



C.M.O.S.

NEWSLETTER

S.C.M.O.



DECEMBER 1981

Vol. 9 No. 6

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FROM THE PRESIDENT'S DESK

I am concerned that a long rambling letter from the President may tend to be overlooked or ignored by members as you glance over your copy of the Newsletter. Consequently, for this issue, at least, I've decided to itemize the points of information to help you identify those which are of greatest importance for you. I do hope that you find this useful, and apologize if the results seem too formal or stilted.

1. MEMBERSHIP RENEWALS

By now, you should all have received your membership renewal form for 1982. Thanks largely to the Trojan efforts of our corresponding secretary, Peter Kociuba, these renewal notices have been produced by the Society this year rather than by the U of T Press. Their essence, however, is the same - a reminder to rejoin the Society at what continues to be a very attractive fee - only \$30 for members, \$15 for associate members (please note that at present full members are not entitled to apply for associate membership), and \$10 for students. It's easy to set the form aside with the intention of renewing later, and thereby lose it in the process. I believe we inadvertently lose quite a number of members each year in this way. Consequently, may I gently remind you to RENEW NOW. Cheques should be made payable directly to CMOS (not the U of T press), and sent to our permanent address: Suite 805, 151 Slater Street, Ottawa, Ontario, K1P 5H3. Next year, we hope, the forms will be printed. If you have any



Lesli Geikie

CMOS NEWSLETTER is a bi-monthly publication of the Canadian Meteorological and Oceanographic Society.

Editor:

Avard S. Mann
Atmospheric Environment Service
Argyll Centre
6325 - 103 Street
Edmonton, Alberta
T5H 5H6

comments on the new format, please pass them along to Peter Kociuba or to myself.

2. MEMBERSHIP

Membership in the Society is holding steady. However, there are a good many potential members out there who haven't joined yet. If you know of a friend or colleague who should belong, do give them a friendly invitation; likewise, if you know of a company or organization which should be a corporate member. Advertising rates in Atmosphere-Ocean and the Newsletter are very attractive for corporate members and in many instances the saving in advertising costs will more than offset the corporate membership fee. Membership application forms are available from your local Centre chairman or from the corresponding secretary.

3. NEWFOUNDLAND CENTRE

I am pleased to announce that Council recently approved a petition from the Newfoundland Chapter to become a Centre. Congratulations to the new Centre and the best wishes with your activities in the years to come.

4. 1982 CONGRESS

Deadlines for the 1982 Congress and associated activities are rapidly approaching. NOW is the time to put pen to paper and either (a) submit an abstract (the Chairman of the Scientific Program Committee is Dr. George Isaac, Cloud Physics, Research Division, AES, 4905 Dufferin Street, Downsview, Ontario, M3H 5T4), (b) submit nominations for the Society's Prizes and Citations (don't forget the new prizes in applied oceanography) to J.R. Mathieson, Regional Director, Pacific Region, AES, 700 - 1200 W 73rd Avenue, Vancouver, B.C., V6P 6H9, or (c) submit nominations for next year's executive and council to Dr. P. Merilees, Canadian Climate Centre, AES, 4905 Dufferin Street, Downsview, Ontario, M3H 5T4.

While on the subject of Congress, I should mention that Mr. Ed Truhlar (AES, Downsview) will be the editor of the Congress Issue of Atmosphere-Ocean. He would greatly appreciate it if Centre and Committee reports were submitted to him (in English and French where appropriate) before the traditional deadline of February 10.

5. METEOROLOGICAL CAREER PAMPHLET

Thanks to the efforts of the public information committee, headed by Mr. Joe Kotylak, AES, 6325 - 103 Street, Edmonton, Alberta, T6H 5H6, a new career pamphlet on "The Meteorologist" has recently been published by the University of Toronto Guidance Centre. Should

you know of individuals (students, high school teachers, career counsellors, etc.) who would appreciate copies of this pamphlet, please put them in touch with Mr. Kotylak.

6. LOGO

Ideas for a new Society LOGO are still coming in. May I take this opportunity to thank those of you who have submitted recent proposals for a LOGO, and encourage others to do so. We should soon be in a position to present a selection of excellent motifs to the general membership for their consideration.

7. EDUCATION COMMITTEE

The first meeting of the new Education Committee for Meteorology was held at McGill University on November 16. Prof. Tim Oke, Dept. of Geography, UBC, Vancouver, B.C., V6T 1W5, was elected chairman, and he promptly set the committee to work to assess the current state of affairs vis-à-vis meteorological education and employment in Canada. The process will begin with a questionnaire to educational institutions and employing agencies looking at supply and demand and attempting to determine how the needs of employers and the capabilities of the universities can best be fitted together. If you are the recipient of one of these questionnaires, please take time to answer it thoughtfully, but promptly. Should you know of institutions to which such a questionnaire ought to be direct in your local area, please communicate directly with Prof. Oke.

