



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



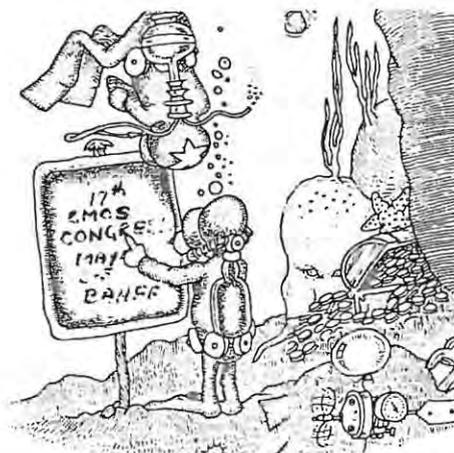
FEBRUARY/FÉVRIER

1983

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MOTS DU PRÉSIDENT

Plusieurs d'entre vous ont répondu à mon appel au sujet de Chinook et ont exprimé leur appui à l'exécutif pour maintenir la revue en vie. Ainsi donc, avec quelque retard, un second numéro étiqueté Été 82 (!) vous est enfin parvenu. Entre temps, le rapport que nous avions demandé à E. Kulin vous a indiqué que Chinook avait un bon potentiel et qu'il serait possible, en quelque années, de le rentabiliser. Les négociations entreprises par le Comité des Publications ont d'ailleurs déjà réalisé des économies importantes quant aux frais d'impression. L'exécutif a donc décidé de vous faire profiter gratuitement de Chinook jusqu'à l'assemblée annuelle.

Le questionnaire sur les services de la Société a été tiré à 5 000 exemplaires et distribué à la majorité de la communauté météorologique et océanographique au Canada, que nous considérons comme notre "clientèle." La compilation des données se poursuit et les résultats seront publiés plus tard. Nous avons l'intention de vous tenir au courant des intérêts exprimés par les membres pour développer une nouvelle formule de cotisation qui vous permettrait un choix de publications pour 1984. Ceci fera l'objet d'une proposition lors de l'assemblée annuelle.

Dans mon message de Noël, j'avais exprimé le vœux que la Société puisse se doter d'un Directeur exécutif. Et bien, l'impossible s'est produit et nous commencerons sous peu à profiter des services offerts généreusement par Uri Schwarz, pour une période d'essai jusqu'au Congrès. Tout l'exécutif est enchanté de la nouvelle (vous trouverez plus de détails sur Uri dans ce numéro).

Enfin, je dois avouer que, parce que nous étions préoccupés par la situation financière et les nouvelles publications Chinook et le Climatological Bulletin (sans compter notre travail régulier!), nous avons malheureusement du délaisser l'organisation de certains comités. Nous sommes toujours à la recherche de présidents et de membres pour les comités sur le Professionnalisme et l'Information Publique. Je serai heureux de recevoir les appels des personnes intéressées à travailler dans ces comités, ou dans tout autre domaine.

FROM THE PRESIDENT ...

Several members have written to me expressing their support for our efforts to keep Chinook alive. In fact, a second issue, labelled Summer 82 (!), has finally been distributed to you. Meanwhile, the report which we had requested from E. Kulin has identified that Chinook has a good potential and that it would be possible, within a few years, to make it self-sustaining. Indeed, the negotiations undertaken by the Publications Committee have already identified significant savings in the printing costs. The executive has therefore decided to continue to distribute Chinook to you free until the annual general meeting.

The questionnaire on the services of the Society has been printed in 5,000 copies and distributed to most of the meteorological and oceanographic community in Canada, which we consider as our "potential market." The compilation of the data is ongoing and the complete results will be published later. We intend to rely on the interests expressed by members to develop a new fee structure which would permit a choice of publications for 1984. This will be the object of a proposition at the AGM.

In my Christmas message, I had expressed the wish that the Society could obtain the services of an Executive Director. Well, the impossible has happened! We will shortly start to use the kind services of Uri Schwarz, for a trial period until Congress. The whole executive is most happy about this event (more on Uri elsewhere in this issue).

Finally, I must confess that, while we were concentrating on the financial situation and the new publications Chinook and Climatological Bulletin (and continuing to carry out our normal duties!), we have unfortunately neglected the organization of certain committees. We are still looking for chairmen and members for the committees on Professionalism and on Public Information. I would be happy to receive calls from interested persons, as well as for other committees.

R. Asselin
President
(613) 995-4086



URI SCHWARZ ACCEPTS NEW CMOS POST

Our President's wish for a suitable candidate to fill the position of Executive Director of the CMOS (see page 1 of the December issue of the Newsletter) seems to have been granted quicker than he dared to hope. Uri Schwarz, who has recently retired after 25 years service with the Secretariat of the International Civil Aviation Organization (ICAO) and who now lives in Ottawa, has volunteered to shoulder the task. He is well known to aeronautical and other meteorological people in Canada and around the world as Chief of ICAO's Meteorology Section, a post he held for the past 15 years. Prior to that, he occupied various other meteorological positions in ICAO at its headquarters in Montreal and also for some years in its Regional Office in Paris. As a founding member of the CMOS, he is well acquainted with its aims and methods, and his extensive experience in organizing international meetings and carrying out senior administrative duties should assist the Society greatly. The CMOS Council has agreed that Uri Schwarz should embark on his duties as of February 1983 on a provisional basis, with the final appointment to be ratified by the General Assembly in May. Details of Uri's duties and any organizational changes arising from this new position (not elected) of an Executive Director will be communicated in a forthcoming issue of the Newsletter.

URI SCHWARZ ASSUME UN NOUVEAU POSTE À LA SCMO

Le souhait de notre Président pour un candidat au poste de Directeur exécutif semble avoir été exaucé plus rapidement qu'il ne l'avait espéré. Uri Schwarz, d'Ottawa, qui a récemment pris sa retraite après 25 ans de service au sein du Secrétariat de l'Organisation de l'Aviation Civile Internationale a offert ses services gratuitement. Il est bien connu dans les cercles aéronautiques et météorologiques du Canada et autour du monde comme chef de la section de météorologie de l'OACI, poste qu'il a occupé pendant les 15 dernières années. Il avait auparavant occupé diverses autres fonctions météorologiques au sein de l'OACI au siège social de Montréal et, pendant quelques années, au bureau régional de Paris. Comme membre fondateur de la SCMO, il est bien au courant des buts et programmes de celle-ci et sa vaste expérience dans l'organisation de réunions internationales et comme agent supérieur de l'administration devrait être d'une grande utilité pour la Société. Le Conseil de la SCMO a accepté que Uri commence ses fonctions de façon provisoire à partir de février 1983, en vue d'une nomination définitive lors de l'assemblée générale annuelle en mai. Le détail de ses fonctions et les changements dans l'organisation de l'exécutif qui résulteront de cette nouvelle position (non élue) de Directeur exécutif vous seront communiqués dans un autre numéro de Nouvelles.

M.K. THOMAS RETIRES

(Speech delivered by R. Asselin, 31 Jan 1983)

On the occasion of the retirement of Morley K. Thomas from the Public Service, I have been asked to prepare a few words about an aspect of his professional career from which I hope he will never retire, namely his involvement with the CMOS, formerly the CMS and before that the Canadian Branch of the RMS. I am very pleased to do so because the CMOS has a vested interest in Morley's retirement ... We have been patiently awaiting this moment when he can finally switch from collecting the dust of the Society and start putting together a history of the Society.

In approaching this task, I naturally took the historical approach and went back through old copies of *Atmosphere*, starting with Vol. 1, 1963. (What a change has occurred!)

The first mention of his name is in 1964-65 for his appointment as Corresponding Secretary, when the Canadian Branch moved its executive from Montreal to Toronto. The Branch was celebrating its 25th anniversary that year and, with the success of its new bulletin, *Atmosphere*, edited by Svern Orvig, spirits were high, as there was talk of secession from the RMS and of forming the Canadian Meteorological Society. Led by Drs. Munn and Brewer, the whole executive was working feverishly toward the goal. In fact, to ensure that they would get there, they even went so far as to renominate themselves for office for a second year.

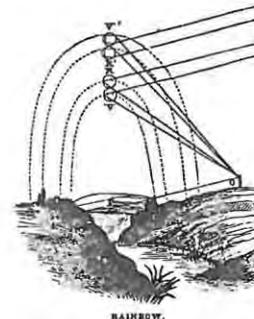
In 1966-67, Morley was elected Vice-president, and again the executive stayed on for a second term. Finally, in 1968-69, Morley Thomas was elected President. Jim Bruce was the Vice-president and Jim McCulloch the Editor. Morley had taken four years to get to the presidency; he was not about to quit early! So, when Jim Bruce bowed out, Morley gladly stayed on for a second tour as President. He did not manage to do two years as Past-President, however, but his record of service with the executive is pretty impressive - 7 years in a row! - from 1964 to 1971.

The Canadian Meteorological Society came into being on January 1, 1967. There was much to do in those early years to build up the membership, which had fallen to about 350, and to shape up the publication, which was very slim indeed! Morley was doing his share, helping people work together and contributing regularly to *Atmosphere*. From his writings about the climate of the year, the life story of Andrew Thompson or the brief history of the meteorological services in Canada, one could say that Morley was "a man of the past!" On the other hand, he would also speak at local and national CMS meetings about what has to become the "in" thing ten years later, namely Climatic Change.

Morley was honoured by the Society in 1969 with the award of "The Prize in Applied Meteorology in view of his extensive contributions which include work relating to people and construction, the preparation of national and international atlases, and continued enthusiastic promotion of all aspects of applied meteorology which culminated in 1969 when the Society held the first Canadian Congress in Applied Meteorology."

Today, I would like to honour Morley Thomas for his extensive contributions to the Society and, in recognition of the work which we still expect from him, to offer him a Paid-up Life Membership (Resolution voted by Council, January 27, 1983).

It is a great pleasure for me, on behalf of the membership of the whole Society, to offer you this gift and to wish you and your wife Clare a very happy and long retirement.





MORLEY K. THOMAS LONG-SERVICE AWARD FOR
VOLUNTEER WEATHER OBSERVING IN CANADA

Environment Canada established the Morley K. Thomas Long-Service Award to give recognition to those volunteer observers with many years of service to Canada. It is the first weather observer award in Canada named after an individual, and it honours a man who has taken weather observations for more than 30 years and who has spent four decades of service to the science of climatology in Canada and internationally.

The Thomas award will be given annually to individuals who have completed 30 years or more of continuous weather observing. It is expected one or two individuals reach that milestone each year.

A native of Ontario, Mr. Thomas received his B.A. from the University of Western Ontario in 1941 and his M.A. from the University of Toronto in 1949. During World War II, he joined the government service as a meteorological officer at a number of RCAF stations, and came to Toronto in 1945 as a climatologist. Shortly afterward, he started taking weather observations in his backyard, first at Toronto High Park for 11 years and then at Toronto Sunnybrook for the past 20 years or more. In 1979, he was named Director General of the Canadian Climate Centre, part of the Atmospheric Environment Service, which is the current focal point for climate applications, services and research in Canada.

Over the past three decades, Mr. Thomas has published several dozen reports, articles and papers on different aspects of the climate of Canada. He has compiled the Climatological Atlas of Canada and is co-author of Climate Canada. He is a past President of the Canadian Meteorological and Oceanographic Society, and in 1981 he was awarded the Patterson Medal, Canada's highest meteorological award. Mr. Thomas has served on numerous national and international committees and has represented Canada at many international meteorology and climatology conferences and meetings in more than a dozen foreign countries over the past decades. He was President of the World Meteorological Organization's Technical Commission for Climatology and Applications of Meteorology from 1978 to 1982.

