



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



AOÛT/AUGUST 1983 VOL.11. NO.4.

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EXECUTIVE MEETING #2

Following are some of the highlights of the second Executive meeting held on August 19, 1983.

1. The Climatological Bulletin issue to be printed in October will be distributed free of charge to members in order familiarize them with this new CMOS publication. The 1984 subscription rate will be \$10.00 and it can be ordered on the membership renewal forms to be mailed in December.
2. The Vice-President is actively pursuing the issue of accreditation of meteorological and oceanographic consultants in conjunction with assembling a new Professionalism Committee. The Executive Director was asked to seek legal advice on the implications of accreditation and on the draft set of guidelines that have been prepared. Watch future Newsletters for more information on this important issue.
3. A long overdue discussion on the role of Councillors-at-Large was held. It was generally agreed that this position has unfortunately evolved into an almost honorary role primarily because of the lack of travel funds to keep Councillors involved and because a quorum for Council is the same as a quorum for the Executive meaning that the Executive can in fact make Council decisions. The discussion turned to an examination of the roles of Council and the Executive. An ad-hoc committee consisting of the Vice-President, Past-President, and Corresponding Secretary was asked to put some of the ideas on paper and report to Council meeting #1.
4. The business of incorporating the Society has been held up because of the necessity to re-write the Constitution and By-Laws to conform to legal standards. Legal counsel has been retained and the assistance of Consumer and Corporate Affairs is being sought. This is not an expensive or terribly difficult procedure but will require a lot of work to re-draft the By-Laws - a step that will also require the approval of a General Meeting.
5. The format and rules for the balloting for the new logo were determined and the Corresponding Secretary asked to prepare the Newsletter article.
6. The next Executive meeting is scheduled for Sept 13 and Council meeting #1 for Oct 27-28.

NEWSLETTER SCHEDULE

It is planned that the C.M.O.S. Newsletter will be published five times per calendar year. Deadlines for the input to these issues will be approximately two weeks prior to the mailing dates, as listed below:

Mailing Dates	Press Deadlines
1st - February 28	February 14
2nd - June 30	June 15
3rd - August 31	August 15
4th - October 31	October 15
5th - December 31	December 10

NEW
CMOS-SCMO
LOGO

(à lire 6,7,et 11)

(see pages 6,7,and 11)

OPERATIONAL METEOROLOGY

Last January, following a request from Mr. D. Sortland supported by more than 50 persons, the Executive Council of CMOS officially recognized a new special interest group on operational meteorology. At the 17th Annual Congress of CMOS in May, a meeting to which 13 persons attended was held and the following steering committee was elected:

Chairman, Gérard Neault
Heather Auld
Gerald Nachnee
Wayne Lumsden
Réal D'amours

People who wrote to D. Sortland in support of the formation of the group have received or will receive shortly a letter advising them of the election. Others who might be interested in becoming a member of this new group can either contact a member of the steering committee or write to the chairman:

Gérald Neault
app. 9, 10515 85 avenue
Edmonton, Alberta
T6E 2N5

The group has already more than 60 members. The only requirement to join the group is to be interested by operational meteorology.

Gérald Neault

CORPORATE AND SUSTAINING MEMBERS

Fathom Atlantic Ltd. Dartmouth, Nova Scotia	Ph.D. Associates Ltd. Rexdale, Ontario
NORDCO Ltd. St. John's, Newfoundland	Beak Consultants Ltd. Richmond, British Columbia
Panarctic Oils Ltd. Library Calgary, Alberta	Frederick Goertz Ltd. Willowdale, Ontario
Seaconsult Marine Research Ltd. Vancouver, British Columbia	Wellsdale Research Limited St. Albert, Alberta
Dobrocky Seatech Ltd. Sidney, British Columbia	Bristol Aerospace Ltd. Winnipeg, Manitoba
Aanderaa Instruments Ltd. Victoria, British Columbia	Hermes Electronics Ltd. Dartmouth, Nova Scotia
Viatec Resources Systems Inc. Calgary, Alberta	Intera Environmental Consult Ltd. Calgary, Alberta
Alberta Agriculture Advisory Committee on Weather Modification Three Hills, Alberta	FENCO Consultants Calgary, Alberta
Ontario Hydro - Meteor. Systems Toronto, Ontario	Airflow Developments Canada Ltd. Mississauga, Ontario
Geneq Inc. Anjou, Quebec	M.E.P. Ltd. Downsview, Ontario
Hymeteq A.L. Ltd. Downsview, Ontario	Envirocon Ltd. Vancouver, British Columbia
Petro-Canada Calgary, Alberta	MacLaren-Plansearch Ltd. Halifax, Nova Scotia
Canada Oil and Gas Lands Administration Ottawa, Ontario	MacDonald Dettwiler & Associates Ltd. Richmond, British Columbia

NOTICE TO NEW MEMBERS

Those who apply for membership must wait for acceptance by Council. As a result, new members can expect several months to pass before their names are printed in the Newsletter.

