meeting and steered the Council through its lengthy agenda. The following points outline some of the highlights of decisions and discussions from the meeting.

1. Dr. Bill Ford will serve as the Chairman of the Nominating Committee for the 1985-86 Executive. He will be assisted by Mr. Bill Appleby. Both members are from the Halifax Centre.

2. Mr. Uri Schwarz was named the CMOS representative on the National Committee for UNESCO.

3. Based on a paper written by Dr. Barry Goodison, a number of decisions were made regarding the format for future Congresses. These decisions will be incorporated into a paper on Administrative Guidelines for CMOS Congresses which will be distributed shortly. Among other things, these decisions will 1) limit the length of Congresses and the number of concurrent sessions; 2) confirm the existence of at least one theme session for each Congress; 3) recognize poster presentation as an alternate means of presentation; and 4) encourage the presentation of papers within sessions at set times.

4. Mr. Bill Richards from the Halifax Centre was confirmed as the Society's new Membership Secretary. He will be organizing the membership drive for 1985. It is hoped that Centres will give him their full support in implementing the various initiatives he is proposing.

5. The Ottawa Centre is making arrangements for the exhibits at the WMO Technical Conference on Instruments and Methods of Observation (TECIMO III) which will be held in Ottawa in 1985. Initial reports indicate that there are a number of companies interested in obtaining exhibit space at the Conference.

6. Dr. Ed Lozowski, at the request of the current Executive and with advice from the By-Law Revisions Committee, has proposed a large number of revisions for the Society's by-laws. Two working groups have been established to review these changes. They will be reporting to the Executive in January with their recommendations.

7. Two grant applications have been finalized and submitted to the appropriate government agencies. The first application seeks financial support from the National Science and Engineering Research Council of Canada (NSERC) for the Climatological Bulletin. The second application is being made to the Ministry of State for Science and Technology (MOSST) Program for Public Information on Science and Technology to obtain financial support for the development of Chinook. Further details on these two applications can be found elsewhere in this Newsletter.

8. Mr. Ron Hopkinson of the Saskatchewan Centre will serve as co-chairman of the LAC for the joint CMOS/ACH Congress in Regina in 1986. Mr. David McLeod, of the Associate Committee on Hydrology (ACH), will serve as the co-chairman.

9. Dr. Ken Sato, Chairman of the Professionalism Committee, has made considerable progress in preparing some draft accreditation procedures. He will be circulating them to Centres for comment in the near future.

Rick Lawford.

INCORPORATION OF THE SOCIETY

As members are aware, we have been for some time seeking to obtain the status of a formally incorporated Society which has various important legal advantages. This was also the main reason for the many, mostly minor, changes to our Constitution and By-Laws which were approved by the 1984 Annual General Assembly. Letters-patent for Canadian incorporation have since been received and at the first meeting of the National Executive in 1985, the Society will be formally transformed into the "Incorporated CMOS".

CMOS SEAL AND LOGO

The CMOS Constitution published in its up-to-date version in the October 1984 Newsletter should have shown the new CMOS seal at its head. This seal is normally "impressed" into the paper and does therefore have no colour of its own. It should not be confused with the "logo" of the Society, which is the one unveiled at the 1984 Annual General Meeting and shown at the masthead of the Newsletter. CMOS correspondence will for some time still make use of letterheads with the old logo until stocks are exhausted, although membership renewals for 1985 will have the new one.

MEMBERSHIP RENEWALS FOR 1985

Members are reminded that the Society publications (Atmosphere-Ocean, Climatological Bulletin and Chinook) must be ordered separately from the membership fee (which includes the Newsletter) at the time of renewal. This does not apply to Student and/or Corporate Members, the former receive Atmosphere-Ocean and the latter all Society publications as part of their membership fee. The 1985 renewal forms will have slightly different format from those used before to make computer preparation easier. One difference which will be noted is that the forms are now duplicate, with the member retaining a copy as a record. The receipt for donations has also been modified, which is as good a reminder as any for members to make donations to the Society in order to permit the Society to expand its services to them.

CMOS ASKS FOR GRANTS AND CONTRIBUTIONS TO AID"CHINOOK" AND "CLIMATOLOGICAL BULLETIN"

In order to get our two newest publications on a firm financial footing, the Society has applied for two federal government grants. Our flagship publication "Atmosphere-Ocean" virtually pays for itself through subscription and page charges but "Chinook" and "Climatological Bulletin" will require a significant infusion of funds during this start-up period. In future years, we expect "Chinook" to become self-supporting due to advertising and large circulation. "Climatological Bulletin" will hopefully follow the same self-financing/page charge route as "Atmosphere-Ocean".

An application for funding of "Chinook" has been made under the Ministry of State for Science and Technology (MOSST) Public Awareness Program for Science and Technology. We hope to hear early in 1985 whether this application for \$5,000, submitted last October, has been successful. If this grant is received, it is intended to use the money for a "Chinook" promotion campaign through, for example high schools, science fairs and CMOS local centres.

With regard to the "Climatological Bulletin", a submission to the Natural Sciences and Engineering Research Council (NSERC) for a Scientific Publication Grant of \$6,000 was made at about the same time as the "Chinook" application. Essentially, the reason for this grant application is to obtain the financial support necessary to make the "Climatological Bulletin" self-supporting much in the same way as "Atmosphere-Ocean". A sound editorial policy is in place, subscriptions are slowly increasing and, with the grant, CMOS anticipates self-sufficiency for "Climatological Bulletin" in the next 5 to 7 years.

The CMOS NEWSLETTER is the principal medium by which Society members may exchange items of CMOS news and interest. It is a bi-monthly publication mailed to all members and, except for advertising revenue, is funded through Society membership fees. Articles are accepted in either official language, and responsibility for content rests with their respective authors. Although views expressed are not necessarily those of CMOS, the editorial staff shall endeavour to maintain a level of integrity deserving of the Society.

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Associate Editors:
Dave Mudry
Micheline Gilbert

LA POLITIQUE EDITORIALE

Le BULLETIN DE NOUVELLES de la SCMO est la voie principale par laquelle ses membres peuvent échanger des articles d'information et d'intérêt. C'est une publication bimestrielle qui est expédiée à tous les membres et qui, sauf pour les revenus de la publicité, est financée par les frais d'adhésion. Les articles sont acceptés dans l'une ou l'autre des langues officielles et le contenu demeure la responsabilité de l'auteur. Même si les idées exprimées ne sont pas nécessairement celles de la SCMO, la rédaction tentera de maintenir un niveau d'intégrité digne de la société.

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CMOS SUBMISSION TO THE INQUIRY ON
FEDERAL WATER POLICY

The Chairman of the Ottawa Chapter of the CMOS Society, Mr. G. Holland, presented a submission to the Inquiry on Federal Water Policy on behalf of the Society's President, Dr. N.J. Campbell, Monday, December 10, 1984.

In his brief submission, the Society wishes to support some of the scientific arguments already submitted to the inquiry in Halifax (R.H. Loucks and K.F. Drinkwater, September 1984).

There is now very real evidence that the freshwater cycle plays an important role in coastal circulation patterns and in marine fisheries. Changes in salinity and temperature are reflected in corresponding changes in the productivity of coastal waters. Major diversions or alterations in river run-off are likely to produce measurable effects in coastal areas perhaps far distant from their source and in ways as yet imperfectly understood.

The ability of civilization to construct engineering works diverting or harnessing river systems should not be taken as a rationale for pandering to the hydrological excesses of present day society. Good management should be based on conservation and recycling rather than embarking on

major schemes whose end effects, although known to be substantial are not predictable. Modern oceanography recognizes river run-off as a major factor in coastal processes and CMOS urges the Inquiry to recommend that all major decisions affecting river flow should first consider not only factors interior to the continent but also the impact on Canada's coastal and estuarine regions.