EXCERPT FROM A.M.S. NEWSLETTER - MARCH 1982

Shrinking polar ice caps may be causing the Earth's sea level to rise and days to lengthen. NOAA scientists Robert Etkins and Edward S. Epstein point out that global sea levels have risen slightly more than one-tenth of an inch each year on the average since 1940, for a total of nearly 5 inches. This is triple the rate of rise measured during the preceding half century, from 1980 to 1940. They estimate that more than 10,000 cubic miles of polar ice, most of it presumably from Antarctic ice sheets, must have melted in the past 40 years. They calculate that transfer of this great mass to the equivalent of a thin layer of water spread over the world's oceans also would tend to reduce the speed of the Earth's rotation. This would lengthen each day by about one-thousandth of a second, they say, accounting for about three-fourths of the actual increase in the length of the day observed by scientists over the past 40 years. A report was published in the January 15 issue of *Science*.

Quite a number of people, both members and non-members, have submitted ideas for a new logo during the past year or so. A great deal of imagination and effort went into the submissions, and I wish to express my hearty thanks to everyone who participated in this process. Their names include: Ford Bergwall, George Boer, Peter Chen, Y.S. Chung, Eduardo Freire, Helga M. Hardy, Geoff Lester, John Loder, Edward Lozowski, John Maybank, Diane Richards, Laura Smith, John Walmsley, and Wei Yew.

A number of the submissions were displayed at the Saskatoon Congress, and members were asked to express their preferences there. Subsequently, a handful of the more favoured ideas were printed in the Newsletter and the membership was asked to respond. Finally, prior to the Ottawa Congress, a small committee selected a few of the more likely candidates for presentation to the Annual General Meeting. Unhappily, none of the candidates met with overwhelming approval, and a motion was introduced to allot a sum of up to \$900 to set up a more formal logo design contest. Most recently, the University of Toronto Press, who are in the process of reviewing the cover designs of the Society publications, offered to design a new logo, for a sum within the range of the figure allotted for a contest prize. As this is likely to lead to a new, professionally-designed logo more swiftly and certainly than the contest idea, the Vice President is now pursuing this proposal with the Press.

Edward Lozowski
Past President

EDITORIAL POLICY

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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Rick Lee

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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Rédacteurs adjoints: André Bolduc
Rick Lee

NEW MEMBERS

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G.T. Hunter Mississauga, Ontario Meteorology	David G. Hughes Edmonton, Alberta Meteorology
C. Harold Ritchie Pointe Claire, Quebec Meteorology	Raymond Rioux Pierrefonds, Quebec Meteorology
C.R. Burn Ottawa, Ontario Student, Meteorology	Stephen T. Miller Halifax, Nova Scotia Student
Yvan Carrier Hull, Quebec Student, Meteorology	G.P. Klassen Willowdale, Ontario Student, Meteorology
Kenneth H. Jones Regina, Saskatchewan Meteorology	Peter C. Geib Edmonton, Alberta Meteorology
Anne Owens Ottawa, Ontario Student, Meteorology	Stewart J. Cohen Downsview, Ontario Meteorology
Barry C. Green Aurora, Ontario Meteorology	



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OFFRE D'EMPLOI

Poste de recherche en agrométéorologie ou en micrométéorologie

Je suis à la recherche de jeunes candidats répondant aux critères du programme de "chercheurs-boursiers universitaires" du CRSNG pour 1983-84.

Plus précisément, nous chercons un jeune Ph.D. ayant acquis une certaine expertise en micrométéorologie ou en agrométéorologie, i.e. être gradué depuis 5 ans ou mois, et avoir publié quelques articles dans les sujets cités plus haut. Il est prévu que le candidat deviendra permanent lorsqu'un de nos professeurs prendra sa retraite dans quelques années. Le candidat doit pouvoir s'exprimer en français.

Les critères d'admissibilité au CRSNG sont:

- Les candidats doivent détenir un doctorat dans un des domaines des sciences ou du génie généralement subventionnés par le CRSNG et posséder une expérience équivalente à celle que les universités exigent des candidats aux postes de professeurs adjoints dans la même discipline.
- Le CRSNG n'impose aucune restriction quant à l'âge des candidats, mais donnera normalement la préférence aux candidats qui auront acquis cinq années d'expérience ou moins après l'obtention de leur doctorat.
- Les candidats doivent être citoyens canadiens ou avoir le statut de résidents permanents au moment de la soumission de la demande.

Les personnes intéressées par ce poste sont priées de communiquer avec:

André Leblond, responsable
Maîtrise en sciences de l'atmosphère
Université du Québec à Chicoutimi
Chicoutimi (Québec)
Tél: (418) 545-5672

CORPORATE AND SUSTAINING MEMBERS

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Mr. Maurice Parise Geneq Inc. Anjou, Quebec	Mr. M.S. Hirt M.E.P. Ltd. Downsview, Ontario
Mr. Andrei Levy Hymeteq A.L. Ltd. Downsview, Ontario	Envirocon Ltd. Vancouver, British Columbia
Mr. W.C. Thompson Petro-Canada Calgary, Alberta	MacLaren-Plansearch Ltd. Halifax, Nova Scotia
Canada Oil and Gas Lands Administration Ottawa, Ontario	Dr. Stuart Waterman MacDonald Dettwiler & Associates Ltd. Richmond, British Columbia

1985 = YEAR OF THE YOUTH

For the International Youth Year 1985, the Youth Science Foundation is considering activities that could be carried out in conjunction with industry, government scientific associations and other youth serving agencies. A major effort will be made to obtain youth input and participation, so to support initiatives developed at the local level and to get across the principles of scientific thought. Initial proposals for consideration are:

- a) Meteorological Observations and analysis of data involving inter station collaboration and discussion.
- b) National geoscience program
- c) National and international astronomical observing program.
- d) Science activities in a Summer camp setting.
- e) Science activities in a rural or northern setting.

XVII CONGRESS issue of the CMOS Newsletter will be combined with Congress business items and printed as a separate unit of 8.5 x 11.0 inch format, but with an experimental new look as designed by the University of Toronto Press. The Abstracts portion of the Congress issue will remain in the Atmosphere-Ocean format, but without the Business section.

NEXT ISSUE: (POST CONGRESS) JUNE/1983

PRESS DEADLINE: MAY 21 1983

ABRIDGED MINUTES OF THE 45TH MEETING OF
THE SCIENTIFIC COMMITTEE OF
THE CANADIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY

Downsview, Ontario
November 22, 1982

Minutes

The meeting was opened at 10:05 a.m. by Chairman George Boer. Present were members: H.S. Sandhu, George Isaac, Paul LeBlond, Jean Thiébaux, Jacques Derome, Han-Ru Cho, and Jim Elliott, and rapporteur: R. Street. Also in attendance were W.L. Godson, P.E. Merilees, S. Woronko, and J. Sandilands. The agenda circulated before the meeting was followed.

1. Minutes of the 44th meeting were approved as distributed.
2. Business arising.
- 2a. Meteorological and oceanographic satellite data and research.

Past discussions of this topic and recommendations were reviewed by George Boer. The current situation with regard to archiving AES data was appraised by Stan Woronko. The CCRS has agreed in principle to carry out the archiving. Beginning August 1983, A.E.S. will initiate a GOES data archive: 0 to 60°N, infrared radiation observations, with 8 km grid resolution. High resolution data archives for smaller regions will also be initiated in response to special requests; and such requests should be addressed to Steve Lapczak of the Data Management Division, or Stan Woronko, Canadian Climate Centre.

There were requests for clarification of the type of data which will be available and the manner in which it can be provided. J. Thiébaux suggested that the Scientific Committee request the Data Management Division of C.C.C. to write a description of anticipated data availability for the CMOS Newsletter to aid potential users in framing formal requests for provision of satellite data. George Boer asked Stan Woronko whether this would be possible, and he affirmed that it was and that they would do so.

Phil Merilees discussed GOES West and raised the question of need for setting up a West Coast archiving facility in lieu of the A.E.S. buying GOES West data, from the U.S., for their needs. George Boer suggested that this topic might be appropriate for the Newsletter, perhaps as a part of the descriptive information which Stan Woronko will be preparing. Jim Elliott said that his impression is that most people are not clear about what is and may be made available, and asked Stan Woronko to make the options clear as well as indicating what may be missed with the presently proposed system unless there are specific requests.

It was suggested that the Spring Congress would be an appropriate time for a meeting of interested and potential users of satellite data and that the organizer of the CMOS Congress be asked to schedule a time and place for this during the Congress. The following ad hoc committee for arranging the meeting was named:

Stan Woronko, Chairman
Paul LeBlond
Jim Elliott (or Peter Smith)
H.S. Sandhu

The proposed closing of the Shoe Cove satellite tracking station was discussed, with reference to the correspondence distributed with the agenda, in which the proposed closing was protested. Jim Elliott distributed and reviewed a report of the Ad Hoc Committee on Meteorological and Oceanographic Satellite Research, dated November 16, 1982.

George Boer asked what manner of response the Committee should make to the letter from Judith Bobbit, CMOS Newfoundland Centre. Clarification of the capability which has been lost with the closing of the Shoe Cove station was requested by George Isaac, and provided by Stan Woronko and Jim Elliott. The Committee requested that the Chairman

reply to the letter, saying that we don't have sufficient and persuasive information to support their request, express appreciation of their concern and needs for data, and apprise them of the forthcoming (potential) meeting of satellite data users at the 1983 CMOS Congress. The Chairman should also communicate with the CCRS and A.E.S., urging them to consider the needs for acquisition and dissemination of data for Newfoundland.

2b. Canadian Computer Facility.

George Boer reviewed prior recommendations on this issue and the correspondence, including his notes on a recent phone conversation with Dick Peltier. The latter reported that the report of the Subcommittee for Vector Computer Access of the NSERC Physics and Astronomy Committee will contain a strong recommendation for NSERC financial support for a graphics component; and he also said that NSERC has agreed to provide money for access to the vector machine.

2c. Planning Workshop on Mesoscale Meteorological Research

George Boer reviewed the Chairmen's Meeting for planning the workshop and the announcement of the workshop which was sent with the last Newsletter. He noted that there has already been significant response.

Anticipated workshop output will be:

- (i) definition of problems and opportunities in mesoscale meteorological research,
- (ii) identification of specifically Canadian interests and special abilities, and
- (iii) a proposal for Canadian research activity.

A session on mesoscale meteorological research for the 1983 CMOS Congress has been proposed and discussed with Congress organizer G. Austin. This is likely to be of the nature of an informational presentation to CMOS membership by working group chairmen.

2d. Planning and prioritizing atmospheric science research.

George Boer reiterated the motion carried at our last meeting:

"The Scientific Committee of CMOS welcomes the opportunity to participate in the scientific planning of the A.E.S."

which was made in response to Dr. Godson's request for input from the Scientific Committee.

Warren Godson reviewed relevant points of a recent meeting of A.E.S. Directors, in particular the resulting opinion that the most manageable arrangement may be periodic review of (only) a limited sector of atmosphere research, each year, and the decision that a concrete plan for this will be developed in the next few months with a view to starting a review cycle early in 1983. Jacques Derome asked whether A.E.S. wants review to

- (i) identify important areas of research, and/or
- (ii) consider whether work presently being carried out is valuable and being conducted properly.