A council meeting has not been held since the last issue of the newsletter. As a result, there are no new members to report.

LETTERS TO THE EDITOR

In the June 1983 issue of the Newsletter, the Editor offered to publish correspondence on the subjects raised in the summary of the "Survey of Expectations from CMOS".

Sir:

I must take issue with a statement made in "Results of the 1982 Survey" presented in the June 1983 issue. The majority regard it (A-O) as being too scientific and dealing too little with applied meteorology, there are some who believe the opposite, calling for higher quality articles. This sentence most definitely infers that articles on operational meteorology are of low quality. Hopefully this is just a poorly worded sentence and not the true belief of the author. I think it is quite obvious that the quality of the article is not dependent on whether it is operational or scientific, in fact, an article can indeed be both at the same time.

Ken Jones.

The point made by Mr. Jones is well taken. Far be it for us to want to belittle the importance of applied meteorology, taking into account the many comments received calling for greater attention to that branch of meteorology. It is of course also true that there can be high or low quality articles in any field, be it theoretical or applied meteorology. It was probably the need to present a very concise summary of comments that caused the imprecise choice of words quoted by Mr. Jones. The following would have been a better formulation:

"While the majority regards it i.e., Atmosphere-Ocean as being too scientific and dealing too little with applied meteorology, there are some who believe that it should concentrate more on specific aspects of theoretical meteorology, such as atmosphere/ocean interaction, and others who call for higher quality scientific articles."

Uri Schwarz

PHOTOS - PHOTOS - PHOTOS

We are calling on meteorologists/oceanographers who are amateur photographers, and on photographers who are amateur meteorologists/oceanographers, to submit photographs showing Canadian weather (with or without landscapes) throughout the seasons, for a CMOS CALENDAR. Black/White photos on glossy paper, size 20 x 25 cm (8 x 10 ins.) are wanted. Submit any time, and if we receive sufficient photos by the end of this summer, we will try and produce the calendar for 1984. Photos received later will be used for a subsequent calendar. So, start clicking! Here is your chance to become famous! Please submit photos for the attention of Uri Schwarz, Executive Director at CMOS Headquarters. (Address on back of Newsletter)

The Mesoscale Meteorology Research Planning Workshop held in Toronto, January 24-26, 1983.

A limited number of copies of papers presented at the workshop have been printed and are available to members free of charge on a first-come first-serve basis.

A few copies of the summary of working group reports have also been printed and will be mailed to members upon request while quantities last.

Please write to the C.M.O.S. headquarters (address on back of Newsletter) to request copies.

LE PRIX TYLER

Les citoyens et les organisations de tous les pays sont invités à soumettre des noms pour le prix Tyler 1984, la plus importante récompense dans le domaine de l'énergie et de l'écologie. Appuyé par le Programme des Nations unies pour l'environnement, ce prix est décerné par le John and Alice Tyler Energy/Ecology Fund.

Le nom des candidats doit être présenté avant le 15 octobre au directeur de cet organisme, University of California, University Park, Los Angeles 90089-4919. Les titres, les documents justificatifs et les lettres de référence doivent être reçus au plus tard le 1^{er} novembre.

Les prix sont décernés pour l'une des réalisations suivantes:

- la protection, le maintien, l'amélioration et la compréhension des conditions écologiques n'importe où dans le monde;
- la découverte, l'utilisation nouvelle, l'amélioration ou la compréhension de sources d'énergie connues ou de remplacement.

Depuis 1973, le prix Tyler a été remis à 11 lauréats pour des réalisations exceptionnelles qui ont profité à l'humanité tout entière. Les prix totalisent plus de un million de dollars et varient entre 150 000 et 200 000 dollars chaque année.

Les autres lauréats se sont distingués par leur avant-gardisme dans le domaine de la purification de l'eau, des normes de qualité de l'eau, la découverte de la composition à l'écologie animale, de nouvelles perspectives sur les interactions entre l'environnement et le corps humain, et par le rôle prépondérant qu'ils ont joué à l'échelle mondiale en ce qui concerne l'environnement humain et la protection de la faune.

Renseignements:

Directeur
John and Alice Tyler
Energy/Ecology Fund
(213) 743-6343

MISSING VOLUME!