NEW CMOS MEMBERS

NOUVEAU MEMBRE DE LA SCMO

Bernard Larocque	Rimouski, Qué.	Professeur
Stefan Ochman	Rimouski, Qué.	Etudiante
Brenda Côté	Rimouski, Qué.	Professeur
Andy Kenmon Yun	Edmonton, Alb.	Student
John C. McConnell	Downsview, Ont.	Professor
Odette Mercier	Rimouski, Qué.	Etudiante
K.W. Daly	Scarborough, Ont.	Meteorologist
Susan K. Lally	Bedford, N.S.	Meteorologist
Peter J. Schwarzhoff	Edmonton, Alb.	Student
Charles J. Power	Lr Sackville, N.S.	Environmental Off.
David L DeWolfe	Wolfville, N.S.	Consultant
Geoffrey R. McBoyle	Waterloo, Ont.	Professor
Pierre Ducharme	Gatineau, Qué.	Météorologiste
Leonard A. Barrie	Downsview, Ont.	Research Scientist
Carolle Marchand	Sherbrooke, Qué.	Etudiante
Manon Lajoie	Ste-Martine, Qué.	Etudiante
Jim Smith	Downsview, Ont.	Student

CASP PROGRAM

Winter storms commonly lash the Canadian East Coast region, but many of their characteristics are not predicted accurately. Recognizing this, an initiative to improve the predictability of these storms and their associated features has recently been advanced. This program, the Canadian Atlantic Storms Program (CASP), is envisioned as a long-term commitment to reach these goals. The meteorological component of the program is being directed by AES and the oceanographic component is being directed by the Bedford Institute of Oceanography.

Recently, funding has been tentatively approved for the first field experiment of CASP by the Interdepartmental Panel on Energy R & D (PERD). This first field project is scheduled for January 15-March 15, 1986. CASP-1 will probably be centred at Halifax and will operate in cooperation with the Atlantic Weather Office. It will run concurrently with the American GALE project centred in the Cape Hatteras area. Because many of the storms which lash the Canadian East Coast have moved up the Atlantic seaboard, it is expected that some of the same storms will be examined in both regions.

A preliminary overview of the CASP-1 experiment is available. The goals of CASP-1 are to begin the process of understanding and predicting the storms and their mesoscale features. Instrumentation to be used in the meteorological study will include additional rawinsonde releases, possibly enhanced satellite information, digitized radar information from the current sites, possibly a Doppler radar, wind profiler, and/or a K-band vertical scanning radar, aircraft measurements, as well as additional surface observations. Some of this instrumentation is planned for the offshore drilling platforms.

Because CASP is an ambitious and complex program, its success depends upon the commitment of a number of members of the Canadian meteorological community. If you are interested in participating in the program, please contact me as soon as possible. The first of several planning meetings is tentatively scheduled for November. At this meeting, tasks for planning and conducting the experiment will be identified and committees will be formed to attack these problems.

It should be noted that some funding for private sector and university research will be available directly from experimental funds. However, participants will be encouraged to seek separate funding from NSERC, AES Subventions, etc., for their CASP research proposals.

Ronald Stewart,
CASP Scientific Coordinator.
(416) 667-4682

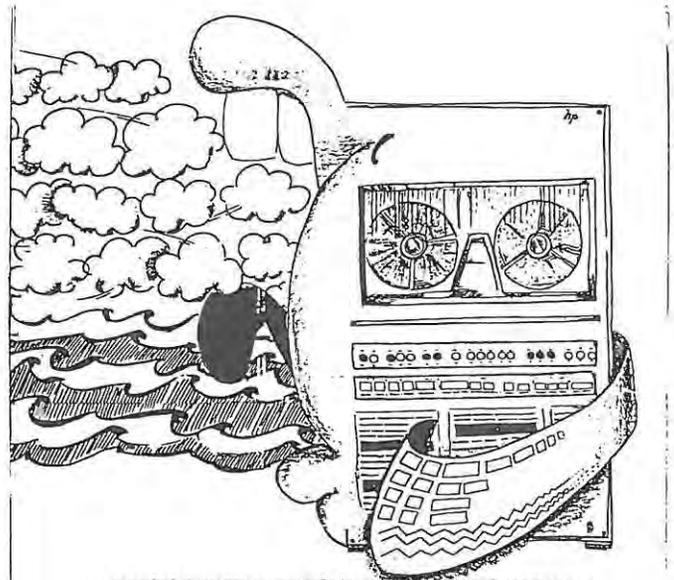
INTERNATIONAL YOUTH YEAR

Our Society has been actively supporting the Canadian Youth Science Foundation for many years. As CMOS members are aware, 1985 has been designated by the United Nations as the International Youth Year, and there will be many special events and efforts to promote science to our young Canadians. Each month has been given a specific science related theme, namely:

- JANUARY - Energy for People
- FEBRUARY - Science and Health
- MARCH - Women in Science and Engineering
- APRIL - Wildlife Management
- MAY - Science Aids the Handicapped
- JUNE - Protecting Our Environment
- JULY - Our Sea and Land Resources
- AUGUST - Heavens Above
- SEPTEMBER - The Information Age
- OCTOBER - Science and Development
- NOVEMBER - Science for Peace
- DECEMBER - Bringing People Together

CMOS Centres have been invited to co-operate in local or regional events organized by the Youth Science Foundation (YSF). The National Science Fair will be held in Cornwall, Ontario, on May 11-18. The Ottawa Centre has been requested to look after the judging and awarding of prize for meteorological and oceanographic projects at that fair. The Executive has decided that prizes will now also include second and third prizes consisting of one year subscription to Chinook. The first prize is a one hundred dollar cheque.

The YSF has also issued an interesting and colourful wall calendar, containing illustrations, profiles of prominent Canadian Scientists and historic dates in Science. Sample copies can be obtained from CMOS Headquarters; for bulk orders, please apply directly to Youth Science Foundation, 805 Slater Street, Suite 805, Ottawa, Ontario, K1P 5H3. Postage and handling cost only will be charged).



LA SOCIÉTÉ CANADIENNE DE MÉTÉOROLOGIE ET D'OcéANOGRAPHIE
CANADIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY

MONTREAL 85

**CONGRÈS ANNUEL
ANNUAL CONGRESS
june 12-14 juin**



UNIVERSITÉ DU QUÉBEC À MONTRÉAL



SEVENTH CONFERENCE ON NUMERICAL WEATHER PREDICTION June 17-20
SECOND INTERNATIONAL CONFERENCE ON THE AVIATION WEATHER SYSTEM June 19-21
AMERICAN METEOROLOGICAL SOCIETY

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19TH CONGRESS 198REAL

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Scientific Program: Dr. H. Ritchie
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LACC Co-Chairman: Mr. Dave MacLeod
(306) 565-6220

SOCIETY ARCHIVIST: Mr. M.K. Thomas
(416) 667-4889

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EXECUTIVE DIRECTOR: Mr. Uri Schwarz
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(902) 426-2431

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Secretary - Mr. Jacques Benoit
(709) 778-7525

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(506) 453-4501

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JOB OPPORTUNITY

Research position beginning July 1, 1985, or earlier. A recent Ph.D. graduate in physical oceanography or applied mathematics (geophysical fluid dynamics) is sought to carry out mixed layer and numerical modelling of the Northeast Pacific Ocean. This modelling work is part of a recently funded NSERC Strategic Grant Project to study the inter-annual variability of the Northeast Pacific Ocean and its influence on sockeye salmon migration. The initial appointment will be for one year, with the possibility of a renewal extending to November 1, 1987. The position will be filled at the post-doctoral (ca. \$22,000) or research associate (ca. \$28,000) level according to the candidate's experience.