Warren Godson replied that the first objective would be the most valuable.

Jim Elliott described the review process in place at B.I.O. and commented on its value to the conduct of programmes at the Institute. The B.I.O. reviews involve outside scientists in the areas of research being reviewed. Jacques Derome agreed that external scientific review of the A.E.S. might be useful, but questioned whether it would be appropriate to request review from outside Canada.

The consensus was that the Scientific Committee would be happy to provide nominations for review committees to investigate various aspects of A.E.S. research, if asked to do so by the A.E.S. These reviewers would, of course, present

their personal comments in the review process which would not necessarily be those of the Committee.

The CMOS Scientific Committee also agreed that one of its roles is to sponsor workshops and other forums to provide national review of specific aspects of atmospheric and oceanic research.

3. New Business.

3.b. Nominations for CNC/IUGG, SCIOCO

On the subject of nominees to the CNC/IUGG, Chairman Boer reviewed the letter from John Falkinham and accompanying relevant materials. In particular, he cited the passage: ". . . to maintain a reasonable balance between continuity (old faces) and new ideas (fresh faces) the CNC/IUGG agreed at its last meeting that approximately half of its current appointed members would not be recommended for extensions of their terms"; and he noted that, in keeping with the urging of CMOS President R. Asselin, we need to nominate at least one oceanographer and one meteorologist, non-government, at least one of whom is francophone. After some brief discussion, five persons were suggested for nomination. They will be contacted and asked if they are willing to have their names put forward as nominees.

With regard to nominees for SCICO, Chairman Boer drew attention to the forthcoming need to nominate persons for this Committee, and asked the membership to be considering possibilities.

3c. Canadian National Committee for ECOR.

Paul LeBlond introduced the subject of the Engineering Committee on Ocean Resources and reviewed the purpose of ECOR. George Boer asked whether there was any specific recommendation for action to be taken by CMOS. (There was none.) He noted that Paul LeBlond's membership in CISTA gives us a link with ECOR, so that we will be informed of any developments which are within our interests.

3d. Canadian Committee on Oceanography.

The topic was introduced and reviewed by Paul LeBlond. After a brief discussion the following motion was made and seconded (P. LeBlond and J. Thiébaux) and carried unanimously.

Motion: The Scientific Committee of the Canadian Meteorological and Oceanographic Society recognizes the value of continued sampling at a central station in the Strait of Georgia (at or near 49°17'N, 123°50.5'W) to document seasonal and interannual variability of the deep waters and recommends to researchers passing through the Strait of Georgia that they should pause long enough at that location to make an STD cast to the bottom (410 m) and make that information available as soon as possible to the Marine Environmental Data Service.

4. Informational

4a. Liaison with Special Interest Groups

Chairman Boer reported that rapporteurs were invited from

- (i) Agricultural and Forest Meteorology: R. Street
- (ii) Air Pollution : J. Reid
- (iii) Hydrology : D.G. Schaefer

and that replies were received from Agricultural and Forest Meteorology and from Air Pollution. Roger Street, the rapporteur from the former commented on possible common interests.

4b. Canadian Climate Program

The purpose of the Canadian Climate Planning Board was reviewed, and it was noted that the Board had prepared a submission for Cabinet, although it was not submitted because of changes in the economic situation. It has been modified somewhat since then and will now be submitted, requesting approval in principle of the proposed projects.

Recommendations have been made to invite and involve the university research community in climate research programmes. Phil Merilees encouraged everyone to consider possibilities for spending some research time (possibly 6 - 8 weeks during summer) using the facilities of the CCC for the conduct of climate research. It was noted that the expenses for such activities may be provided by the CCC; and requests for this type of support are invited. The need for encouraging the evolution of research interests in Canada, towards work in this areas discussed by Warren Godson, George Boer, and Phil Merilees. Georges Boer particularly mentioned their (CCC's) involvement in climate modelling and diagnostists and the fact that they would welcome participation of persons from universities.

The meeting was adjourned at 3:55 p.m.

Respectfully submitted

H.J. Thiébaux,
Secretaru

FROM THE CMOS SCIENTIFIC COMMITTEE

ATTENTION: Users of Satellite Data

Users of meteorological satellite data can look forward to new sources of data in the near future. The Atmospheric Environment Service is preparing to archive GOES-East data by the fall of 1983, and the Canada Centre for Remote Sensing is seriously considering the archiving of NOAA polar orbiter data over Canada.

At the last meeting of the CMOS Scientific Committee, it was suggested that users or potential users of satellite data needed more information about archiving plans and want an opportunity to provide input. An ad-hoc committee was set up to decide whether a special users meeting should be held. Such a meeting might be held in conjunction with the Spring Congress of the CMOS at Banff, if that is the most convenient time and place.

If you have any interest in archiving issues, if you want to participate in a users meeting, or if you want more information, please write to the chairman of the ad-hoc committee:

Dr. S. Woronko
Atmospheric Environment Service
4905 Dufferin Street
Downsview, Ontario
M3H 5T4

(or phone (416) 667-4646)

The AES is planning to archive the full GOES-East disk with the visible channel space-averaged to match the resolution of the infrared channel (nominal 8 km at the equator at the sub-satellite point), with a time resolution of 3 hours. Full resolution data will be saved for a small number of regions which are yet to be designated. The AES will also participate in the WMO-ICSU International Satellite Cloud Climatology Project by supplying reduced data to the (Project) Global Processing Centre for amalgamation with other satellite data to produce a global cloud data set. The availability of satellite data will present new opportunities for Canadian participation in algorithm research.

The Canada Centre for Remote Sensing is currently negotiating an agreement with AES to handle the acquisition, distribution, and archiving of NOAA Advanced Very High Resolution Radiometer (AVHRR) data from stations at Edmonton, Downsview, and possibly Sondre Stromfjord (Greenland). The details have not been worked out yet.

S. Woronko

NOTES FROM HYSIG

As most members will be aware, the 2nd Workshop on DCP's, co-sponsored by HYSIG, was held in conjunction with the 16th Annual Congress in Ottawa in May, 1982. A new organization now called the Canadian DCP Users Coordinating Group was founded at that time under an umbrella arrangement with HYSIG. Bill Thompson, Petro Canada, Calgary, serves as its chairman.

That group has now begun publication of a newsletter named "THE HAPPY MEDIUM" under the editorship of Jeff Whiting, Saskatchewan Research Council, Saskatoon. It is primarily directed toward information exchange with respect to the operation of automatic stations called data collection platforms (DCP's) which use satellites for retransmission. Contributions are welcomed, however, in all areas of hydrology. Funding support of up to \$300.00 was authorized by CMOS in order to "kick off" the new venture. Issue No. 1 was mailed in December. If you are interested, please let us know.

HYSIG's plans for the future include continued cooperation with the DCP Users Group (a 3rd Workshop is planned for Saskatoon in January, 1984) and the support of other relevant endeavours in hydrology as resources and circumstances permit.

D.G. Schaefer
Chairman, HYSIG

AGRICULTURE AND FOREST METEOROLOGY SPECIAL INTEREST GROUP

The CMOS Special Interest Group in Agriculture and Forest Meteorology has held one meeting of the Steering Committee since its conception during the 16th Annual Congress in Ottawa. At this meeting, it was proposed that the major thrusts of the Special Interest Group would be to:

- provide a medium by which the various organizations in the Agriculture and Forest Meteorology communities can communicate;
- encourage exchange between the aforementioned organizations regarding current activities of scientists and groups involved in agriculture and/or forest meteorology programs; and
- promote the preparation of information sheets and/or documents regarding various aspects of agriculture and/or forest meteorology.

The initial step towards meeting these goals was made with the circulation in January 1983 of the first issue of our newsletter with the proposed title "AGRIFORM." This newsletter will provide a communication medium for the Special Interest Group and will inform members of activities in Agriculture and Forest Meteorology.

A session on Agriculture and Forest Meteorology and the next general meeting of the Special Interest Group are scheduled during the 1983 Congress.

Roger B. Street
Chairman

REPORT ON ACTIVITIES OF THE ALBERTA CENTRE 10 January 1982

Since the last report on activities at the Alberta Centre, there have been three meetings. On 26 July, Dr. Hay, Professor with the University of British Columbia, talked on "Solar Radiation Studies in British Columbia." Dr. Hay's talk used recent studies in British Columbia to illustrate continuing research concerns in solar radiation. The two particular topics he addressed were the areal variability of solar measurements and solar radiance in incline surfaces. Theoretical and field studies in the Vancouver area were used as illustrations.

Members of the Centre enjoyed a presentation entitled "Circular Polarization for Precipitation Measurements" on 21 October, by Dr. R. Humphries of the Alberta Research Council. Dr. Humphries explained the construction of theoretical models for hail and rain, and that by combining these models the polarization parameters for the various rain-hail combinations can be determined. It was indicated that by using a polarization diversity S-band radar, improved measurements of rainfall and hailfall can be made.

On 18 November, Dr. Leahey, of Western Research and Development, presented to the Centre a talk entitled "The Dynamical Equations in Turbulent Flow." Equations used in forecasting are part of dynamic meteorology which are quantitatively based on Newton's second law of motion. Dr. Leahey reasoned that because it is difficult to isolate a body, or parcel, of air in the atmosphere it would be incorrect to employ Newton's second law to the description of atmospheric motions.

NEW HALIFAX CENTRE EXECUTIVE FOR 1982-1983

Chairman	- Dr. J.W. Loder Bedford Institute of Oceanography
Secretary	- Dr. D.J. Lawrence Bedford Institute of Oceanography
Treasurer/Membership	- Mr. W. Richards Atmospheric Environment Service
Dalhousie University Representative	- Dr. B. Ruddick Oceanography Department

TORONTO CENTRE

The new Toronto Centre executive for 1983 is as follows:

Chairman:	Kaz Higuchi
Treasurer:	Douglas Chan
Secretary:	Leslie Walsh
Program Coordinators:	Mary-Ann Jenkins Gilles Castonguay

ANNEE MONDIALE DES
COMMUNICATIONS
WORLD COMMUNICATIONS
YEAR
AÑO MUNDIAL DE LAS
COMUNICACIONES



The following concluding description of World Communications Year 1983 is a continuation of the article printed in the December issue of the Newsletter:

Some dates considered significant within the Canadian meteorological community are as follows:

1863	First telegraphic climate message in Canada sent from Peterborough to Toronto.
1872	Beginning of daily routine telegraphic exchange of weather reports between Canada and the United States.
1920	Wireless first used to broadcast a storm warning on the Great Lakes.
1938	Implementation of Teletype across Canada in the Canadian Weather Service.
1944-45	First use of radio on a meteorological buoy in the Great Lakes to communicate data.
1953	Introduction of a national weather facsimile system in Canada.
1963-64	Establishment of experimental receiving stations for transmissions of imagery from U.S. Automatic Picture Transmission Satellites.
1983	Treasury Board approval of a plan for a new communications system for the Atmospheric Environment Service.

Many international organizations such as the International Civil Aviation Organization (ICAO), the United Nations Industrial Development Organization (UNIDO), the Universal Postal Union (UPU), and the World Health Organization (WHO) have recognized the inherent educational opportunities of World Communications Year and have planned projects, seminars, conferences and other activities during 1983 to complement other WCY projects.

The ITU has prepared a list of pilot projects involving assistance to many Third World countries in implementing various types of communications projects, including training, maintenance, frequency monitoring, network planning and broadcasting facilities.