A number of CMOS members have requested a missing Newsletter they thought they had not received between February 1983 (Vol. 11 No. 1) and June 1983 (Vol. 10 No.3). The editors originally felt that the congress issue which replaces the springtime Newsletter would be Vol. 11 No.2 and the June issue should have been Vol. 11 No.3. Unfortunately, the 11 was inadvertently printed as 10 in the June issue and the Congress issue was not identified as a Newsletter. In their wisdom, your editors have decided to continue this unique numbering system and hopefully this issue will be Vol. 11 No. 4. Next year, we won't count the Congress Issue!

Editors.

ANNUAL FEES FOR / COTISATIONS ANNUELLES POUR 1983

Regular Membership / Membre Régulier	- \$ 40.00
Student Membership / Membre Étudiant	- \$ 12.00
Associate Membership / Membre Associé	- \$ 20.00
Corporate (Sustaining) Membership / Membre de Corporation (Soutien)	- \$ 75.00(minimum)
Subscription to / Abonnement à Atmosphere-Ocean	- \$ 50.00
Subscription to / Abonnement à Climatological Bulletin	- \$ 10.00

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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Editorial Board

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Associate Editors: André Bolduc
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.

Adresse postale

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Conseil de rédaction

Rédacteur en chef: Dave Mudry
Rédacteurs adjoints: André Bolduc
Rick Lee

L'OACI CÉLÈBRE LE BICENTENAIRE DU PREMIER VOL HUMAIN

Montréal, juillet 1983 - - Il y a deux cents ans (le 21 novembre 1783) l'homme s'élevait pour la première fois dans les airs: ce jour-là, une montgolfière emportait deux passagers au-dessus des toits de Paris. Ces deux premiers aéronautes, Pilâtre de Rozier et le Marquis d'Arlandes, franchirent près de huit kilomètres en 20 minutes, à une hauteur maximale de 150 mètres, réalisant ainsi un des plus vieux rêves de l'humanité.

Cet événement historique, qui marque le début des voyages aériens et que suivront 120 ans plus tard les premiers vols motorisés, sera commémoré par diverses manifestations telles que des rallyes en ballon et de grandes expositions en France, aux États-Unis et ailleurs dans le cadre du Bicentenaire de l'Air et de l'Espace.

En sa qualité d'organisme international de réglementation s'intéressant à tous les aspects de l'aviation civile, l'OACI présente à cette occasion, au siège de l'Organisation (1000 ouest, rue Sherbrooke) une exposition qui illustre les grands moments de l'histoire du vol, ainsi que les perspectives d'avenir que les techniques spatiales offrent à l'aviation civile. On pourra y admirer plusieurs œuvres d'art sur le thème de l'aviation dont une tapisserie des Gobelins due à Gleizes-Villon et intitulée "Histoire du vol", de même que des affiches historiques et des dessins d'enfants d'une trentaine de pays. Le public aura également l'occasion d'entendre une narration musicale sur l'histoire du vol, enregistrée par Orson Welles.

L'exposition, qui durera jusqu'au 15 septembre, est ouverte au public du lundi au vendredi de 9 heures à 17 heures.

PROBABILITY OF PRECIPITATION

- 0% No precipitation even though it may be cloudy.
- 10% Dry weather with only one chance in ten of snow or rain falling.
- 20% Dry weather still expected.
- 30% Go ahead with your picnic, boating or ski plans but you may have to take shelter.
- 40% An umbrella is recommended. Make alternate plans for outdoor activities that are conducive to rain. Not a good day to pave the driveway. Keep your fingers crossed!
- 50% It's even Steven on whether it snows or not. Be prepared for all eventualities.
- 60% Want to water your lawn? The odds are favorable that Mother Nature might give you some help.
- 70% Suggest cancellation of outside events. The chances for dry weather have shrunk to three in ten.
- 80% Wet weather likely. Make appropriate plans.
- 90% The occurrence of precipitation is a near certainty. Venture out if you enjoy walking in the rain or playing in the snow.
- 100% Precipitation is a certainty.

(Taken from the fact sheet produced by the Weather Services Division, Field Services Directorate).