In accordance with Canadian immigration regulations, this advertisement is directed to Canadian citizens and permanent residents of Canada. Closing date for applications is March 31, 1985. Send curriculum vitae and names and addresses of three referees to:

Dr. L.A. Mysak
Department of Oceanography
6270 University Boulevard
The University of British Columbia
Vancouver, B.C.
V6T 1W5

JOB WANTED

RETIRED AES METEOROLOGIST available for part-time or project work. Good at studies and report writing. Write R.G. Stark, P.O. Box 397, Downsview, Ontario. M3M 3A8.

Careers in

R&D

Cloud Physicist

The Alberta Research Council is a crown corporation dedicated to promoting responsible economic development of natural resources and industry in the Province of Alberta through a broad range of research in science and technology.

Our Atmospheric Sciences Department is seeking an experienced researcher to participate in an advanced research program involving the use of a research aircraft in weather modification and air quality projects. The position will involve spending about four months in the field each year in the role of mission scientist aboard the research aircraft.

Candidates should possess a Ph.D. in atmospheric sciences, meteorology or physics. Previous experience in directing research aircraft extemporaneously and in the vicinity of severe storms from on board the aircraft is essential. Experience in hail suppression, rain/snow augmentation and air quality research programs is desirable. Also desirable is experience in instrument development for research aircraft and expertise in the field of nucleation and cloud physics.

This competition will remain open until a suitable candidate is selected.

Please apply in writing quoting Competition No. ARC - 801 to:

ALBERTA RESEARCH COUNCIL

Human Resources Department
Alberta Research Council
5th Floor, Terrace Plaza
4445 Calgary Trail South
Edmonton, Alberta
T6H 5R7

1985 CMOS XIXth CONGRESS

Université du Québec à Montréal

June 12-14, 1985

Welcome to the XIXth Congress of the Canadian Meteorological and Oceanographic Society (CMOS), which will be held in Montréal, in June 1985. The Université du Québec à Montréal (UQAM) is located in downtown Montréal, and connected to the Holiday Inn Place Dupuis by an underground passage. The UQAM Pavillon Judith-Jasmin will house most of the activities. The address is: 405 east, Ste-Catherine Street.

After the CMOS Congress, the American Meteorological Society will hold two other congresses: the Seventh Conference on Numerical Weather Prediction, June 17 to 20 and the Second International Conference on the Aviation Weather System, June 19 to 21.

SCIENTIFIC PROGRAMME

The theme of the CMOS congress is "Modelling in Meteorology and Oceanography", which will also be the title of the plenary session at the beginning of the Congress. This session will include two invited presentations: one by André Robert related to the "Evolution of Numerical Weather Prediction Models", and the other by James Price related to "Modelling the Effects of Hurricanes on Ocean Circulations". The following is a list of other theme sessions, which will consist of invited and submitted papers: Atmosphere-Ocean Interactions and General Circulation Modelling, Operational Use of Model Output, Modelling Cloud and Meso-scale Processes, Modelling the Transport and Diffusion of Pollutants, Modelling of Estuarine and Coastal Processes, and Marine Sediment Geochemical Processes. Contributions have also been sought on waves in the atmosphere or in the oceans, limnology, and space shuttle experiments. Sessions will be held on other aspects of meteorology and oceanography, depending on submissions. Lengths of papers (including time for questions and discussion) will be 20 minutes for submitted papers and 40 minutes for invited papers. Generally there will be simultaneous sessions in order to accommodate and anticipated 140 oral presentations.

EXHIBITS

Concurrently with the three congresses an exhibition will be held. As the number of booths is limited, exhibitors are required to contact the Exhibits Convenor, Mr. Richard Moffet, in order to arrange for reservations as early as possible.

VISIT TO THE CANADIAN METEOROLOGICAL CENTRE

In the afternoon of June 14, there will probably be guided tours of the operations sections and Computer Centre (CRAY computer).

RAMSES II EXHIBITION

From June to September 1985, Montréal will be the host of an exhibition about RAMSES II and his time. The treasures of a pharaoh who lived 3000 years ago will be shown in Montréal. The arrangements Committee has bought a limited number of tickets which will be valid (at a cost of \$4.50 CAN each) only at selected times in the afternoon of Friday June 14. If interested, please indicate it on the registration form and add this amount to the registration fees. If you wish to see this show at another time, please mention it on the form or contact the Social Activities Convenor, Mr. René Servranckx.

ACCOMODATION

Two hundred rooms have been reserved at the Holiday Inn, Place Dupuis, of which 25 are available on the 10th and the rest of the 11th. The hotel is connected to the UQAM by an underground passage; it is also close to Old Montréal, Village St-Denis and the Voyageur Bus Terminal. The Berri-de-Montigny subway station is connected to the hotel and gives access to the Olympic Stadium, Man and His World, and several major shopping centres or promenades.

The rate for single or double occupancy is \$65 CAN and includes parking. Each reservation must be made before May 15 1985 using the accompanying form.

Thirty rooms have been reserved at the McGill University residence, and preference will be given to students and retired members. Rates and additional information are given below. Reservations must be made May 1st 1985. The McGill University Campus is a 35-minute walk away from UQAM; the subway ride takes about 15 minutes.

The reservations at the Holiday Inn, Place Dupuis, or the McGill University residence must be made with the hotel or the university.

TRANSPORTATION

Visitors landing at the Dorval Airport can take the Murray Hill bus line, which will take them downtown for about \$5.50 CAN. The fare for a taxi or limousine from the Dorval Airport to the Holiday Inn Place Dupuis is approximately \$25.00 CAN and up.

SOCIAL

An ice breaking party sponsored by AIR CANADA, for all registered participants, will be held at the Holiday Inn Place Dupuis, from 7 to 9 p.m., on June 11th, 1985.

A "wine and cheese" will be served at UQAM on June 12th, from 6 to 7:30 p.m., before the CMOS general annual meeting. The annual banquet shall be at the Holiday Inn Place Dupuis at 7 p.m. on June 13th; a cash bar will be opened from 6 to 7 p.m. before the annual banquet.

The cost of the banquet and of the "wine and cheese" are covered in the registration fees, except for retired and student members. Additional tickets (limited number for the banquet) will be available at the registration desk.

At registration time, we will make available information for those participants who want to enjoy the historical and cultural locations of Montréal.

REGISTRATION

Pre-registration should be made before May 15 1985. No late registration fee will be charged, but your cooperation in meeting this deadline will make the paperwork easier. As mentioned below on the form, registration fees for 1985 congress are \$92.00 CAN for CMOS members, \$112.00 CAN for non-members, \$20.00 CAN for retired members and \$10.00 CAN for student members.

Except for retired and student members, the costs for the banquet and the "wine and cheese" are included in the basic registration fees.

A ticket for the welcome reception will be offered free to all registered participants.

XIXe CONGRES SCMO 1985

Université du Québec à Montréal

12-14 juin, 1985

Bienvenue au dix-neuvième congrès de la Société Canadienne de Météorologie et d'Océanographie qui aura lieu à Montréal en juin 1985. L'Université du Québec à Montréal (UQAM) est située en plein coeur de Montréal et est reliée au Holiday Inn Place Dupuis par un couloir souterrain. Le pavillon Judith-Jasmin de l'UQAM sera le lieu de rencontre pour la majorité des activités; il est situé à l'adresse suivante: 405 rue Ste-Catherine est.

À la suite du Congrès de la SCMO, l'American Meteorological Society tiendra deux congrès à l'UQAM: le septième congrès sur la prévision numérique du 17 au 20 juin et le deuxième congrès international sur le service météorologique à l'aviation du 19 au 21 juin.