Priority technologies for these projects for which Canadian manufacturers are available are fibre-optic distribution systems, digital local switching, digital subscriber carriage, subscriber radio and satellite single-carrier-per-channel systems for remote telephony.

Activities in these areas would promote long-term beneficial relationships between Canada and Third World countries by encouraging co-operative research and development and manufacturing. However, obstacles will be encountered, such as developing systems to operate in areas where the climate is adverse, training local technicians, and the absence of a dependable power supply.

In Canada, a national steering committee has been set up, under the chairmanship of John Gilbert, Director of International Arrangements, Department of Communications, to prepare for Canada's participation. The committee includes representatives from industry as well as federal and provincial governments and other interested associations.

To date, the committee has identified nine possible projects to be sponsored by organizations such as Teleglobe, the CBC, Canada Post, and others. One example is a proposal brought forward by the Ontario Ministry of Transport and Communications for development of rural telephone systems in Third World countries. There are an estimated 550 million telephones in the world, but 75% of these are in eight developed countries only, and rural telephone service is considered essential to economic development.

One of the pilot projects referred to above is the joint ITU/WMO project "Hurricane Disaster Network/Improved ANMET." The objective is to improve the Antilles Meteorological Telecommunication Network (ANMET) so that it can be operated efficiently and reliably to meet the ongoing requirements in the eleven Caribbean countries involved for meteorological services, including timely and effective hurricane warning, and also to establish a telecommunications network in the smaller islands of the Caribbean to facilitate the communications of weather data to designated ANMET stations on the larger islands; and, in the event of a hurricane, to enable local authorities to organize the warning, rescue and relief operations. The Atmospheric Environment Service has indicated its interest to support this project, as have several other members of the National WCY Steering Committee.

The young people of the world will also be given an opportunity to participate in the celebration of World Communications Year. A worldwide photo and drawing competition, "Youth in the Electronic Age," will be launched this Fall. The competition is open to young people from 8 to 18 years of age, and entrants will be divided into three age-groups. The theme will be "Telecommunications for Everyone." Photographs, drawings, paintings and illustrations should develop the theme and show how young people imagine the role telecommunications will play in their world.

Stimulating an awareness among youth of the impact of communications infrastructures on today's society is very important, because they will become the scientists, engineers, educators, policy-makers and users of tomorrow, and will be ultimately responsible for the continued development of communications for the benefit of mankind.

The youth art competition was first organized in 1971, during the first World Telecommunications Exhibition, TELECOM 71, and has since become one of the highlights of TELECOM. The prize winners in the WCY 83 competition will be announced and displayed during TELECOM 83, to be held in Geneva, October 26 to November 1, 1983.

Mankind will be increasingly affected by the explosive and imbalanced development of communications infrastructures. Only if the balance is redressed by a fairer distribution of facilities and a better co-ordination of their development can the economic and social needs of all nations be met.

World Communications Year will not provide solutions to all the problems. But, in mobilizing the whole world community to the need to develop communications infrastructures, it will mark the beginning of a new era when all nations can benefit from the services provided by these equitably developed systems.

L'article qui suit est la continuation de la description de l'Année Mondiale des Communications 1983. La première partie fut publiée dans l'édition de décembre du Bulletin de Nouvelles :

Au Canada, un comité national a été créé pour préparer la participation du pays. Présidé par John Gilbert, directeur des Arrangements internationaux au ministère des Communications, il se compose de représentants de l'industrie et des gouvernements fédéral et provinciaux, ainsi que de diverses associations. À ce jour, le comité a catalogué neuf projets pouvant être parrainés par des organismes comme Téléglobe Canada, Radio-Canada ou la Société canadienne des postes. Citons à titre d'exemple, une proposition du ministère des Transports et des Communications de l'Ontario pour l'installation de systèmes téléphoniques ruraux dans les pays en développement.

Pour sa part, l'UIT a dressé une liste de projets-pilotes prévoyant une aide à de nombreux pays du tiers monde dans la mise en oeuvre de divers projets de communications, par exemple le contrôle des fréquences, la planification des réseaux et les installations de radiotélédiffusion. La participation du Canada aux activités de ce genre favoriseront, à long terme, ses relations avec les autres pays en matière de recherche et de fabrication, relations qui profiteront particulièrement aux pays du tiers monde.

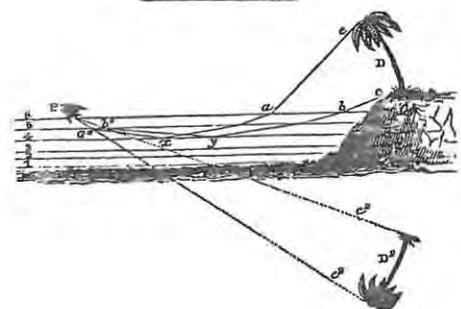
Parmi les susdit projets-pilotes on compte le projet mixte UIT-OMM "réseau de communications sur les ouragans/l'amélioration de l'ANMET." Il s'agit d'améliorer le réseau de télécommunications météorologiques des Antilles (ANMET) afin que ce réseau puisse être opéré avec efficacité et fiabilité pour répondre aux besoins météorologiques dans les onze pays des Caraïbes impliqués, y compris les avertissements opportuns d'ouragans, et aussi d'établir un réseau de télécommunications dans les plus petites îles des Caraïbes afin de permettre la transmission des données météorologiques aux stations ANMET sur les îles principales et, à l'occasion d'un ouragan, de permettre aux autorités locales d'organiser les avertissements, le sauvetage et l'aide. Le Service de l'environnement Atmosphérique et d'autres membres du comité national ont indiqué leur intérêt à soutenir ce projet.

Les jeunes du monde entier auront également l'occasion de participer à la célébration de l'Année mondiale des communications. Un concours mondial de photographies et de dessins, "La jeunesse à l'âge de l'électronique 83" a été lancé cet automne. Ouvert à tous les jeunes de 8 à 18 ans, ce concours laisse les concurrents imaginer, sous forme de photos, dessins, peintures ou illustrations, le rôle que peuvent jouer les télécommunications dans leur pays. Les oeuvres des lauréats seront exposées à TÉLÉCOM 83, qui se tiendra à Genève du 26 octobre au 1^{er} novembre 1983.

Il est très important de sensibiliser les jeunes aux effets des infrastructures de communications dans la société moderne. Ce sont en effet eux les ingénieurs, chercheurs, enseignants, dirigeants et usagers de demain, et en fin de compte les futurs responsables de l'évolution des communications au profit de l'humanité.

De plus en plus, nous allons ressentir les effets de l'essor fulgurant des technologies des communications. Voilà le moment venu d'assurer une plus juste répartition de celles-ci et une meilleure coordination de leur mise en place. C'est seulement alors que les besoins économiques, sociaux et culturels de toutes les nations pourront être satisfaits.

Certes, l'Année mondiale des communications ne sera pas une panacée. Cependant, elle marquera le début d'une ère nouvelle où tous pourront enfin bénéficier des services fondamentaux de télécommunications, à condition bien sûr que chaque pays y participe pleinement. Et le Canada entend y offrir sa pleine mesure!



LETTER TO THE EDITOR

Sir:

We are enthusiastic about the initiative on Canadian Meso-scale Studies which is being discussed widely, which we hope will lead to serious discussions at the CMOS Congress at Banff in May, and which may - if espoused by CMOS - result in forceful requests for opportunities and funds in meteorological research and development.

We plead in this letter that genuine, physically-definable meteorological phenomena be the subjects of the proposed study. We are convinced that warnings of meteorological hazards through precise forecasting and, of course, possible preventive measures, demand knowledge of the mechanism of the phenomenon and an appreciation of its interaction with atmosphere and surface on many relevant scales. To deal with lightning and hail, for instance, demands overall comprehension of convective storms; blizzards (in most Canadian settings) demand appreciation of the cyclone: its progress must be seen as an interaction between air masses, of air masses and the general circulation, and it must also be seen as a system of precipitation bands, with characteristic temperature and moisture structure related to the terrain below. The phenomena in these examples are quite different, but both call for work on all meso-scales, with at least some attention to smaller and larger scales.

What we are saying then is that a coordinated systems approach is needed, with many sensors and many methods of analysis and modelling focusing successively on series of similar events. In our examples, these might typically be cyclones in the lower Great Lakes/St. Lawrence Valley regions, or major hail storms in the lee of the Rockies. Such approaches are - it seems to us - the only scientifically sensible and promising attacks on these phenomena, or indeed on any of the major meteorological events which dominate so much of the Canadian perception of our climate and, of course, a good fraction of our weather hazards and discomforts.

The time is ripe for concerted meso-scale studies of our major weather, with due attention to neighbouring scales, because recent progress in large-scale and micro-scale effects has revealed a "meso gap" and because of the new availability of a vast panoply of sensors, analysis and modelling techniques, now too often and therefore too expensively deployed on different specimens of the weather. It is also opportune because many Canadian weather hazards and inconveniences are centred on these phenomena. Systematic attacks upon them is thus likely to be at once scientifically and operationally rewarding. There will not be good hail or blizzard warnings, let alone prevention or preventive measures, without good scientific clues. And there will not be great improvements in Day One forecasting without an improved knowledge of development on the meso-scale added to existing extrapolation techniques. The insights which the proposed programs will produce should have concrete and tangible payoffs. We are saying this with conviction, though we must guard against promising silly payoffs like immediate hail suppression or snow-making on ski slopes and snow-suppression over roads by seeding.

For a country as large and as richly endowed with meteorological variety as ours, we thus advocate that a few major, frequent relevant and potentially understandable types of meso-scale events be selected and proposed for intensive, concerted and systematic study. Theoretical studies, model studies based on existing or routine data are essential and must be made, but clearly special observational programs will be very much needed in addition.

As readers may know, a major effort, called the STORM (Stormscale Operational and Research Meteorology) Program is being initiated in the United States. Our thinking is independent of STORM, but comparison of the features of a Canadian program as urged above and those of STORM shows resemblances which only confirm that what we are suggesting is scientifically and operationally timely. It would be extravagant or childish for Canadians to duplicate or ape what STORM will attempt. But it would be foolish not to mount appropriate programs here to which STORM activities would be complementary.

The precise choice of systems to be looked at has, of course, political, social and economic aspects, in addition to the meteorological ones. It is in the interest of us all, however, that the requisite choices be made soon, for sooner or later - we are convinced - all our major weather phenomena need and will get the kind of treatment we advocate.

W.F. Hitschfeld and
Peter Yau
McGill University

Dr. Ed. Lozowski
Past-President, CMOS
Suite 805
151 Slater Street
Ottawa, Ontario
K1P 5H3

Dear Ed:

I read with sympathy Henry Leighton's letter on the "Canadian Committee of Scientists and Scholars" (CCSS) which appeared in the latest CMOS Newsletter. In answer to your accompanying letter requesting comments on the matter, I would like to offer the following argument to CMOS members so that they may look favourably upon the efforts of the CCSS.

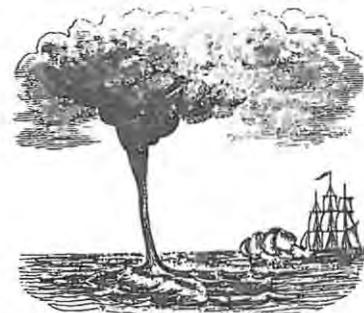
Faced with appeals for help or charity to remote causes, it is easy to claim that "charity begins at home": there is always some more pressing immediate need which should take preference over far-away "missionary" work. Although this is generally true, I submit that there are good reasons, beyond human altruism, for expressing our concern and trying to help people who are being persecuted for their ideas, wherever that may be.