PROBABILITÉ DE PRÉCIPITATIONS

- 0% Aucune précipitation, même si le temps devient couvert.
- 10% Temps sec. Seulement une chance sur dix qu'il neige ou pleuve.
- 20% On s'attend toujours à un temps sec.
- 30% N'annulez pas votre projet de pique-nique, de canotage ou de ski, mais vous risquez d'avoir à vous abriter.
- 40% Un parapluie sera peut-être nécessaire. Ne prévoyez que des activités extérieures pouvant s'accommoder de la pluie. Mauvais jour pour goudronner l'allée du garage. Touchez du bois!
- 50% Les chances qu'il neige ou non sont égales. Soyez prêt à toute éventualité.
- 60% Voulez-vous arroser votre pelouse? Il y a fortes chances que Dame Nature vous vienne en aide.
- 70% Il est conseillé d'annuler toute activité extérieure. Il n'y a plus que trois chances sur dix pour qu'il fasse beau.
- 80% Il fera sans doute un temps humide. Concevez vos projets en conséquence.
- 90% Il est presque sûr qu'il y aura des précipitations. Ne vous aventurez dehors que si vous aimez patauger dans la pluie ou jouer dans la neige.
- 100% Il y aura précipitations.

(Tiré de la fiche d'information établie par la Division des services météorologiques, Direction générale des services extérieurs.)

ICAO EXHIBIT MARKS BICENTENNIAL OF HUMAN FLIGHT

Montreal, July 1983 - - Two hundred years ago (on November 21, 1783) man soared in the air for the first time when a Montgolfier balloon took two passengers over the rooftops of Paris. The first two aeronauts, Pilâtre de Rozier and the Marquis d'Arlandes, covered about eight kilometers in 20 minutes at a peak altitude of 150 metres, thereby realizing one of mankind's oldest dreams.

This historic feat, which marked the dawn of aerial travel before the first engine-powered flights 120 years later, will be celebrated with balloon rallies, major exhibits and other events in France, the United States as well as in Canada.

ICAO as the international regulatory agency concerned with all aspects of civil aviation is holding an exhibit at its headquarters (1000 Sherbrooke St. West). The displays highlight major events in the history of flight as well as future prospects of space techniques for civil aviation. Several art works and historical posters on aviation will be on view including a Gobelin tapestry on "The History of Flight" by Gleizes-Villon and children's art works from some 30 countries. The public will also be able to hear a musical narration on the history of flight by Orson Welles.

The exhibit is open to the public from Monday through Friday from 9 a.m. to 5 p.m. until September 15.

L'Association Canadienne des Géographes fait part d'une nouvelle initiative en vue de mettre sur pied la publication d'une revue trimestrielle orientée en direction des géographes qui pratiquent leurs spécialités dans les secteurs d'activités gouvernementales canadiennes, d'affaires et d'enseignement.

The Operational Geographer/Géographie Appliquée (T.O.G.) est à la recherche d'articles rédigés en anglais ou en français. T.O.G. sera éventuellement publié quatre fois par an à compter de 1985.

T.O.G. met l'accent sur la communicabilité entre géographes professionnels au Canada et souhaite la publication d'articles et de relations d'échanges se rapportant à des publications contemporaines et à des sujets de discussions importantes dans le contexte de la géographie appliquée et de la géographie en tant que discipline professionnelle. Articles, revues et échanges souligneront les préoccupations fondamentales à cet égard et les perceptions thématiques ou les discussions. T.O.G. met l'accent sur la recherche et la synthèse, leur actualité et leur compréhension.

Les structures du T.O.G. impliquent:

- 1) Un article de tête
- 2) Des articles dont au moins un portant sur les thèmes suivants par numéro:
 - a) Point de vue actualisé d'un important thème sous-jacent mettant l'accent sur des applications pratiques.
 - b) Étude de cas (sans doute sa complexité inhérente pourrait être présentée sous forme de notes) qui se succéderont dans une série de numéros.
 - c) Révisions des principales bases et leur implication.
- 3) Informations
 - a) Nouvelles de l'A.C.G. incluant des rapports de groupes d'étude.
 - b) L'enseignement en géographie et développement des spécialités.
 - c) Messages des lecteurs.
 - d) Quelques pages humoristiques.
- 4) Rapports de conférences.
- 5) Révisions thématiques d'ouvrages ou d'autres médias d'information.

La longueur maximale des articles se limite à 3 000 mots, celle des notes, des rapports et des comptes rendus bibliographiques se limite à 1 000 mots et celle des autres items ne doit pas dépasser 500 mots. Les manuscrits publiés ne seront pas retournés aux auteurs lesquels ne recevront pas de tirés à part.