PROGRAMME SCIENTIFIQUE

La réunion a pour thème "La modélisation en météorologie et en océanographie", qui sera aussi le titre de la session plénière au commencement du congrès. Cette session comprendra deux communications par des conférenciers invités: André Robert nous parlera de "l'évolution des modèles de la prévision numérique du temps", tandis que James Price donnera sa conférence sur "la modélisation des effets des ouragans sur les circulations océanographiques". Les autres sessions thématiques, qui consisteront en des communications présentées par des conférenciers invités et par les autres participants, sont les suivantes: interactions atmosphère-océan, exploitation météorologique, modélisation des processus de la méso-échelle et des processus de formation des nuages, modélisation du transport et de la diffusion des polluants, modélisation des processus estuariens et côtiers, et processus géochimiques des sédiments marins. On a recherché aussi des communications sur les ondes dans l'atmosphère ou dans l'océan, sur la limnologie, et sur des expériences ayant eu lieu avec la navette spatiale. Il se tiendra des séances sur d'autres aspects de la météorologie et de l'océanographie, ceci en fonction de la participation. Le temps alloué pour les communications (incluant la période de questions et de discussion) sera de 20 minutes pour les communications soumises par les participants et de 40 minutes pour les communications présentées par des conférenciers invités. On attend environ 140 communications orales et en général il y aura des sessions simultanées pour les inclure toutes.

EXPOSITION COMMERCIALE

Pendant les trois congrès, il y aura une exposition commerciale. Comme le nombre d'exhibits est limité, nous demandons aux intéressés de bien vouloir communiquer avec le responsable, Richard Moffet, afin de réserver le plutôt possible.

VISITE AU CENTRE METEOROLOGIQUE CANADIEN

Dans l'après-midi du 14 juin, il y aura probablement quelques visites organisées dans les sections d'exploitation et du centre de calcul (ordinateur CRAY).

EXPOSITION RAMSES II A MONTREAL

De juin à septembre 1985, il y aura une exposition sur le grand pharaon RAMSES II et son temps. Les trésors du grand pharaon qui vécut il y a 3000 ans seront dévoilés à Montréal. Pour cette exposition, le comité d'organisation a acheté un nombre limité de billets à 4,50\$ CAN chacun qui pourront être utilisés seulement à certaines heures le vendredi après-midi, le 14 juin. Sur la formule d'inscription, vous pouvez indiquer votre intérêt et ajouter le montant aux frais d'inscription. Pour ceux et celles qui désirent visiter l'exposition en d'autres temps, vous n'avez qu'à le mentionner sur le formulaire d'inscription ou communiquer avec le responsable, René Servranckx.

LOGEMENT

200 chambres ont été réservées au Holiday Inn Place Dupuis, dont 25 seront disponibles à partir du 10 juin et le reste à partir du 11 juin 1985. L'hôtel est relié à l'UQAM par un couloir souterrain et est situé à proximité du Vieux Montréal, du Village St-Denis et du terminus d'autobus Voyageur. La station de métro Berri-de-Montigny est adjacente à l'hôtel et facilite l'accès aux attractions du Stade Olympique, de Terre des Hommes et à plusieurs centres commerciaux.

Le prix d'une chambre simple ou double est de 65\$ CAN incluant un espace de stationnement par chambre. Chaque réservation doit être faite avant le 15 mai 1985 en utilisant la formule ci-jointe.

De préférence pour les membres à la retraite et pour les étudiants(es), 30 chambres ont été réservées à la résidence de l'Université McGill. Les prix ainsi que d'autres informations sont indiqués plus loin. Il faut réserver avant le 1er mai 1985. De l'Université McGill à l'UQAM, le trajet à pied se fait en 35 minutes, tandis qu'en métro, on peut compter 15 minutes incluant le temps pour y accéder et en sortir.

Les réservations pour l'hôtel Holiday Inn Place Dupuis ou la résidence de l'Université McGill doivent être faites directement avec l'hôtel ou l'université.

TRANSPORT

Les voyageurs arrivant à l'aéroport de Dorval peuvent utiliser l'autobus de Murray Hill au coût d'environ 5,50\$ CAN pour se rendre au centre-ville.

Un taxi ou une limousine de l'aéroport de Dorval jusqu'à l'hôtel Holiday Inn Place Dupuis peut vous coûter jusqu'à 25.00\$ CAN, ou plus.

ACTIVITE SOCIALES

Une réception d'accueil, pour tous ceux qui seront inscrits, aura lieu au Holiday Inn Place Dupuis de 19h à 21h le 11 juin 1985 sous le patronage d'AIR CANADA.

Un vin et fromage sera servi à l'UQAM de 18h à 19h30 précédant l'assemblée générale annuelle de la SCMO le 12 juin. Le banquet annuel se tiendra également au Holiday Inn Place Dupuis à partir de 19h et il sera précédé d'un bar payant de 18h à 19h le 13 juin. Les billets du banquet et du vin et fromage seront compris dans les frais d'inscription, sauf pour les membres à la retraite et pour les étudiants(es). Des billets additionnels (en quantité limitée pour le banquet) seront disponibles à la table d'inscription.

Lors de l'inscription, nous fournirons des informations pour les gens intéressés à visiter les sites historiques et culturels de la ville.

INSCRIPTION

On demande que toute inscription à l'avance soit faite avant le 15 mai 1985. Aucun excédent ne sera exigé pour un retard, mais le respect de cette date va alléger le fardeau administratif. Comme il est mentionné plus loin sur le formulaire d'inscription, les frais pour 1985 seront de 92\$ CAN pour les membres de la SCMO, de 112\$ CAN pour les non-membres, de 20\$ pour les membres à la retraite et de 10\$ pour les étudiants(es). Sauf pour les membres à la retraite et les étudiants(es), les billets du banquet et du vin et fromage sont inclus dans les frais d'inscription. Un billet pour la réception d'accueil sera fourni gratuitement pour tous ceux qui seront inscrits.

LOCAL ARRANGEMENTS COMMITTEE

COMITE ORGANISATEUR

Chairman: Jean-Guy Cantin,
Environnement Canada
Président: Suite 300, 100 Boul Alexis Nihon
St-Laurent (Québec)
H4M 2N8
(514) 333-4551

Secretary-Publicity Convenor: Prof. Peter Zwack,
Département de Physique
Université du Québec à Montréal
Responsable secrétaire-publicité: C.P. 8888, Succ. A
Montréal (Québec)
H3C 3P8
(514) 282-3304

Treasurer: Robert Mailhot,
Environnement Canada
Trésorier: Centre Météorologique Canadien
2121, voie de service nord
Route Transcanadienne
Dorval (Québec)
H9P 1J3
(514) 683-8554

Registration Convenor: Jocelyne Blouin,
4089, rue Oxford
Responsible inscription: Montréal (Québec)
H4A 2Y5
(514) 481-7946

Facilities Convenor: Robert Mailhot,
Environnement Canada
Responsible location: Centre Météorologique Canadien
des lieux: 2121, voie de service nord
Route Transcanadienne
Dorval (Québec)
H9P 1J3
(514) 683-8554

Social Activities Convenor: René Servranckx
Environnement Canada
Responsible activités: Suite 300, 100 Boul Alexis Nihon
sociales: St-Laurent (Québec)
H4M 2N8
(514) 333-4551

Exhibits Convenor: Richard Moffet,
Environnement Canada
Responsible exposition: Suite 300, Boul Alexis Nihon
St-Laurent (Québec)
H4M 2N8
(514) 333-4551

Translation Convenor: Marie-France Guéraud,
Environnement Canada
Responsible traduction: Suite 300, 100 Boul Alexis Nihon
St-Laurent (Québec)
H4M 2N8
(514) 333-3497

From the 17th to the 20th, at the same place, The American Meteorological Society (AMS) conference on "Numerical Weather Prediction" will also be held. From June the 19th to the 21st, the Second International Conference on Aviation Weather Systems, administered by the AMS, will also be held at the University. We expect that 200 attendees will attend each of these conferences, coming from throughout North America and Europe. It will be possible for the exhibitor to maintain the exhibit for all three of these conferences.