One might argue, in a moment of pessimism, that the climate of academic freedom which we now enjoy in North America is not absolutely stable. Less than a century ago, it was still practically impossible to teach in Canadian universities without professing to share the beliefs of the majority: there was then no room for atheists. More recently, the anti-communist witch-hunts led by Senator McCarthy poisoned the U.S. intellectual climate for a few years. What does the future hold? May we safely assume that our governments will continue, perhaps in the face of strong economic or political pressures, to be as enlightened and tolerant of criticism?

By expressing our concern for the principles of intellectual freedom and offering help to people who are made to suffer physically because of their ideas, we are developing a sensitivity to encroachment on our liberties and exercising the very reflexes which may enable us to defend them should the need arise. I am not advocating that CMOS should campaign actively on behalf of persecuted scientists (although it could take a special interest in the case of meteorologists and oceanographers), but I feel that the pages of the Newsletter should provide sympathetic, if limited, access to organizations like the CCSS and that members of CMOS should be encouraged to support its efforts.

Paul H. LeBlond

x.c. H. Leighton
I. Halperin



THE CANADIAN NATIONAL SCIENTIFIC COMMITTEE FOR SCOPE

On December 14, 1982, the annual meeting of the Canadian National Scientific Committee for the Scientific Committee on Problems of the Environment (SCOPE) was held at the National Research Council (NRC) in Ottawa. The Canadian National Scientific Committee for SCOPE is one of a number of expert committees which report to the Executive Council of the National Research Council. As a result of a recent decision by NRC's Executive Council, representatives from various professional societies are being invited to sit as observers on appropriate national scientific committees. As a result of this decision, the Canadian Meteorological and Oceanographic Society sent a representative to the December 14 meeting of the Canadian National Scientific Committee for SCOPE.

SCOPE is a member of the International Council of Scientific Unions (I.C.S.U.). It was established in 1969 to advance knowledge in areas related to man-environment interactions and to serve as a non-governmental, international and interdisciplinary council of scientists and as a source of advice for all concerned organizations with respect to environmental problems. These objectives are achieved by producing reviews, synthesizing knowledge and making recommendations on required actions. SCOPE provides a framework for integrating the expertise from various disciplines in dealing with problems of the environment. In selecting projects, the SCOPE executive gives priority to those which are broader than the concerns of single specific scientific unions and which have major significance for the world's environment. SCOPE also carries out activities to support the Earthwatch Program of UNEP (United Nations Environmental Program) and the Man and Biosphere Programme (MAB) of the United Nations Educational and Social Committee (UNESCO). SCOPE receives funding from ICSU, foundations, industries, and national governments including Canada. Input to SCOPE from different countries is channeled through National Scientific Committees. NRC has the responsibility for the Canadian National Scientific Committee.

Dr. T. Munn of the University of Toronto chaired the meeting. In his opening remarks he provided an introduction to SCOPE. Subsequently, the Committee's terms of reference were discussed in detail. In responding to a request from NRC's Committee on International Scientific and Technical Affairs, the members agreed that the National Scientific Committee should:

- advise the Council on Canadian participation in SCOPE meetings and seminars and in SCOPE-related activities, and
- encourage communications between SCOPE and Canadian Scientists interested in the activities of SCOPE.

A major portion of the meeting was spent discussing and taking appropriate decisions on Canadian participation in SCOPE projects. In view of the wide range of environmental issues discussed, the following paragraphs summarize only the topics which

were felt to have the greatest interest for meteorologists and oceanographers.

A SCOPE Working Group is presently completing a report on the disposal of high level radioactive wastes. Three aspects of the disposal problem were considered in the study, including environmental pathways, terrestrial disposal and seabed disposal. It is recognized that there is a pressing requirement for a study of the options for the disposal of low level waste. I.C.S.U. is presently considering a proposal for such a study.

Dr. Kenneth Hare, provost of Trinity College, is chairing a working group which is finalizing a report entitled "Understanding Climate-Society Interaction." The report will provide a number of interesting concepts and analytical procedures for use by anyone who is interested in assessing the social and economic impacts of climate change.

Two Canadians, Dr. H.R. Krouse from the University of Calgary and Dr. Stewart of the University of Saskatchewan, have been participating in a project on the Biogeochemical Sulfur Cycle. The project is being carried out in collaboration with the Sulfur Centre located at the Institute of Biochemistry and Physiology of Microorganisms at Puschino in the U.S.S.R. Future SCOPE activities will include studies and workshops designed to aid in the elaboration of the role of the tropics in the sulfur cycle and the effect of extra sulfur cycling on other biogeochemical cycles, such as the nitrogen and phosphorous cycles, and on the environment in general. It was noted that the U.S.S.R. has a wealth of data related to certain aspects of the sulfur cycle. It is hoped that the recent agreement to have this information computerized and available in the Sulfur Centre will assist scientists outside the U.S.S.R. in having more ready access to it.

Dr. C.S. Wong of the Department of Fisheries and Oceans reported on work related to CO₂ monitoring in the oceans. He indicated that the Scientific Committee on Ocean Research (SCOR) was planning to organize two meetings of panels of experts: one meeting to deal with the Pacific Ocean and the other to deal with the Atlantic and other oceans. It is hoped that as a result of these meetings the program for monitoring CO₂ in the ocean will be improved to the point where it will be possible to detect the first signal from a CO₂ increase in the oceans. Such information is felt to be very critical in determining whether the biosphere or the oceans will provide the best reservoir for CO₂ emissions.

A number of other interesting topics were discussed including: studies of the functions of ecosystems and the effects of environmental stress; fire ecology in northern circumpolar regions, including biological invasions after forest fires; reports on methodologies for the safety evaluation of chemicals; data needs for risk assessment in Canada; movements of trace metals in the environment; ecotoxicology; agricultural land degradation and a publication titled "Environmental Prospects: 1982." The diversity and breadth of the topics dealt with by SCOPE can also be seen from their list of publications.

The Canadian National Scientific Committee assists Canadian scientists in interacting with scientists from other countries working on SCOPE projects and in preparing proposals and reports for the executive of SCOPE. For example, one Committee member was interested in collaboration with international contacts made through SCOPE in a study of fire behaviour in the Wood Buffalo National Park. The Canadian National Scientific Committee also acts as a "sounding board" for the new initiatives which individual Committee members may wish to bring before the SCOPE executive. New project proposals dealing with soil quality and marine quality objectives are being formulated for review at the National Committee's next annual meeting. Another Canadian proposal dealing with methods for establishing the value of an ecosystem is being revised before being resubmitted to the SCOPE executive. After some discussion, it was agreed that Canada should have a focal point for studies of the environmental effects of a nuclear war. The Scientific Committee will thus be encouraging Canadian research activities related to this topic. The Canadian National Committee for SCOPE also serves as a useful forum in which members can exchange their views and observations on SCOPE activities. Two topics which were discussed showed that the difficulties that SCOPE members have are similar to those encountered by scientists involved in other International organizations. Several scientists with experience on international projects noted the difficulty in involving scientists from third world countries in SCOPE projects due to their many other commitment and the inadequacy of their funding. There was also some discussion about the need to have summaries of reports available for the laymen and, when appropriate, the politician or the decision maker. It appeared that there was not a clear consensus on the best way to meet that need.

In summary, the Canadian National Committee for SCOPE could provide members of the Canadian Meteorological and Oceanographic Society with a window on the many interesting projects and activities being undertaken by SCOPE. After members become more aware of the activities of SCOPE, they may find some projects to which they can make useful contributions.

Anyone wishing further information on any of the discussions at the above meeting is invited to contact R. Lawford at (613) 997-1438 or (613) 837-1768.

**ATMOSPHERE-OCEAN
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Atmosphere-Ocean is the scientific journal of the Canadian Meteorological and Oceanographic Society. It is published quarterly in March, June, September and December and has a circulation of about 1200.

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NEWLY APPOINTED A-O EDITOR

Dr. Philip Merilees, past Associate Editor of Atmosphere-Ocean, was recently appointed Editor of A-O, succeeding Dr. H.R. Leighton, who has held the position since 1980. The appointment was confirmed at a recent meeting of the CMOS Executive. Dr. Leighton's contribution to the Society was noted with thanks.

Arctic Haze News Backgrounder

ENVIRONMENT CANADA SCIENTISTS MONITOR ARCTIC HAZE

Department of Environment (DOE) atmospheric scientists have made some startling discoveries about the state of the air in the Arctic. During three years of sampling air at three northern stations - Mould Bay, Igloodik and Alert - scientists discovered a seasonal Arctic air pollution which forms a haze over most of the Arctic north of 60° latitude. The pollution has its source in the U.S.S.R., Europe and, to a lesser extent, North America.

Arctic haze is caused by suspended particles which scatter light and reduce visibility horizontally from 300 km to 30 km and vertically to a height of several thousand metres above the ground. Particle levels in the haze are 20 to 40 times higher in winter than in summer.

The suspended particles consist of contaminants from coal and oil burning industrial areas and smelters in the mid-latitudes (30° to 60° north). The particles are picked up by prevailing winds and deposited in the Arctic air mass. In fall and winter, the prevailing winds carry particles from the Soviet Union into the Arctic air mass. In late winter and early spring, particles are carried to the Arctic in prevailing winds blowing over western Europe and, to a lesser extent, in North American wind systems.

North American airborne pollution is generated mainly in the eastern part of the continent and is generally blown out over the Atlantic Ocean. U.S.S.R. pollution sources are either upwind or within the Arctic airmass and have a direct effect on the Arctic atmosphere. European pollution enters the Arctic by travelling northward over Scandinavia or the U.S.S.R.

The most obvious effect of Arctic haze is the extreme reduction in visibility during the most serious pollution periods. Arctic haze particles are acidic, but the levels of acidity are at least ten times lower than those of acid rain in eastern Canada. In most polar areas, the acidic particles are effectively buffered by the Arctic's acid-neutralizing soils.

Scientists are concerned that Arctic haze will have a warming effect on Arctic climate. The magnitude of such an increase is unknown at present, but a slight warming effect in March, April and May is expected. More detailed impact assessments are currently under way.

Samples of suspended particles are collected weekly by the DOE network on filters mounted on high power vacuum lines. Major ions, trace elements, pollen and the darkness of the particle deposits on the filters are then measured. Particle light scattering is recorded every ten minutes and averaged on an hourly, daily and weekly basis.

Sulphates comprise 30% of the total aerosol mass. The components of Arctic haze are soot, organic compounds, wind blown dust and sea salt. Man-made pollutants compose about 80% of the haze in winter and spring.

It is thought that precipitation plays an important role in reducing the pollution levels in the haze by removing the particles from the atmosphere. Results have shown an inverse relationship exists between the existence of Arctic cloud cover (an indicator of precipitation) and sulphate concentrations.

The DOE three-station air-monitoring network is part of an international research program in the Arctic including scientists from Norway, Denmark, Iceland, the U.S. and the U.K.

It is expected that the exact cause of Arctic haze will be more clearly defined by 1984 when Canada plays host to the Third International Symposium on Arctic Air Chemistry. Results of ongoing research on the origin and effects of polar air pollution will be presented at the symposium. The outcome of this scientific gathering will be the provision of more insight into the problem of Arctic haze. The research results may influence the decision on whether a formal international effort to curb Arctic air pollution is warranted.