La correspondance se rapportant à l'organisation et à la structure interne du T.O.G. devrait être adressée directement au Président de l'ACG, a/s Bureau du Secrétaire situé à Montréal. Les présentations d'articles, de notes ou de comptes rendus ainsi que la correspondance avec l'éditeur de T.O.G. peuvent être adressées directement au: Professeur Brenton M. Barr, Department of Geography, University of Calgary, 2530 University Dr. N.W., Calgary, Alberta T2M 1H4 (403) 284-5586 ou s'il y a lieu: Paul-Yves Denis, Dépt. de Géographie, Université Laval, Ste. Foy, Québec G1K 7P4.

The Canadian Association of Geographers announces a major initiative to create a quarterly journal aimed at those geographers practicing their skills in Canadian government, business and education. The Operational Geographer/Géographie Appliquée, (T.O.G.) seeks contributions in English or French, T.O.G. will appear four times per year by 1985.

T.O.G. is a forum for communication among practising geographers in Canada and encourages articles and related communications pertaining to contemporary issues and topics important to the practising geographer and to geography as a professional discipline. Articles, reviews and communications will stress state-of-the-art concerns and thematic overviews or discussion. T.O.G. will emphasize survey and synthesis, currency and readability.

The structure of T.O.G. comprises:

- 1) Editorial
- 2) Articles - at least one each of the following per issue:
 - a) state-of-the-art overview of an important sub-field, focusing on practical applications.
 - b) case study (perhaps consisting of multiple parts in successive issue).
 - c) policy reviews and implications.
- 3) Regular Features:
 - a) C.A.G. News (and communications from study groups).
 - b) geographical education and development of skills.
 - c) communications from readers.
 - d) a humorous column.
- 4) Conference Reports.
- 5) Thematic Reviews of Books and Other Media.

Maximum length of articles is 3,000 words of reviews and reports, 1,000 words, and of all other items, 500 words. Manuscripts of material published will not be returned to the authors, and offprints of published items will not be produced.

Correspondence pertaining to the organization and structure of T.O.G. should be directed to the President of the C.O.G., c/o the C.A.G. Montreal Office.

Submissions of material and correspondence with the editor should be addressed to: Professor Brenton M. Barr, Department of Geography, University of Calgary, 2500 University Drive, N.W., Calgary, Alberta T2N 1N4 (403)284-5586.

PRIZE NOMINATIONS SOUGHT

Nominations are invited for the 1984 Tyler Prize - the world's biggest award for achievement in the field of energy and ecology. Endorsed by the United Nations Environment Program, the prize is awarded by the John and Alice Tyler Energy/Ecology Fund in California.

Individuals and organizations around the world are asked to submit nominations by October 15, 1983, to the fund's executive director, care of the University of Southern California, University Park, Los Angeles 90089-4019, U.S.A. Related credentials, supporting material and letters of reference must be received no later than November 1.

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CANDIDATES FOR THE NEW CMOS LOGO

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CANDIDATES FOR THE NEW CMOS LOGO

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PLEASE SEE THE LAST PAGE OF THE NEWSLETTER FOR BALLOTING INSTRUCTIONS

Session 5C: Oceanography II

In the first paper of this session, W.J. Emery (U.B.C. Dept. Oceanography) reported on the anomalous trajectories followed by four buoys deployed in August 1982 in the Gulf of Alaska. There, trajectories lie well northward of the usual path of eastward flow and indicate a strong reduction in the size of the Alaskan Gyre. Accompanying changes in upper layer dynamic topography were consistent with observed tracks. This phenomenon was discussed in terms of its relation with changes in the atmospheric circulation on the north east Pacific.

The other papers were concerned with coastal and estuarine studies. Louise Royer (also from U.B.C. Oceanography) talked about salinity observations obtained from ferries regularly crossing the Strait of Georgia. Two years of data along routes respectively on the north and the south of the Fraser River Plume were presented. Model studies relating runoff to observed salinity variations and winds, based on extension of Stronach's upper layer model, were also shown to be moderately successful. Some of this work appeared in *Atmosphere-Ocean*, 20, 357. Turning to the Atlantic Coast, Peter Smith (of the Bedford Institute) reported on current measurements made on Browns Bank (off the southern tip of Nova Scotia) and on theoretical interpretations of the observed currents. The clockwise gyre observed around the Bank appears to be due to topographic rectification of the tide, but winds and offshore currents may lead to breakdowns of the gyre. Another gyre, the Sitka eddy, was described by Sus Tabata (of the Institute of Ocean Sciences, Sidney) with the help of historical hydrographic data (cf. also *J. Phys. Oceanogr.* 12, 1260). This anticyclonic eddy ranges from 200-300 km in diameter and down to a depth of 2000 m. Surface speeds of up to 2 knots have been observed. G. Swaters (U.B.C. Oceanography) has now modeled the eddy in terms of topographic interaction.