Therefore an exhibitor space for the CMOS congress will be \$500.00 CAN. If an exhibitor wishes to stay for the conferences of the second week, an additional fee of \$300.00 CAN is required. Should an exhibitor wishes only to be present the second week for the two AMS sponsored conferences, the fee is set at \$500.00 CAN. Booths will be assigned according to the preferences on a first-come, first-served basis. Any special needs (telecommunications line, telephone, etc.) will be charged to the exhibitor. The Local Arrangements Committee will provide a standard power outlet, 120 V A.C., 15 amp. Additional information included:

1. In the exhibit space, tables are available;
2. Security will be provided during the evenings, nights and week-ends. However, the CMOS and the University declines any responsibility against damages or theft;
3. One free inscription for the CMOS congress accompanies every exhibit space rented;
4. The exhibits will be set-up mostly on June 11 and June 17, 1985.
5. Participants to all three congresses will be housed at the "Holiday Inn".

If any pre-congress help or name of a customs broker is required, the Local Arrangements Committee will put the exhibitor in contact with people working with them. A cheque dated not later than February 1st, 1985 is required. For more information, please feel free to contact Mr. Richard Moffet.

SCIENTIFIC PROGRAMME COMMITTEE

COMITE DU PROGRAMME SCIENTIFIQUE

Chairman: Dr. Harold Ritchie,
Environnement Canada
Président: Recherche en prévision numérique
Suite 508
2121, voie de service nord
Route Transcanadienne
Dorval (Québec)
H9P 1J3
(514) 683-7768

Vice-Chairman: Prof. Conrad East,
Département de Physique
Vice-Président: Université du Québec à Montréal
C.P. 8888, Succ. A
Montréal (Québec)
H3C 3P8
(514) 282-3302

Logement/Accommodation

- | | |
|---|---|
| 1. Holiday Inn: prix unique (65\$) pour occupation simple ou double*.
Il faut réserver avant le 15 mai.
Donner le nom de l'autre occupant si le cas se présente. | 1. Holiday Inn: same price (65\$) for single or double occupancy.
Reserve before May 15th.
*Give name of roommate, if appropriate. |
| 2. 30 chambres à la résidence de l'université McGill; la préférence sera accordée aux membres à la retraite et aux étudiants(es). Réserver avant le premier mai. | 2. 30 rooms at McGill University residence: first choice given to retired members and students. Reserve before May First. |

HOLIDAY INN PLACE DUPUIS

Congrès/Congress Société Canadienne de Météorologie et d'Océanographie/Canadian Meteorological and Oceanographic Society

Nom du client/Guest Name

Adresse résidence/Home Address

Ville/City Code/Zip Tel:

Société/Company

Ch. partagée avec/Roommate

Arrivée/Arrival: Date Heure/Time

Départ/Departure: Date Heure/Time

P.S. Chambre retenue jusqu'à 18h, si non garantie par dépôt ou no. carte crédit. Room held till 6pm unless guaranteed by deposit or credit card no.

Carte Credit Card (AX, VS, DC, MC, AC)..... No.

S.v.p. retourner à/Please return to: Holiday Inn Place Dupuis
1415, rue St-Hubert
Montréal, Québec
Canada
H2L 3Y9

McGill University

Non-étudiant/non-student	24\$/jour	\$24/day	144\$/sem.	\$144./week
Étudiant/Student*	17,50\$/jour	\$17.50/day	78\$/sem.	\$78./week

*Identification exigée/ID card required

S.v.p. réserver à/Please reserve to:

McGill University
Summer Accommodations
Attn: File No. CM30
3935 University Street
Montreal, Québec H3A 2B4
Tel: (514) 392-4222, 392-4224

- Réservations confirmées par un dépôt d'une nuit.
- Les serviettes sont fournies.
- Inscription au 3425, rue Université.
- Reservations confirmed upon a one night deposit. Towels supplied.
- Room registration at 3425, University St.

EXHIBIT SPACE AVAILABLE

XIX CMOS CONGRESS IN MONTREAL

UNIVERSITE DU QUEBEC A MONTREAL

June 12 - 14 1985

THE XIXth congress of the Canadian Meteorological and Oceanographic Society will be held on June 12, 13 and 14 of 1985. We expect an attendance in excess of 300 at the 1985 CMOS congress. Attendees are professionals in the fields of meteorology and oceanography from all across Canada, and throughout the United States. The conferences will be held at the "Université du Québec à Montréal". This area is near the lecture halls to be used for the conference sessions. Attendees moving between sessions will pass through the exhibitor area, which is also open to the "métro", Montréal's modern subway system. It is expected that the majority of attendees will enter the conference sessions through the exhibitor area. At least 18 spaces (about 10' X 15') are available in this "Grande Place" which is also connected to the metro.

Congrès SCMO 1985
Formulaire d'inscription

CMOS CONGRESS 1985
REGISTRATION FORM

Nom/Name
Adresse/
Address
Ville/City Province Code/Zip
Tél./tel. Association/Affiliation

Frais d'inscription

Membre	92\$
Membre-retraité	20\$
Non-membre	112\$
Etudiant	10\$

Registration Fees

Member	\$92.
Retired member	\$20.
Non-member	\$112.
Student	\$10.

Veillez faire parvenir votre formulaire au plus tard le 15 mai 1985, et faites votre chèque à l'ordre de SCMO 1985 congrès

Please send your registration form before may 15, 1985, and make the cheque payable to CMOS congress 1985

Adresse: M. Robert Mailhot, trésorier
SCMO 1985
Environnement Canada
Centre Météorologique
Canadien
2121, voie de service nord
Route Trans-canadienne
Dorval, Québec H9P 1J3

Address: Mr. Robert Mailhot, treasurer
CMOS 1985
Environment Canada
Canadian meteorological
Center
2121, Service Road North
Trans Canada Highway
Dorval, Québec H9P 1J3

PS. 1 Etes-vous intéressé(e) à visiter l'exposition Ramsès II, le vendredi 14 juin, en après-midi.
Oui non
Prix d'entrée: 4,50\$. Si oui, ajouter ce montant à votre chèque.

PS. 1 Would you like to visit the Ramses II exposition on friday afternoon, the 14th yes no
Entry: \$4.50 If yes add this amount to your cheque.

2 Les frais d'inscription comprennent le banquet et autres réceptions, sauf pour les membres retraités et les étudiants. Il y aura une réception d'accueil ouverte à tous le 11 juin à l'hôtel.

2 Registration fees include banquet and other reception except for retired members and students. An ice-breaking party will be held for everybody, June 11th at the Hotel.

BANQUET: 325 places seulement/seats only

CALL for PAPERS
Second Conference on Aviation Weather System

June 19 - 21, 1985

Montréal (Quebec) Canada

The Second International Conference of the Aviation Weather System will be held 19-21 June 1985, in Montréal, Que., Canada. The conference is sponsored by the American Meteorological Society and is co-sponsored by the Canadian Meteorological and Oceanographic Society (CMOS), International Civil Aviation Organization (ICAO), World Meteorological Organization (WMO), and others. The technical program is being arranged by the AMS Committee on Aviation Meteorology.

This conference will address user requirements and the present state of services rendered, highlight programs and developments in process, and outline techniques of the late 20th century. Aviation continues to be a primary user of meteorological information and with the advent of new hardware and the development of new data acquisition, analysis, interpretation, and dissemination techniques, there is even a more pressing need to communicate this knowledge between the aviation users and those involved with the development of the new hardware and techniques. This conference should provide a forum for such an interaction as well as the opportunity to present the results of new scientific work in the area of aviation meteorology.

The main topics will be scheduled to accommodate the presentation of information suitable for such sessions and to provide the opportunity to interact on an individual basis with presentors. Should you desire to present your material in a poster session, please specify this on your abstract.