For more information, contact:

Dr. Len Barrie
Atmospheric Dispersion Division
Atmospheric Environment Service
4905 Dufferin Street
Downsview, Ontario M3H 5T4

C.M.O.S.
XVII ANNUAL CONGRESS

Committee Meeting Schedule for May 2, 1983

Committee	Meeting Place	Time
Editorial	Frontenac Room	0900 - 1200
Education	Dutchess Room	0900 - 1200
Scientific	Frontenac Room	1300 - 1645
Centre Chairpersons	Dutchess Room	1400 - 1645
Professionalism	Empress Room	1400 - 1700
Council (Session 1)	Frontenac Room	1700 - 1800
Council (Session 2)	Frontenac Room	1900 - 2100

* Ice Breaker Wine and Cheese * Riverview Lounge * 2030 - 2230 *

Other Scheduled Events

Registration Desk will be open - May 2: 1230 to 2100

Annual General Meeting - May 3: 1930 to 2300 in the Ballroom

Field Tour - May 4: Morning.

Avalanche hazard system (Parks Canada), sunshine area. A limited number can attend. Those interested are asked to sign-up during Registration.

Banquet - May 4: Cocktail Hour - 1830 to 1930

Dinner - 1930 to 2300

Bus to Calgary Airport from Banff Springs Hotel to leave May 5 at 1300 for connecting flights to Winnipeg, Toronto, Ottawa and Montreal. Those requiring this transportation are asked to make reservations during Registration.

SCIENTIFIC PROGRAM SCHEDULE (TENTATIVE)

Date	Time	Session	Title
03 May	0830 - 1030	1	Day 1 Forecasting (Plenary)
		2A	Forecast Verification
	1050 - 1230	2B	Climatology I
		2C	Oceanography I
	1330 - 1520	3	Remote Sensing of Sea Ice
	1540 - 1730	4A	Aviation Meteorology
4B		Climatology II	
4C		Sea Ice	
04 May	0830 - 1000	5A	Operational Meteorology I
		5B	Dynamics I
		5C	Oceanography II
	1020 - 1200	6A	Operational Meteorology II
		6B	Numerical Modelling
		6C	Oceanography III
	1300 - 1430	7A	Operational Meteorology III
		7B	Cloud Physics
		7C	Oceanography IV
		8	Exhibits and Posters
	1430 - 1600	9A	Meteorological Remote Sensing
Boundary Layer			
Agriculture and Forest Meteorology			
1600 - 1745	9B	9C	Meteorology
		10A	Mesoscale Meteorology Workshop Report
		10B	Meteorological Techniques
		10C	Environmental Meteorology
		1020 - 1200	11
05 May	0830 - 1000	10A	Mesoscale Meteorology Workshop Report
		10B	Meteorological Techniques
		10C	Environmental Meteorology
1020 - 1200	11	Panel Discussion on Day 1 Forecasting (Plenary)	

ATTENTION!

Those people attending the CMOS Congress in Banff are reminded to confirm their hotel reservations with a deposit before the end of March. The deposit shall consist of total room costs for one night, plus the registration fee. Please note that a limit has been placed on A.E.S. travel expenses. Our latest information is that an amount of \$57.00 is the maximum amount per day which A.E.S. will allow each staff member for accommodation and meals while attending the Congress. This, of course, indicates shared accommodations.

The Scientific Committee on Oceanic Research (SCOR) is a subcommittee of the International Council of Scientific Unions (ICSU). It plays an important and useful role in providing advice to intergovernmental organizations (notably the Intergovernmental Oceanographic Commission of UNESCO), in organizing international meetings, and in establishing working groups. The SCOR Secretariat is based at the Department of Oceanography, Dalhousie University, Halifax, Nova Scotia. The following news items may be of interest to Canadian marine scientists.

(1) Joint Oceanographic Assembly

The JOA was held at Dalhousie University from August 2 to 13, 1982, at the invitation of the National Research Council. General sessions, symposia and Association Sessions were held in all areas of marine science over the 10 working days of the assembly. Proceedings of the assembly will be published by Fisheries and Oceans, Ottawa.

(2) SCOR Officers

President: E.S.W. Simpson (S. Africa)
 Vice-Presidents: G. Seidler (FRG)
 T. Wolff (Denmark)
 R. Chesselet (France)
 Secretary: A.R. Longhurst (Bedford Institute)

Warren Godson (AES, Downsview) is an ex-officio member as President of IAMAP; Tim Parsons (UBC) ceased to be an ex-officio member when his term as President of IABO came to an end this year.

(3) Working Groups

SCOR is most active and visible through its working groups. These are designed to stimulate or focus interest in a particular field of marine science. Proposals for the creation of working groups may be made by SCOR National Committees, affiliated organizations of SCOR, ICSU, IOC, UNESCO, ICES or existing working groups, and may nominate Corresponding Members who may attend working group meetings at their own expense. There are 26 WG's in existence or being formed.

(4) Committees and Panels

(a) SCOR/IOC Committee on Climatic Change and the Ocean

Chairman: R.W. Stewart (Victoria)
 Member: A.R. Longhurst

(b) Joint Panel on Oceanographic Tables and Standards

Chairman: J. Gieskes
 Members: E.L. Lewis (IOS) and C.K. Ross (BIO)

(c) Antarctic Review Group (SCOR/SCAR)

Convenor: T.D. Foster

(5) Work on Behalf of IOC

(a) Ocean Science for the Year 2000 (FORE)

A report has been prepared by SCOR and the Advisory Committee on Marine Resources Research of FAO for submission to IOC.

(b) Marine GeoScience Workshop

A workshop was held on behalf of CMG in Heidelberg in July 1982 on "Ocean Science and Non-Living Resources", "The Oceanic Lithosphere", and "Geological History of the Oceans and Ocean Margins." A report will be forwarded to IOC.

S.E. Calvert
 (Chairman CNC/SCOR)
 U.B.C. Oceanography



INTERNATIONAL CONFERENCE ON SCHOOL AND POPULAR
METEOROLOGICAL EDUCATION
OXFORD - JULY 2, 3, 4, 1984

The Royal Meteorological Society and the American Meteorological Society are co-sponsoring a conference concerned with the meteorological education and training of amateur meteorologists, school children and the general public. The format will be that of a conference cum workshop and will include presented papers, demonstrations of apparatus and equipment (both commercial and home-made), practical sessions using teaching aids, book displays, etc.

CMOS members who may be interested in attending should contact:

Dr. J.M. Walker
Education Secretary
Royal Meteorological Society
Grenville Place
Bracknell, Berkshire
England RG12 1BX

If any Centres have developed programs or equipment for the meteorological education of school children or the public, perhaps they might wish to send a delegate to this conference.

QUADRENNIAL OZONE SYMPOSIUM, SEPTEMBER 3-7, 1984,
KASSANDRA, HALKIDIKI, GREECE

The Ozone Commission of IAMAP will hold its next Quadrennial Ozone Symposium at the Athos Palace Hotel in Halkidiki, Greece, from Monday, September 3, through Friday, September 7, 1984. The Symposium is cosponsored by the Commission of the European Communities, the Academy of Athens, and WMO. Registration will begin on Saturday, September 1, at the Athos Palace Hotel which is located 80 km south of Thessaloniki airport.

The scientific program will be concerned with the following topics: recent developments in observational techniques; analysis of both surface-based and satellite ozone observations; chemical-radiative-dynamical model calculations; observations of relevant trace constituents and their budgets; laboratory measurements of chemical rate constants and absorption cross-sections; interaction of ozone and circulation; radiation topics relevant to atmospheric ozone; ozone-climate interaction; non-urban tropospheric ozone; and future directions.

It is planned that there will be 5 days of scientific meetings, consisting of invited presentations and contributed papers in both oral and poster sessions. Extended abstracts will be published in a separate volume, which will be distributed to registered participants free of charge.

The second circular describing requirements for preparation of abstracts and giving details of accommodation, social activities and other symposium information will be forwarded to those sending expressions of interest (preferably before June 1, 1983) to: Prof. Christos S. Zerofos, Chairman, Local Organizing Committee, Physics Department, Campus Box 149, University of Thessaloniki, Thessaloniki, Greece. It will facilitate arrangements if a copy is also sent to Dr. C.D. Walshaw, Secretary, Ozone Commission, Clarendon Laboratory, University of Oxford, Parks Road, Oxford, OX1 3PU, England.

The deadline for abstracts will be February 1, 1984. Authors of contributed papers will be notified of the acceptance of their papers in April, 1984.

WMO/AMS/CMOS
FIFTH SYMPOSIUM ON METEOROLOGICAL
OBSERVATIONS AND INSTRUMENTATION
APRIL 11 - 15, 1983 -- TORONTO, ONTARIO, CANADA

Synopsis of Sessions

Apr 10	Sun	7:00	pm	Registration	
Apr 11	Mon	8:00	am	Registration (continued)	
		9:00	am	Session 1 : Welcome to the Fifth Symposium	
		9:30	am	Registrants' Coffee	
		10:00	am	Session 2 : Measurement of Basic Surface Variables	
		10:15	am	Spouses' Coffee	
		1:30	pm	Session 3 : Precipitation Sensors	
		3:30	pm	Session 4 : Radiation Sensors	
		5:00	pm	Industry Coffee	
		6:00	pm	Icebreaker	
Apr 12	Tues	8:30	am	Session 5 : Pressure Sensors	
		10:30	am	Session 6 : Cloud and Visibility Sensors	
		1:30	pm	Session 7 : Radiosonde--I	
		3:30	pm	Session 8 : Radiosonde--II	
		5:00	pm	Industry Coffee	
Apr 13	Wed	8:30	am	Session 9 : Satellite--I	
		10:30	am	Session 10 : Satellite--II	
		1:30	pm	Session 11 : Remote Profiling of the Atmosphere--I	
		3:30	pm	Session 12 : Remote Profiling of the Atmosphere--II	
		5:00	pm	Industry Coffee	
Apr 14	Thurs	8:30	am	Session 13 : Requirements and Needs	
		8:30	am	Session 14 : Aircraft Systems	
		9:30	am	Session 15 : Data Representativeness and Standards	
		10:30	am	Session 16 : Aircraft Data Acquisition Systems	
		1:30	pm	Session 17 : Mesoscale Networks	
		1:30	pm	Session 18 : Airborne Measurements--I	
		3:30	pm	Session 19 : Networks	
		3:30	pm	Session 20 : Airborne Measurements--II	
		6:00	pm	Wrap-Up Bar	
Apr 15	Fri	8:30	am	Session 21 : Automatic Weather Station Technology	
		8:30	am	Session 22 : Meteorological Radar	
		10:30	am	Session 23 : Optical and Acoustic Sensing	
		10:30	am	Session 24 : Severe Storms, Lightning, and Thunder	
		1:30	pm	Session 25 : Air Quality and Boundary Layer Measurements	
		1:30	pm	Session 26 : Computation and Analysis	

General Information

The Fifth Symposium on Meteorological Observations and Instrumentation, sponsored by the World Meteorological Organization, the American Meteorological Society, and the Canadian Meteorological and Oceanographic Society, will be held April 11 - 15, 1983, at the Loews Westbury Hotel in Toronto, Ontario, Canada. The AMS Committee on Atmospheric Measurements is responsible for the organization of the technical program. The Atmospheric Environment Service of Canada and the CMOS Toronto Chapter will be the local hosts.