The only chemical oceanography paper to the Banff Congress, unfortunately, was presented by Jean Lebel (Univ. Québec à Rimouski), who reviewed pH and alkalinity variations in the St. Lawrence and Saguenay estuaries and interpreted them in terms of the circulation of these two systems.

P.H. LeBlond

Summary of the Cloud Physics Session

Five papers were presented in this session primarily on the topic of weather modification in Alberta. All the authors and speakers are employed in the Atmospheric Sciences Division of the Alberta Research Council (ARC). The talks were evidence of a strong program of atmospheric research at ARC. The presentations were very impressive, particularly in terms of the professional drafting and artwork that was used in producing the visual aids.

Geoff Strong presented a paper describing scale interactions in the atmosphere and how these affect small scale convection over Alberta. Frank Robitaille, Terry Krauss and Bob Kochtubajda then presented papers describing ground generator seeding, cumulus cloud, hailstorm feeder and orographic cloud seeding. All of these papers used data generated by the new INTERA/ARC research aircraft which was described in some detail and has many other useful applications for atmospheric research. The cumulus and hailstorm feeder cloud seeding experiments showed evidence that ice crystals could be produced by AgI flares in locations and concentrations consistent with previously defined weather modification hypotheses. The study of the modification potential of orographic cloud systems was particularly exiting because the measurements of liquid water and ice crystal concentrations in such Canadian clouds are very unique. However, more data is required before definitive conclusions can be made. All the papers generated lively question and answer sessions that were enjoyed by the audience.

G.A. Isaac
10 August 1983

Yao, Freeland and Mysak presented an analysis of current meter information taken on the British Columbia shelf over a period of one year. They found coherence of the low frequency along shore circulation at 0.09 cpd. Seasonally averaged currents reflected seasonal wind changes except off the southern tip of Queen Charlotte Islands.

Sanderson and Okubo examined the dispersion of drifters with non-zero initial dimensions. Using deterministic and turbulent components of drifter motion, an expression for the variance was calculated for a general flow field.

Cummins and LeBlond reviewed the general properties of internal waves and applied Lee and Beardsley's non-linear wave model to field observations of solitary internal waves in Davis Strait. An improved fit to experimental data was obtained using a KdV equation including second-order non-linear effects.

Emery and Thomson examined the temporal evolution of mesoscale eddies in the North Pacific using a large XBT data set obtained in a multi-ship survey. Emery and Lee discussed the development of a simple interface to infer real-time dynamic heights from XBT data and mean T-S and S-Z curves. Field tests using XBT and CTD casts confirm the accuracy of this technique.

R.G. Ingram

SESSION 9E BOUNDARY LAYER

The session on the atmospheric boundary layer was led off by a description of the Nanticoke II Shoreline Dispersion Experiment by R.M. Hoff of AES (Downsview). Because many industrial complexes are located adjacent to large water bodies, the development of the thermal internal boundary layer and its interaction with plumes is an important practical question. This sequence of multi-faceted experiments is contributing significantly to the required understanding and model development. G.A. McBean, AES (Sidney) then presented a description of a baroclinic boundary layer over the ocean. The vertical divergence of the turbulent heat fluxes leads to a heating rate similar to that observed. The advection heating rates were smaller but significant. The following two papers, both presented by J. Salmon, in the absence of the authors, dealt with modelling of flow over low topography. P. Taylor's, AES (Downsview) latest version of the MS 3DJH model was shown to compare favorably with data from field experiments. The same model was applied to flow over a barchan sand dune by J.L. Walmsley, AES (Downsview) and A.D. Howard (U. of Virginia) with encouraging results. The model will now be used to drive a sand-transport model which could predict the rate of movement of the sand. The locale of interest in the next paper was the urban area as C.S.B. Grimmond (Geography, U. of British Columbia) described her results of a measurement programme to assess the suburban water balance. Particular emphasis was given to the role of evapotranspiration in the temporal variations of the components. The last paper on the session took us up into the clouds to examine the role of isothermal 0°C layers in precipitation bands. R.E. Stewart (Physics, U. of Toronto) proposed mechanisms for the formation of these layers and described how these processes are affecting the precipitation bands.

Gordon McBean

*****CONTINUED FROM PAGE 5

Prizes are awarded for any of the following achievements:

the protection, maintenance, improvement and understanding of ecological conditions anywhere in the world

the discovery, further development, improvement or understanding of known or new sources of energy.

Since 1973, the Tyler Prize has gone to 11 environmental laureates for outstanding achievements benefiting mankind. Prizes totaling over \$1 million have been awarded, ranging from \$150,000 to \$200,000 annually.