Titles and reviewers' abstract (about 200 words) should be received by Program Co-Chairman, Dr. Wayne Sand, Department of Atmospheric Science, University of Wyoming, Laramie, WY 82071 (tel.: 307-766-2151 or 3245) no later than 30 January 1985. Letters of acceptance will be written by the middle of March. Dr. Sepp Froeschl will act as Co-Chairman working with local arrangements and international participants.

A preprint volume to be distributed at the meeting is being planned. Instructions and special typing paper will be furnished to authors of accepted papers. A complete camera-ready manuscript of no more than 8 pages, including diagrams and photographs, must be received no later than 12 April 1985. Page charges will be assessed to help defray printing costs.

CALL for PAPERS

Seventh Conference on Numerical Weather Prediction

June 17 - 20, 1985

Montréal (Quebec) Canada

The seventh Conference on Numerical Weather Prediction, sponsored by the American Meteorological Society, will be held 17-20 June 1985, in Montréal, Que., Canada. The conference will be co-sponsored by the Canadian Meteorological and Oceanographic Society (CMOS) and the Montréal Centre of CMOS will serve as local host. The University of Quebec at Montréal (UQAM) will be the venue and co-host. The NWP Conference will immediately follow the Annual Congress of the CMOS at UQAM and will partly overlap the Second International Conference on the Aviation Weather System, also sponsored by the AMS and held at UQAM on 19-21 June 1985.

Papers are solicited on all aspects of NWP, both theoretical and operational. It is anticipated that there will be sessions in the following areas: 1) analysis, data assimilation and initialization, including mesoscale models; 2) limited area and mesoscale models; 3) medium and

extended range forecast models; 4) predictability studies and experiments; 5) synoptic/diagnostic studies with application to NWP; 6) sensitivity to initial data; 7) weather element prediction by direct model output; 8) applications of NWP to the prediction of aviation weather. Papers involving applications of the FGGE data sets are encouraged.

It is intended to avoid concurrent sessions and at the same time to allow maximum time for presentations and discussion. Therefore, it may be necessary to reject submissions on the basis of lack of relevance or apparent significance of the work or lack of clarity of the abstract. Poster sessions will be arranged if a sufficient number of authors indicate a preference for that type of presentation. Authors of oral presentations may be asked to provide session chairmen with advance copies of their visual material.

Titles and abstracts (200-400 words) should be submitted by 15 October 1984 to the Program Chairman: Ian D. Rutherford, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ont., M3H 5T4, Canada (tel.: 416-667-4883). Authors should include their affiliation, full mailing address and telephone number and should indicate their preference for either oral or poster presentation. Authors will be notified by 15 December 1984 regarding acceptance.

A preprint volume of papers is planned. Instructions and special typing paper will be furnished to authors of accepted papers. A complete camera-ready copy manuscript of no more than 8 pages, including diagrams and photographs, must be received at AMS headquarters no later than 15 February 1985. Page charges will be assessed to help defray printing costs. A preprint volume will be distributed to pre-registrants (in U.S. and Canada) prior to the meeting. Other conference registrants and participants will receive a preprint volume at the time of registration.

**** SECOND ANNUAL SYMPOSIUM ****

DIVING FOR SCIENCE:
PRACTICAL ASPECTS OF RESEARCH

Methods	Techniques	Equipment
Human Factors	Safety	Applications
Impacts	Results	Health

IDEAS: - New, Old, Innovative.

MARCH 28 AND 29, 1985
CONSTELLATION HOTEL
TORONTO, ONTARIO

**** Held in conjunction with: ****
**** CANADIAN UNDERWATER TECHNOLOGY CONGRESS ****
**** MARCH 27, 28, 1985 ****
**** UNDERWATER CANADA - MARCH 30, 31, 1985 ****

(Joint tickets available for combinations of attendance at conferences)

Write to: Dr. Alan R. Emery
Director, National Museum of
Natural Sciences
Ottawa, Ontario
K1A 0M8

S.I.G. On Floating Ice NEWS

A Workshop on Microwave Remote Sensing will be sponsored by the special interest group on Floating Ice and operated by members at York University in the week of May 19 to 24, 1985. This is an area in which progress has been made recently by government and research institutions centred around the Canadian Radarsat project and should be of interest to many.

Those wishing further information concerning the workshop or wish to submit input to a proposed special bulletin please contact:

F.J. Eley
Acting Chairman
Special Interest Group on
Floating Ice
c/o Gulf Canada Resources Inc.
P.O. Box 130
Calgary, Alberta
T2P 2H7

WORKSHOP on EVAPOTRANSPIRATION, IRRIGATION and PLANT MOISTURE STRESS in AGRICULTURE AND FORESTRY

A one day workshop on Evapotranspiration, Irrigation and Plant Moisture Stress in Agriculture and Forestry was held on October 2, 1984 at the Kortright Centre for Conservation in Kleinburg, Ontario. This workshop was co-sponsored by the Ontario Ministry of Natural Resources, the Atmospheric Environment Service and the Canadian Meteorological and Oceanographic Society Special Interest Group in Agriculture and Forest Meteorology. The objectives of the workshop were:

- 1) to determine the current state of evapotranspiration and irrigation studies in crop systems and of procedures employed for field research programs and operations, and
- 2) to provide guidance for the definition of areas needing further study.

In addition, the workshop was designed to provide the wide range of prospective attendees with exposure to the theories and instrumentation involved as well as the application of these for the purpose of evapotranspiration modelling and monitoring and irrigation scheduling. A publication of proceedings is planned and should be available during the spring of 1985.

The program was divided into three sessions: theory, demonstration and applications. The paper titles and presenters were:

- Evapotranspiration Modelling in Forestry
Dr. D. Spittlehouse, B.C. Forestry Service.
- The Measurement and Prediction of Evapotranspiration for Agriculture
Dr. K.M. King and Dr. G.W. Thurtell.
University of Guelph.
- The SAE Lysimeter Program and Facilities
R.B. Street, Atmospheric Environment Service.
- Eddy Correlation Instrumentation
B. Tanner, Campbell Scientific.
- Evapotranspiration & Irrigation
D.C. MacIver, Ontario Ministry of Natural Resources.
- Methods for Estimating Irrigation Water Requirements in Forest Nurseries and Mini-rotations
Dr. C.S. Papadopol, Ontario Ministry of Natural Resources.

- Evapotranspiration and Hydrology in Deciduous-Cedar Stands, Beverly Swamp, Ontario
Dr. D.S. Munro, University of Toronto.
- Problems in Using Eddy Correlation Systems for Potential Evapotranspiration
B. Tanner, Campbell Scientific.
- Plant Moisture Stress in Tree Seedlings
S.J. Colombo, Ontario Ministry of Natural Resources.
- Evapotranspiration and Irrigation Scheduling in Agricultural Crops and Tree Fruits
Dr. C.S. Tan, Agriculture Canada.
- Irrigation Techniques in Agriculture
Dr. R. Pitblado, Ridgetown Agricultural College.
- Irrigation Monitoring in Forestry Nurseries
Dr. V. Timmer, University of Toronto and
W.R. Bunting, Nu Tech Services.
- An Examination of the Potential for Delaying Flowering in Forestry Seed Orchards
B. Graham and B. Nicks, Ontario Ministry of Natural Resources and
R.B. Street, Atmospheric Environment Service.

Dr. W. Rouse of Mc Master University provided a summary of the days activities in terms of the current status and future directions of the study of evapotranspiration, irrigation and plant moisture stress in agriculture and forestry. For agriculture, irrigation scheduling for high value commercial crops using simplified equilibrium/composition models and or soil moisture measurements appears to have a lot of promise. In forestry, practical prediction models for the energy soil limiting variety need to be calibrated for the major forest regions of Canada. Factors limiting this task include the incorporation of the biological factors and the poor forest climate data base.