Hotel

All sessions will be held at the Loews Westbury Hotel in downtown Toronto. A block of rooms has been set aside for the meeting at the following special rates: Can. \$62, single; Can. \$72, double (plus sales tax, presently 7%). We strongly urge you to request a written confirmation of your reservations and to bring it with you to the hotel. Kindly make your reservations prior to March 7, 1983, by writing directly to Loews Westbury Hotel, 475 Yonge Street, Toronto, Ontario, Canada M4Y 1X7 (telephone: (416) 924-0611; telex: 065-24304). Reservations will be held until 6:00 pm unless guaranteed payment for one night is received. (Check-in time is 4:00 pm.) Be sure to mention the American Meteorological Society's name when making reservations. For your convenience in securing accommodations, reservation cards are available from AMS.

Families are invited, and those who plan to extend their stay beyond the symposium dates may make arrangements at the same conference rates.

Registration

The AMS registration desk will be open Sunday, April 10, from 7:00 pm to 9:00 pm and on Monday through Friday from 8:00 am to 5:00 pm. The AES will operate a local information service from this desk during the week. Registration fees, including the preprint volume, are U.S. \$70 for AMS/CMOS members, speakers, and session chairmen; U.S. \$90 for nonmembers; and U.S. \$40 for undergraduate and graduate students. We urge you to preregister by sending the appropriate remittance together with your name, affiliation, and complete mailing address to: American Meteorological Society, 45 Beacon Street, Boston, Massachusetts 02108, U.S.A., Attention: Fifth Symposium on Meteorological Observations and Instrumentation.

Transportation

The Loews Westbury Hotel is approximately 30 minutes from Toronto International Airport. Taxi and flat-rate limousines are available at about Can. \$20. Gray Coach airport buses (Can. \$3) serve the subway system to three points at 30 minute intervals each. The hotel is one block north of the College subway station. Toronto has an extensive network of subway and surface transportation (85¢ - exact change, token or ticket).

Exhibits

Industry Exhibits have been arranged for the Kent Room. Exhibit hours will be 8:30 am to 6:00 pm, beginning at 3:00 pm on Monday, April 11, and ending at 11:00 am on Thursday, April 14. Interested organizations are invited to contact the Exhibits Manager at (416) 667-4668.

Coffee Service

Coffee is being provided as a courtesy of the Industry Exhibitors. During exhibit hours, service will be scheduled for the Kent Room and will include a relaxation "Tiffin" service at 5:00 pm. At other times, coffee will be served near the meeting rooms.

Demonstration Papers

To relieve congestion in some sessions and to provide further opportunities for communication, a few papers are scheduled for demonstration in the Exhibits/Coffee area. Authors and apparatus will be available for examination.

Spouses' Coffee

A coffee get-together for spouses, families, and friends of conference registrants will be held on Monday, April 11, at 10:15 am. Room information will be available at the AMS registration desk. There is no social program planned. The get-together will enable guests to become acquainted and to plan tours, shopping, and social activities, should they so wish.

Icebreaker

There will be an Icebreaker (cash bar) on Monday, April 11, at 6:00 pm.

Wrap-Up Bar

A Wrap-Up Bar (cash bar) will be held on Thursday, April 14, at 6:00 pm.

SNOW AND ICE PROCESSES AT THE EARTH'S SURFACE

FIRST CIRCULAR

Sapporo, Japan

2-7 September 1984

Cosponsored by the Japanese Society for
Snow and Ice
with a meeting in Tokyo
1 September 1984

The Society will hold a symposium on snow and ice processes at the Earth's surface, in Sapporo, Japan, in 1984. The Japanese Society for Snow and Ice are cosponsors of the event. Registration will take place on Sunday, September 2, and sessions will be from Monday to Friday, September 3 to 7. There will be a meeting with the Japanese Society for Snow and Ice in Tokyo on Saturday, September 1.

Topics

The symposium will be concerned with the following topics:

1. Mass and heat exchange at the snow/ice surface.
2. Physical and chemical processes associated with snow and ice (snow metamorphism, snow/ice accretion, drifting snow, ground freezing, etc.).
3. Behaviour of airborne snow (blowing snow, avalanching, fluidization).
4. Sea ice drift and its effects.

Further Information

You are invited to attend the symposium. The Second Circular will give information about accommodation, general program, preparation of summaries and final papers. Requests for copies of the Second Circular should be addressed to:

The Secretary General
International Glaciological Society
Lensfield Road
Cambridge CB2 1ER
England

SYMPOSIUM ON ICE AND CLIMATE MODELLING

SECOND CIRCULAR

Northwestern University
Evanston, Illinois, U.S.A.
June 27 - July 1, 1983

Cosponsored by the American Meteorological Society

The Society will hold an interdisciplinary Symposium on Ice and Climate Modelling at Northwestern University, Evanston, Illinois, U.S.A., in 1983. Registration will take place on Sunday, June 26, and sessions will be from Monday to Friday, June 27 to July 1.

Registration Fees:

Participants	68.00	U.S. \$120.00
Accompanying persons aged 18 or over	17.00	U.S. \$ 30.00

LAST DATE FOR REGISTRATION BOOKINGS: 1 MARCH 1983

General information about the Symposium may be obtained from:

The Secretary General
International Glaciological Society
Lensfield Road
Cambridge CB2 1ER
England Telephone: Cambridge 355974

Detailed information about arrangements in Evanston may be obtained from:

Johannes Weertman
Department of Materials Science and Engineering
Northwestern University
Evanston, Illinois 60201
U.S.A.



POAC 83

THE SEVENTH INTERNATIONAL CONFERENCE ON PORT AND OCEAN ENGINEERING UNDER ARCTIC CONDITIONS

April 5 - 9, 1983
Helsinki, Finland

Programme

The programme includes the following topics and will be divided into three parallel sessions:

- Sea Ice Properties and Conditions in Cold Regions
- Underwater Technology in Arctic Seas
- Offshore Operations and the Environment
- Technical and Economic Aspects of Navigation in Cold Regions
- Icebreaking Technology including Model Testing
- Behaviour of Materials and Structures in Arctic Seas
- Modelling the Interaction Between Ice and Structures
- Coastal and Offshore Structures and Their Ice Forces
- Marine Foundations and Artificial Islands
- Instrumentation Technology and Measuring Systems in Cold Regions

Important Dates

- January 15, 1983 First registration deadline, fee 1200 FIM.
January 15, 1983 Deadline for submitting final manuscripts.
February 15, 1983 Deadline for late registration, fee 1500 FIM.
For registrations mailed later than February 15, 1983, we cannot guarantee hotel bookings or participation in the Conference, the number of participants being limited to 400.
April 5 - 9, 1983 Conference.

Correspondence

All correspondence pertaining to POAC 83 are to be addressed to:

Sirpa Suomela (Ms.)
Secretary General POAC 83
Technical Research Centre of Finland
Laboratory of Structural Engineering
Betonimiehenkuja 3
SF-02150 ESPOO 15, FINLAND
Tel: Int. + 358 0 456 4831

LA CONFÉRENCE DU CENTENAIRE DU SERVICE HYDROGRAPHIQUE DU CANADA

Les MARDI, MERCREDI, JEUDI et VENDREDI
5, 6, 7 et 8 AVRIL, 1983

CENTRE DE CONFÉRENCES DU GOUVERNEMENT DU CANADA
2, rue Rideau Ottawa, Ontario

Le Service hydrographique du Canada célèbre en 1983 son centenaire. A l'occasion de cette fête, le Service ainsi que l'Association canadienne d'Hydrographes parrainent une conférence dont le thème sera "De la ligne de sonde au laser."

Une vue rétrospective concernant l'histoire de l'hydrographie au Canada nous sera donnée au début de cette conférence, suivie par une mise au point du progrès récent dans les techniques de levés et dans l'informatique, la cartographie secondée par le dessin automatique, les systèmes de positionnement électroniques, et l'utilisation de techniques de télédétection. La traduction simultanée pour chaque communication sera disponible en français et en anglais.

Au cours de cette rencontre des expositions auront lieu au centre de conférences. Des activités sociales ont été préparées et un programme pour les dames sera planifié.

Envoyer votre enregistrement avancé à:

Conférence du Centenaire
du Service hydrographique du Canada
Chambre 325
615, rue Booth
Ottawa (Ontario)
K1A 0E6



CANADIAN HYDROGRAPHIC SERVICE CENTENNIAL CONFERENCE

TUESDAY, WEDNESDAY, THURSDAY and FRIDAY
APRIL 5, 6, 7 and 8, 1983

CANADIAN GOVERNMENT CONFERENCE CENTRE
2 Rideau Street, Ottawa, Ontario

1983 marks the one-hundredth anniversary of the establishment of the Canadian Hydrographic Service. To mark this occasion, the Service and the Canadian Hydrographers Association are jointly sponsoring a conference on the theme "From Leadline to Laser."

The conference will take a retrospective look at the history of hydrography in Canada and will then focus on recent developments in field survey techniques and data processing, computer-assisted cartography, electronic positioning systems, and the use of remote sensing techniques. Simultaneous translation will be available in both French and English for all sessions.

Exhibitors' displays will be located at the Conference Centre during the conference. Social gatherings have been arranged, and a ladies' program will be provided.

Send Advance Registration to:

Canadian Hydrographic Service
Centennial Conference
Room 325
615 Booth Street
Ottawa, Ontario
K1A 0E6

**THIRD NATIONAL WORKSHOP ON PEOPLE, RESOURCES
AND THE ENVIRONMENT NORTH OF 60°**

Being held by:
CANADIAN ARCTIC RESOURCES COMMITTEE

Wednesday, June 1 to Friday, June 3, 1983

Northern United Place
Yellowknife, Northwest Territories

Tentative Agenda to Include:

- Resource development policies in the circumpolar world.
- Development in northern Canada: the national and regional interests.
- Conservation of environmentally significant areas.
- Regional planning and land use planning.
- Natural resource jurisdiction and political development.
- Mineral development.
- Renewable resources management.
- Ocean management.
- Inland water resources.
- Development in the Beaufort Sea region.
- Plenary session on the federal government's land claims policy.

Details can be obtained by contacting:

Canadian Arctic Resources Committee
46 Elgin Street, Room 11
Ottawa, Ontario
K1P 5K6

**SCIENTIFIC EXCHANGE PROGRAM WITH
THE ROYAL SOCIETY OF LONDON**

In August 1982, the Royal Society of London and NSERC signed a Memorandum of Understanding on scientific cooperation to promote visits of selected candidates in the natural sciences and engineering disciplines. These visits will enable the participants from both countries to engage in productive interchanges and collaboration with colleagues.

The new program with the Royal Society will come into effect in April 1983 and will provide support for up to 20 participants annually in each direction. Candidates selected for such exchanges must have established prior contact with the host scientist(s) and have agreed upon a specific scientific activity or research project to be undertaken, as well as a suitable period and duration for the visit in the other country.

The cooperation with the Royal Society raises to five the number of bilateral exchange programs between NSERC and corresponding organizations in other countries. For a list of these organizations and general description of the exchange programs, as well as eligibility and application procedures, the reader is referred to the NSERC Awards Guide 1983-84, page 58.

For further information on this new exchange program, please contact Dr. Alfred Kugler at (613) 993-9681.