The International Glaciological Society held their annual symposium during the week of June 26-July 1, 1983. The venue this year was Evanston, Illinois - suburb of Chicago, home of the Detroit Lions summer camp, the National Women's Temperance Union, and Northwestern University, which provided excellent facilities for the conference.

The theme was "Ice and Climate Modelling" - a topic intended to bring together climate, sea ice, and glacier ice modellers. That the symposium was successful in fulfilling this intention is attested to by the fact that well over a hundred delegates representing some fifteen countries attended presentations by some of the world's leading experts in all of these fields. In each of the sessions dealing with specific topics, one or more "review" papers were presented to give delegates from other fields a broader insight into the subject at hand so they might better grasp and appreciate the more detailed and technical papers. Judging from the discussion that followed most presentations, this idea was a good one. Authors were encouraged (harangued) to submit their full papers, or at least extended abstracts, for publication in the *Annals of Glaciology* to be printed in early 1984. Of course, all papers and abstracts will be fully refereed.

Having just attended the CMOS Congress in Banff, I found it interesting to compare the IGS Symposium with our recent Congresses. The Symposium lasted twice as long as our Congresses but only half as many papers were presented. Authors were given between thirty and fifty minutes for presentation and discussion rather than ten to fifteen minutes. Chairmen still had to wield stern gavels but usually it was to curtail discussion rather than to cut off presentations. Generally authors had sufficient time to develop their ideas for the audience who gained a better understanding and appreciation for what they were saying. There were no joint sessions at the Symposium (no running from room to room) and sessions didn't start until nine o'clock in the morning (reasonable considering the intellectual discussions that usually keep one up til the wee hours). All in all the Symposium seemed much more relaxed than our Congresses which always seem to be fighting a losing battle with the schedule. In addition, the threat of fully refereed proceedings being published helped to ensure a high quality of scientific content.

Future Congress organizers take note. In my opinion at least, I would rather see fewer papers of higher quality and with adequate time for presentation and discussion. I am certain this would promote a more satisfying conference than the present state where hurried authors get chased off the stage by harried chairmen leaving an audience wondering if the last six slides would have enlightened them as to what the talk was all about.

John Falkingham

AES PUBLICATION

The Canadian Climate Centre of Environment Canada has remodelled *Climatic Perspectives*, its weekly climate information publication.

The main change is the addition of a new monthly supplement providing more detailed, longer-term summaries of weather events across Canada. The new publication combines *Climatic Perspectives* and the monthly *Canadian Weather Review*.

Further information:
Amir Shabbar
(416) 667-4711

Over two hundred scientist and meteorologists from many different countries attended the American Meteorological Society's Symposium on Meteorological Observations and Instrumentation at the Westbury Hotel in Toronto, April 11-15.

The Canadian Meteorological and Oceanographic Society shared cosponsorship with the World Meteorological Organization. Members of the Toronto Chapter of CMOS, in particular Jim Drummond as Chairman of the Local Arrangements Committee and Charles Lin as Facilities Manager, were very supportive. CMOS past president Richard Asselin accepted CMOS responsibility for primary sponsorship of the associated Industry Exhibition, where Canadian manufacturers and distributors were well represented among some 20 exhibitors.

Some 125 papers were presented, in 26 sessions, covering several major areas including observations from satellites, new techniques for remote sensing of the atmosphere, technologies for mapping severe weather operation of new meteorological radars from aircraft, and application of ultra-light aircraft to meteorological observations.

DU NOUVEAU AU SEA

Le Centre climatique canadien d'Environnement Canada a remanié *Perspectives climatologiques*, sa publication hebdomadaire d'information climatologique.

La principale modification apportée consiste en un nouveau supplément mensuel qui fournit des résumés plus détaillés et à plus long terme des événements météorologiques au Canada. La nouvelle publication réunit *Perspectives climatologiques* et *Revue du temps du Canada*.