CALL FOR PAPERS

Third International Workshop on
ATMOSPHERIC ICING OF STRUCTURES

May 6 - 8, 1986 VANCOUVER, B.C.

Workshop Objectives

Ice accumulation on structures is a serious and costly problem affecting a wide variety of industrial and military applications. Many engineers and scientists from diverse fields are working on the problem. For the most part they have been working in isolation.

This isolation was broken when the first international workshop on atmospheric icing of structures was held in the USA in June 1982, and the second in Norway in June 1984. This third workshop aims to reinforce the good work completed at the first two and to:

- confirm and expand international cooperation;
- review and update recent progress on atmospheric ice and snow loading;
- define goals for future research;
- establish a registry of interested participants;
- make commitments to research;
- provide opportunities for demonstrating meteorological monitoring equipment.

Who Should Attend

Although this workshop originally was initiated by transmission line engineers, any individual involved with atmospheric icing will benefit from attending. Participants may be engineers, scientists and meteorologists coming from the military, academic and governmental fields, as well as the industrial and utility sector. It is expected that participants will take an active part in the workshop.

Scope

The scope of the subject matter to be addressed during the Workshop is necessarily broad because the scope of the problem is broad. Papers are solicited on the theoretical and laboratory investigations, as well as field studies and experiments. Acceptable topics for formal contributions include, but in no way are limited to, the following:

Meteorology

- Processes
- Data
- Instrumentation for special purposes

Modelling

- Meteorological parameters versus icing
- Meteorological mapping
- Topographical effects

Physics of Icing

- Theoretical studies
- Laboratory experiments
- Accretion on different objects

Icing Data (field data)

- Instrumentation
- Data acquisition
- Existing data and availability

Aerodynamics of Ice Covered Structures

- Lattice and pole structures
- Conductors, guys and cables
- Other geometries

Practical Applications

- National and international regulations and recommendations
- Overhead lines
- Towers
- Other structures

Papers

Papers will be accepted for presentation during the Workshop depending upon their pertinence and the contribution they will make toward achieving the objectives set for the Workshop. Selection will be made by a reviewing committee appointed by the sponsoring organizations on the basis of 200-word abstract submitted in advance.

Accepted papers will be distributed in pre-printed form upon registration at the Workshop. They will be published, along with the transcription of all discussions, as a bound Proceedings after the Workshop.

Interested authors must adhere to the following time schedule:

- 1) 200-word abstracts due in Vancouver B.C., Canada, by October 1, 1985;
- 2) Authors will be notified on acceptance of their paper by November 30, 1985;
- 3) Camera-ready copy of the finished manuscripts must be in Vancouver by February 15, 1986.

All papers must be prepared and delivered in English.

Short Contributions

In addition to papers, time will be allotted for separate short contributions. Further information will be sent to those who request program and registration forms.

Sponsoring Organizations

The Workshop is sponsored by utilities and research institutes in the USA, Norway and Canada. In particular,

the workshop is supported by:

- Canadian Electrical Association (CEA)
- Environment Canada
- B.C. Telephone Co. Ltd.
- Canadian Meteorological and Oceanographic Society (CMOS)
- B.C. Hydro.

Program and Registration

The Workshop program and registration form will be published in November 1985 and will be sent to those who complete and return the attached form. A registration fee estimated at \$200.00 CAN (\$50.00 CAN for accompanying persons) will be charged for each participant (\$1.00 US = \$1.30 CAN). A special program will be set up for accompanying persons. A post workshop tour can be arranged.

Vancouver will be the site of Expo 86. The 1986 World Exposition is sponsored by the Government of Canada and organized and operated by a Crown Corporation of the Government of British Columbia.

For more information, please contact:

Mr. David Armstrong
Workshop Coordinator
c/o B.C. Hydro,
555 West Hastings Street
Box 12121
Vancouver (B.C.)
V6B 4T6
(604) 663-2938

CALL FOR PAPERS

The First ATLANTIC CANADA Symposium
on Remote Sensing and Geographic Information Systems

16-17 August 1985
Nova Scotia Land Survey Institute

PROGRAM COMMITTEE

General Chairman: Edward Wedler.
Session Papers: Dr. R.v. Maher & Dr. M.S. Akhavi.
Posters & Exhibits: Paul Quinn & Patricia Castel.
Administration & Information: John F. Wightman
& Lynn B. McIntyre.
Program Scheduling: Andrew B. Didiuk & Marc H. Beaudoin.

FOCUS

Presentations in remote sensing, geographic information systems, and related topics are invited, especially those that address grass-roots issues and problems affecting Atlantic Canada.

Through this 2-day forum, scientists, engineers, managers, planners, technologists and students can gather to exchange ideas, techniques and methods used in project work, to help resolve research, development and operational problems and to present new challenges. Technical session papers, poster papers and exhibits are to include a variety of disciplines such as: forestry, ice, geology, land use, water resources, agriculture, oceans, engineering, etc. A special invitation is made to university, college and technical students to provide them an audience for their work. Posters will be on display for the duration of the Symposium. Papers are to be 2-3 page camera-ready summaries. Camera-ready papers are to be included with abstracts in the Symposium Proceedings.

SCHEDULE

200-250 word paper/poster abstract due : 15 April 1985.
Acknowledgement and notification: 30 April 1985.
Camera-ready summaries due: 15 July 1985.
Registration & Symposium: 16-17 August 1985.

FEEES

Advance registration (prior to August 1, 1985) - \$10.00
Registration (August 15-18, 1985) - \$15.00

SPONSORS

Maritime remote Sensing Committee
Nova Scotia Land Survey Institute

CONTACT

Nova Scotia Land Survey Institute
P.O. Box 10
Lawrencetown, Annapolis County,
Nova Scotia, Canada.
BOS 1M0 Tel.: (902) 584-2226

CANADIAN WATERS THE STATE OF THE RESOURCE

Preliminary Program for a National Symposium

Sponsored by The Rawson Academy of Aquatic Science

Background

The Rawson Academy of Aquatic Science is a non-profit Canadian organization chartered in 1979. It is an association of scientists, educators and managers from across Canada and is named in honour of Donald S. Rawson (1905-1961), one of the early leaders in the development of Canadian aquatic science. The objectives of the Rawson Academy are:

1. To study or promote the study of the factors which affect the quality of Canadian waters and to determine and predict the vulnerability of Canadian water resources.

2. To study or promote the study of all or any special economic or legal matters which may relate to water resources management in Canada.

3. To educate and inform both the public and private concerns in any or all matters respecting Canadian water resources.

4. To offer services as an informed and independent conciliator in conflicts arising out of the allocation of Canadian water resources.

Purpose

The Rawson Academy is sponsoring its first national review of Canadian aquatic resources, their quantity, quality and distribution in relation to present and projected demand.

Top professionals in various fields relating to Canadian aquatic resources will present theme papers to review significant scientific, technical and policy information. These reviews will be edited and published by the Rawson Academy. In addition, contributed papers will be presented at concurrent sessions of the symposium.

Symposium Site

All the symposium sessions and luncheons will be held at the Royal York Hotel in Toronto. The Royal York is located in downtown Toronto, within easy walking distance of restaurants, shops and entertainment. The University of Toronto campus, plus many of the tourist attractions and places of interest, are easily accessed by the subway and streetcar system.

Symposium Dates

Sunday, May 26 to Wednesday, May 29, 1985.

Theme Papers and Touring Lectureships

The twenty-one invited theme papers to be presented at the symposium are currently being developed as chapters in a book, which will review significant aspects of Canadian water supply, demand, quality, regulation and policy. It is planned to publish this book, "Canadian Aquatic Resources: Current Status, Future Prospects" in early 1986.