**INTERNATIONAL CONFERENCE ON SCHOOL AND POPULAR
METEOROLOGICAL EDUCATION
OXFORD - JULY 2, 3, 4, 1984**

The Royal Meteorological Society and the American Meteorological Society are co-sponsoring a conference concerned with the meteorological education and training of amateur meteorologists, school children and the general public. The format will be that of a conference cum workshop and will include presented papers, demonstrations of apparatus and equipment (both commercial and home-made), practical sessions using teaching aids, book displays, etc.

CMOS members who may be interested in attending should contact:

Dr. J.M. Walker
Education Secretary
Royal Meteorological Society
Grenville Place
Bracknell, Berkshire
England RG12 1BX

If any Centres have developed programs or equipment for the meteorological education of school children or the public, perhaps they might wish to send a delegate to this conference.

**PROGRAMME D'ÉCHANGE SCIENTIFIQUES AVEC
LA ROYAL SOCIETY OF LONDON**

En août 1982, la Royal Society of London et le CRSNG ont signé une entente sur la coopération scientifique afin de favoriser les échanges entre des candidats choisis dans les disciplines des sciences naturelles et du génie. Ces visites permettront aux participants des deux pays de collaborer avec leurs collègues et d'entreprendre des échanges productifs.

Ce nouveau programme avec la Royal Society entrera en vigueur en avril 1983 et, chaque année, 20 chercheurs de chacun des pays pourront en bénéficier. Les candidats choisis devront préalablement avoir pris contact avec le ou les chercheurs qui les accueilleront afin de déterminer l'activité scientifique ou le projet de recherche collectif ainsi que le moment et la durée de la visite dans l'autre pays.

Cette coopération avec la Royal Society porte à cinq les programmes d'échanges bilatéraux entre le CRSNG et des organismes semblables d'autres pays. Le Guide des subventions 1983-84 donne à la page 58 la liste de ces organismes et une description générale des programmes d'échanges, des critères d'admissibilité et des modalités de demande.

Si vous désirez obtenir plus de renseignements sur ce nouveau programme d'échanges, veuillez appeler le Dr. Alfred Kugler au (613) 993-9681.

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Willowdale, Ontario M2K 2W2
(416) 222-8167, Telex: 06-966575

OR

1328 West Pender Street
Vancouver, British Columbia V6E 2W3
(604) 684-5377, Telex: 04-508765

In accordance with By-Law 10, Meetings, of the Canadian Meteorological and Oceanographic Society, I am giving notice that the Annual General Meeting will be held May 3, 1983, at 7:30 p.m. at the Banff Springs Hotel. This meeting will include those items listed under By-Law 10(d), which reads:

"A General Meeting, to be called the Annual General Meeting, shall be held each year, on a day and at an hour to be determined by Council, to approve the minutes of the preceding Annual General Meeting, to receive the reports of Council, the auditor or auditors and the ballot counters, to establish the fees for the next calendar year, to discuss and determine such questions as may be proposed relative to the affairs of the Society, to appoint an auditor or auditors for the ensuing year, and to install the Council elected for the ensuing year."

In addition to the above, Council will present a motion that: "the AGM permit the Executive to approve up to a fifty percent reduction in fees for retired members who apply to the Executive for such a reduction."

There will also be motions from Council regarding:

- (i) the status of the associate membership category, and
- (ii) the publications members receive as part of their membership fee (Newsletter plus various combinations of A-O, Chinook, and the Climatological Bulletin).

The exact wording of these motions will be formulated at Council No. 3.

The agenda for the Annual General Meeting will be published in the Congress Newsletter which will be mailed to all members before the AGM.

John Falkingham
Corresponding Secretary

CMOS TOUR SPEAKER - NEW SCHEDULE

Due to personal illness, Dr. René Ramsier regrets that he will not be able to undertake the C.M.O.S. speaker tour this winter as originally planned. This tour is being rescheduled to take place in the fall. The tour itinerary will be published in the newsletter when all new dates and places are known.

Pour raison de santé, le docteur René Ramseier a le regret d'annoncer qu'il ne pourra entreprendre la tournée du conférencier de la SCMO telle que prévue. Cette tournée sera remise à l'automne. L'itinéraire de la tournée sera publié dans le bulletin de nouvelles lorsque les nouvelles dates et lieux seront connus.

PAYMENT EN TROP DE LA COTISATION

Un nombre surprenant de membres a envoyé un trop gros chèque de cotisation, probablement à cause d'une interprétation erronée du relevé. Le surplus sera remboursé. Veuillez prendre avis que la cotisation pour 1983 est de \$40.00, incluant Atmosphere-Océan. Le Bulletin Climatologique est offert en supplément à \$10.00. Naturellement, la Société accepte les dons et fournira des reçus pour fins d'impôt avec plaisir.

OVERPAYMENT OF DUES

A surprising number of members have made an overpayment of annual dues, presumably as a result of misinterpretation of the renewal notice. These will be refunded.

Please be advised that the fees for 1983 are \$40.00, including Atmosphere-Ocean. The Climatological Bulletin is an additional option, at \$10.00.

Naturally, the Society accepts donations and will gladly provide receipts for income tax purposes.

Conformément au Règlement 10, Réunions de la Société Canadienne de Météorologie et d'Océanographie, je donne l'avis que l'Assemblée Générale Annuelle aura lieu le 3 mai 1983, à 19 h 30 au Banff Springs Hotel. Cette assemblée examinera les points contenus dans l'article 10(d) qui se lit comme suit :

"Une Assemblée Générale, appelée l'Assemblée Générale Annuelle, est tenue chaque année, au jour et à l'heure déterminés par le Conseil d'administration, afin d'approuver le procès verbal de l'Assemblée Générale Annuelle précédente, de prendre connaissance des rapports du Conseil d'administration, du (des) vérificateur(s) et des scrutateurs, de fixer les montants des cotisations pour la prochaine année civile, de discuter et de prendre des décisions sur les questions concernant les affaires de la Société, de choisir un (des) vérificateur(s) pour l'année suivante, et de procéder à l'investiture des administrateurs élus pour l'année suivante."

En plus, le Conseil présentera une motion que : "l'AGA permet à l'Exécutif d'approuver jusqu'à une réduction de cinquante pour cent sur les cotisations pour les membres retirés qui en font la demande à l'Exécutif."

Aussi, il y aura des motions par le Conseil concernant :

- (i) l'état de catégorie du membre associé, et
- (ii) les périodiques que les membres reçoivent avec leur cotisation (Nouvelles, ainsi que diverses combinaisons de l'A-O, le Chinook, et le Climatological Bulletin).

Une meilleure formulation de ces motions sera faite au Conseil n° 3.

L'ordre du jour pour l'Assemblée Générale Annuelle sera publié dans le bulletin des nouvelles du Congrès qui sera posté aux membres avant l'AGA.

John Falkingham
Secrétaire à la
Correspondance



MEMBERSHIP RENEWAL FORMS

This year, CMOS started using pre-printed forms for fee renewal notices. This same form is used for all categories of members as well as for non-member subscriptions to our publications. Unfortunately, because of the limited space available for instructions on the form, there has been some confusion about it.

Members should note that they do not have to pay the additional \$50.00 subscription fee in order to receive Atmosphere-Ocean. This line item is intended for non-member subscriptions only. For their \$40.00, \$12.00, or minimum \$75.00 membership fee, Regular, Student, or Corporate/Sustaining members will still get five issues of A-O as in past years. Associate members do not receive A-O.

If you wish to receive the newly-acquired Climatological Bulletin, you must, however, include an additional \$10.00 subscription fee. This publication is not included in the membership fee.

For those members who misunderstood the form and sent too much money, please accept our apologies. Refunds will be mailed as soon as possible.

J. Falkingham
Corresponding Secretary



28 February 1983

28 février 1983

NOTICE TO ALL MEMBERS

AVIS A TOUS LES MEMBRES

In accordance with By-Law 4(c) of the Canadian Meteorological and Oceanographic Society, I am providing you with:

Selon les termes de l'Article 4(c) des Règlements de la Société Canadienne de Météorologie et d'Océanographie, je vous fais parvenir:

- a) the list of members of the current Council
- b) the list of nominations for 1983-84 made by the Nominating Committee
- c) a copy of the By-Law 4(d)

- a) la liste des membres du Conseil en cours
- b) la liste des mises en candidature pour 1983-84 telle que rédigée par le Comité des Mises en Candidature
- c) une copie de l'Article 4(d)

The Council of the Canadian Meteorological and Oceanographic Society for 1982-83 consists of the following:

Le Conseil de la Société Canadienne de Météorologie et d'Océanographie pour 1982-83 se compose comme suit:

President
Vice President
Treasurer
Corresponding Secretary
Recording Secretary
Councillors-at-Large

Dr. Richard Asselin
Dr. René Ramseier
Mr. Ken B. Yuen
Mr. John Falkingham
Mr. J. Carr McLeod
Mr. Peter J. Kociuba
Mr. Pierre Ducharme
Dr. G.T. Needler
elected locally/élus localement
Hodgson, Morrisey, Maheu et Noisieux
Chartered Accountants

Président
Vice Président
Trésorier
Secrétaire Correspondant
Secrétaire d'Assemblée
Conseillers

Local Centre Chairmen
Auditor

Présidents régionaux
Vérificateur

Nominations for Council for 1983-84:

Mises en candidature pour le Conseil pour 1983-84:

President
Vice President
Treasurer
Corresponding Secretary
Recording Secretary
Membership Secretary
Councillors-at-Large

Dr. René Ramseier
Dr. Neil Campbell
Mr. Ken B. Yuen
Mr. John C. Falkingham
Mr. Rick G. Lawford
Mr. Brian J. O'Donnell
Dr. Chris Garrett
Dr. Barry Goodison
Dr. Steve Calvert

Président
Vice Président
Trésorier
Secrétaire Correspondant
Secrétaire d'Assemblée
Secrétaire des Membres
Conseillers

By-Law 4(d)

Article 4(d)

Nominations (in addition to those made by the Nominating Committee) will be accepted by the Recording Secretary up to the last day of March **, provided -

Les mises en candidature (en plus de celles proposées par le Comité des Mises en Candidature) seront acceptées par le Secrétaire d'Assemblée jusqu'au dernier jour de mars **, pourvu -

- i) that the nominee is eligible for the office for which he is nominated,
- ii) that the nominee acknowledges his willingness to accept office if elected by signing the nomination, and
- iii) that the nomination is signed by four members

- i) que le candidat soit éligible au poste pour lequel il est présenté,
- ii) que le candidat confirme son intention d'accepter le poste advenant son élection en signant l'acte de mise en candidature, et,
- iii) que l'acte de mise en candidature soit signé par quatre membres

** before March 25, 1983

** avant le 25 mars 1983

Nominations should be sent to the Corresponding Secretary;

Mises en candidatures devraient être envoyés au Secrétaire Correspondant:

Mr. John Falkingham
Ice Centre Environment Canada
365 Laurier Ave. W., 3rd. floor
Ottawa, Ont. K1A 0H3

Si vous craignez que le courrier ne puisse nous atteindre avant la date de l'échéance, veuillez contacter le Secrétaire Correspondant par téléphone ou par telex.

If the deadline is unlikely to be met by mail, please contact the Corresponding Secretary by telephone or telex.

John Falkingham
Corresponding Secretary/Secrétaire Correspondant
(613) 996-5236 telex 053-3761



CMOS - SCMO

Suite 805

151 Slater St.

Ottawa, Ontario, Canada

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MAIL