Renseignements:
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CANADIAN GEOPHYSICAL UNION

JOINT 1984 CONGRESS

DALHOUSIE UNIVERSITY, HALIFAX, NOVA SCOTIA

29 May - 1 JUNE 1984

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The 18th Annual Congress of the Canadian Meteorological and Oceanographic Society and the 11th Annual Meeting of the Canadian Geophysical Union will be held jointly at Dalhousie University, Halifax, Nova Scotia from May 29-June 1, 1984. The theme is "The Marine Environment: Atmosphere, Ocean and Lithosphere". Theme Sessions common to the two Societies will include: Geophysical fluid dynamics, atmosphere, ocean and lithosphere; Arctic expeditions, CESAR, LOREX and FRAM; Scientific services to the offshore industry; Climate change; Coastal meteorology, oceanography and geophysics; and Boundary processes. Special Sessions will be organized to highlight a number of fields of particular interest. A feature of the meeting will be an Open House to be held at the Bedford Institute of Oceanography. Abstracts, not to exceed 400 words, related to the theme sessions or on any topic in meteorology, oceanography and geophysics will be accepted until January 27, 1984 and are to be sent to S.D. Smith (CMOS) and H.R. Jackson (CGU), Bedford Institute of Oceanography, P.O. Box 1006, Dartmouth, Nova Scotia, Canada B2Y 4A2. Commercial displays in the fields of oceanography, meteorology and geophysics are invited, and are being co-ordinated by Mr. John Brooke, 24 Flamingo Drive, Halifax, Nova Scotia B3M 1S7 - phone: (902) 443-2932.

ADVERTISING RATES - CMOS NEWSLETTER

The following rates are based on 8.5 x 11.5 inch (21.6 x 27.9 cm) black and white, camera-ready copy. Additional charges apply where typesetting, artwork or photographic plates are required. Distribution per issue is approximately 950.

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SCIENTIFIC SEMINARS, MEETINGS, WORKSHOPS

From time to time representatives of our respective meteorological and oceanographic government agencies attend scientific "state-of-the-art" sessions that are virtually unknown to the general membership. Since the C.M.O.S. Newsletter offers a medium through which such scientific information can be communicated, it is urged that it be used. If you have been to a scientific seminar, meeting or workshop that may be of interest to others, let's hear about it.

NEW CMOS-SCMO LOGO

The Great Logo Debate has been lingering on ever since oceanography joined the CMS and members realized that the "snowflake" does not depict the dual nature of the Society. Thirty logo designs that have been submitted by members are presented in this Newsletter. Unfortunately we do not have the resources to portray all of these logos in their best colour and size and have compromised by attempting to show them all at office photocopier quality. Our apologies and thanks to those who obviously spent considerable time on these designs.

As instructed by the last Annual General Meeting, the Executive is conducting a ballot to determine the most favoured candidate for the new logo of the Society. Although Council still has the final say on the new logo, they will be heavily influenced by the results of this ballot.

The rules of the balloting are as follows:

1. Each CMOS member is entitled to one ballot. The name of the member must be printed on the ballot so that this rule can be enforced.
2. There are thirty candidate logos displayed elsewhere in this Newsletter, numbered from one to thirty. The voter should rank up to ten logos (identified by number) in decreasing order of preference. In scoring, a first choice will receive 10 points, second choice 9 points, and so on to the last choice ranked or to the tenth choice, whichever comes first. The logo receiving the highest point total will be the winner.
3. Ballots should be mailed to:

CMOS-SCMO LOGO
Suite 801, 151 Slater Street
Ottawa, Ontario
K1P 5H3

and must be received before December 1, 1983.

Some comments on the candidate logos:

Some of the logos have been drafted while others are hand-drawn sketches. Please do not take this into account when ranking your choices and try to visualize them all as having the same quality. When the logo becomes official, it will of course be re-drafted to professional standards.

The logos were submitted in various sizes and many have been done in beautiful colours. They have been presented here in black and white and at approximately letterhead size. Since the logo will be most frequently seen on letterhead, the Executive felt the balloting should be done on that format.

Many of the logos were accompanied by written descriptions of their features and how they relate to the Society. In fairness to all candidates, these have not been printed. A written description will be prepared for the official logo when selected.

Logo numbers 1 to 17 do not contain any identification of the Society name. In a final version, this would be added in some manner. For example, the full name could be printed around the perimeter as is the case for the existing "snowflake" logo or added below the logo as for the "iceberg" that was presented to the AGM. When ranking your choices try to visualize this. In fairness, the "snowflake" logo (#1) has been presented without the name around the outside.

Any official name of the Society must be bilingual. Some of the logos are inherently so (including those that make use of the circular arrangement of the letters S-C-M-O-S). Those that are not must always be presented in pairs as is the case for the "snowflake". Please consider this when ranking your choices.

CMOS-SCMO LOGO BALLOT FORM

My choices for the new LOGO are

1st choice - # _____	6th choice - # _____
2nd choice - # _____	7th choice - # _____
3rd choice - # _____	8th choice - # _____
4th choice - # _____	9th choice - # _____
5th choice - # _____	10th choice - # _____

NAME _____

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