The Academy will identify from the papers presented at the symposium, several issues that should reach a wider audience. The Academy will offer the authors of these papers expense paid Rawson Touring Lectureships, so that their findings may be presented in public lectures at science centres across Canada.

Symposium Office

Mrs. Angela Lynch, Symposium Co-ordinator
Rawson Academy of Aquatic Science
Room 200, 601, 17 Avenue S.W.
Calgary (Alberta)
T2S 0B3
(403) 228-0407

Co-chairman, Program Committee

Dr. H.A. Regier, University of Toronto,
Toronto, Ontario.

Dr. A.L. Hamilton, International Joint Commission,
Ottawa, Ontario.

Organizing Committee

Dr. M.C. Healey, Pacific Biological Station,
Nanaimo, B.C.

Dr. H.H. Harvey, University of Toronto,
Toronto, Ontario.

Dr. P. Legendre, University of Montreal,
Montreal, Québec.

Dr. K. Patalas, Freshwater Institute,
Winnipeg, Manitoba.

Dr. J.R. Vallentyne, Canada Centre for Inland
Waters, Burlington, Ontario.

Dr. R.R. Wallace, Dominion Ecological Consulting,
Calgary, Alberta.

CANADIAN WATER RESOURCES ASSOCIATION 38TH ANNUAL CONFERENCE JUNE 26-28, 1985

WATER RESOURCES MANAGEMENT AND AGRICULTURAL DEVELOPMENT

The 1985 CWRA conference will focus on the management of water resources to enhance, expand and intensify agricultural productivity in Canada. Five broad areas will be explored:

1. Irrigation Water

- (a) Supply - water availability, quality constraints, economics of alternatives and policies.
- (b) Demand - water use characteristics and trends, crop selection, management practices, costs, charges, and climate.
- (c) Return Flow - design and efficiency considerations and downstream water quality implications.

2. Irrigation Systems - to include diversion, storage and conveyance, structures, operation, monitoring, costs and performance.

3. Irrigation Methods - farming methods and equipment, management practices, crop systems and efficiency, drainage, soils and on-farm economics.

4. Special Topics - focus on simulation model development, regionalized variables (geostatistics) and environmental impacts.
5. Drainage and Wetland Management - focus on drainage and wetland management as related to agricultural productivity including on- and off-farm economics and downstream riparian considerations.

The conference will also include concurrent technical sessions and meetings of the Canadian National Committee on Irrigation and Drainage (CANCID) and the International Water Resources Association (IWRA).

If you wish to receive a conference program and a registration form, or contribute a paper to the program please contact:

R. Bruce MacLock
 C.W.R.A. Conference Chairman
 Alberta Environment
 9th Floor, Oxbridge Place
 9820-106 Street
 EDMONTON, ALBERTA T5K 2J6



1st BIENNIAL
 CANADIAN HYDROGRAPHIC CONFERENCE
 CONFERENCE REGISTRATION

HYDROGRAPHY and TECHNOLOGY in the MID-80s

The Canadian Hydrographic Service and the Canadian Hydrographers Association are pleased to announce the start of the second century of the CHS with the First Biennial Conference on April 16-18 1985 in Halifax, Nova Scotia.

April 15, 1985

Registration booth opens 6:00 p.m. (18:00 hours).
 Icebreaker Party.

April 16, 1985

A.M. - Session 1 - Data Acquisition.
 P.M. - Hands-on demonstration* / Tour B.I.O.
 Evening - Beer Fest.

April 17, 1985

A.M. - Session 2 - Managing, Processing and Displaying Oceanographic / Topographic Information.
 Evening - Dinner and Dance.

April 18, 1985

A.M. - Hands-on Demonstration* / Session 2 (continued).
 Luncheon
 P.M. - Session 3 - The Future of Charting and Mapping.
 Closing ceremonies.

April 19, 1985

A.M. - P.M. - Joint CHA/CHS/Hydrographic Society Seminar on Electronic Charting at B.I.O.

*Displays of systems on site, and aboard survey launches.

For more information please contact:

Mr. Mike Lamplugh, Conference Chairman
 Ms. Linda MacMillan, Conference Secretary
 C.H.S., Atlantic Region
 Bedford Institute of Oceanography
 P.O. Box 1006
 Dartmouth, N.S.
 Canada B2Y 4A2
 (902) 426-3846

CMOS ANNUAL FEES / COTISATIONS ANNUELLES SCMO

Regular Membership / Membre régulier	- \$20.00
*Student Membership / Membre étudiant	- \$12.00
*Corporate Membership / Membre corporatif	- \$75.00

ANNUAL SUBSCRIPTION RATES FOR MEMBERS

ABONNEMENTS ANNUELS POUR MEMBRES

Atmosphere-Ocean / Atmosphère-Océan	- \$20.00
Climatological Bulletin	- \$10.00
Chinook	- \$ 7.50

*Note: Atmosphere-Ocean is included in the Student Annual Fee and all Society publications are sent to Corporate Members.

*Note: Les membres étudiants reçoivent Atmosphère-Océan et tous les périodiques sont envoyés aux membres corporatifs.

MEMBERSHIP APPLICATION FORM - DEMANDE D'ADHESION
(Please print in block letters - Lettres moulées s.v.p.)

Title/Titre _____ Dr _____ Mr _____ Mrs _____ Miss _____ Ms _____
M _____ Mme _____ Mlle _____

Name/Nom _____

Address/Adresse _____

Telephone/Téléphone _____ (rés./maison) _____ (bus./travail) _____

Occupation/Emploi _____
(for records only: if student, indicate institution and year studies will be completed.
Pour dossiers seulement: l'étudiant doit inscrire le nom de son institution et l'année où il finira ses études.)

MEMBERSHIP CATEGORY - CATEGORIE DE MEMBRE

Regular _____ Student _____ Corporate or Sustaining _____
Régulier _____ Etudiant _____ Corporation ou Soutien _____
(Please check one - Cochez un s.v.p.)

PUBLICATION SUBSCRIPTIONS - ABONNEMENT AUX PERIODIQUES

Atmosphere-Ocean _____ Climatological Bulletin _____ Chinook _____
Atmosphère-Océan _____

PRIMARY FIELD OF INTEREST - SPHERE D'INTERET PRINCIPAL

Meteorology _____ Oceanography _____
Météorologie _____ Océanographie _____

Special Interest Group Affiliation - Affiliation de Groupe d'intérêt spécial

Hydrology _____ Air Pollution _____ Agriculture & Forest _____ Operational Meteorology _____ Floating Ice _____
Hydrologie _____ Pollution de l'air _____ Agriculture & Forêt _____ Météorologie d'exploitation _____ Glace dérivante _____

Please enroll me as a member of the Canadian Meteorological and Oceanographic Society in the category indicated.
(Note: applications received after November 1 are for the following year)

Je désire devenir membre de la Société Canadienne de Météorologie et d'Océanographie dans la catégorie indiquée.
(Note: les demandes d'adhésion reçues après le 1er novembre sont pour l'année suivante)

I attach a cheque for \$ _____ payable to the Canadian Meteorological and Oceanographic Society for the membership fee and publication subscriptions.

J'inclus un chèque au montant de \$ _____ payable à la Société Canadienne de Météorologie et d'Océanographie pour la cotisation de membre et des abonnements de périodiques.

I also include a tax-deductible donation of \$ _____ for (check one): _____ The Society's Development Fund
Other (specify) _____

J'inclus aussi un don déductible d'impôts de \$ _____ pour (indiquez): _____ Le Fonds de développement de la Société
autre (stipulez) _____

_____ Date

_____ Signature

Mail completed form to CMOS Membership at the address below.
Faire parvenir au SCMO la demande d'adhésion complétée à l'adresse ci-dessous.

CMOS - SCMO

Suite 805

151 Slater St.

Ottawa, Ontario, Canada

K1P 5H3

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MAIL