8. FELICITATIONS OF THE SEASON

On behalf of the Executive and Council, may I wish you all the best of the Season and a prosperous New Year!

Edward Lozowski
President

1982 CMOS Renewals have been mailed. Please forward payment to our permanent office by December 31, 1981 to ensure continuity of service.

CENTRE EXECUTIVES

1981-1982

	<u>Chairman</u>	<u>Secretary</u>
<u>B.C. Mainland</u>	Dr. Douw Steyn Dept. of Geography University of B. C. Vancouver, B.C. V6T 1W5	Brian Hammond A.E.S. 1200 West 73rd Ave. Vancouver, B.C. V6P 6H9
<u>Vancouver Island</u>	Dr. Tad S. Murty Institute Ocean Sciences P.O. Box 6000 9860 W. Saanich Road SIDNEY, B.C. V8L 4B2	Dr. David Krauel Royal Roads College FMO Victoria, B.C. V0S 1BO
<u>Alberta</u>	D. Sortland 7334 18 Ave. Edmonton, Alta. T6K 2B4	T. G. Medlicott Alberta Weather Centre Argyll Centre 6325 - 103 St. Edmonton, Alta. T6H 5H6
<u>Saskatchewan</u>	Prof. Earl Ripley Plant Ecology Dept. Univ. of Saskatchewan Saskatoon, Sask S7N 0W0	D. J. Bauer 3302 - 14 St. E. Saskatoon, Sask. S7H 0B7
<u>Toronto</u>	Prof. Han-Ru Cho Dept of Physics Univ. of Toronto Toronto, Ont. M5S 1A7	Glen Lesins McLennan Physical Labs. Univ. of Toronto Toronto, Ont. M5S 1A7
<u>Ottawa</u>	Gord Shimizu Director Program Development & Eval. A.E.S. - D.O.E. Hull, P. Q. K1A 0H3	John Falkingham Ice Forecasting Central Trebla Building 473 Albert Street Ottawa, Ontario K1A 0H3
<u>Winnipeg</u>	Douglas Holdham 266 Graham Ave. Rm 1000 Winnipeg, Man. R3C 3V4	

(Cont'd)

<u>Montreal</u>	Dr. Claude Girard RPN Edifice West Isle, 508 2121 Transcanadienne DORVAL, P.Q. H9P 1J3	Luc Pouliot Foret Meteo 100 Boul Alexis Nihon Ville St-Laurent, P.Q. H4M 2N8
<u>Québec</u>	Richard Leduc Gouvernement du Québec Service de la Météorologie 194 Ave St. Sacrement Québec, P.Q. G1N 4J5	Fernando Sheriff 1185 Boul. St. Cyrille O. Sillery, P.Q. G1S 1V8
<u>Rimouski</u>	Dr. Jean Lebel Dept. d'Océanographie Univ. du Québec à Rimouski 300 Ave des Ursulines Rimouski, P.Q. G5L 3A1	Dr. Michel Khalil Dept. d'Océanographie Univ. du Québec à Rimouski 300 Ave. des Ursulines Rimouski, P.Q. G5L 3A1
<u>Halifax</u>	Dr. Denis Lefaivre Ocean Circulation Div. Atlantic Ocean. Lab. Bedford Institute P. O. Box 1006 Dartmouth, N.S. B2Y 4A2	Eldon Oja 12 Scott Street Dartmouth, Nova Scotia B2Y 3V1
<u>Newfoundland</u> <u>Centre</u>	Mr. Laurie W. Davidson Seaconsult Limited Suite 200 194 Duckworth Street St. John's, Nfld. A1C 1G6	Miss Judith Bobbitt OCEANS Limited P.O. Box 13398 St. John's, Nfld. A1B 4B7
<u>New Brunswick</u> <u>Chapter</u>	Prof. R.B.B. Dickison Dept. of Forest Resources Univ. of New Brunswick P.O. Box 4400 Fredericton, N.B. E3B 5A3	

CENTRES AND CHAPTERS

Vancouver Island Centre: The Executive of the Vancouver Island Centre for 1982-82 consists of:

Tad Murty (Chairman)
David Krauel (Secretary)
Gordon McBean (Treasurer)
Humphrey Melling (Coordinator)
Rod Davis (Coordinator)

The first meeting of the Executive took place on 18th September, 1981, and several activities were planned.

1. We have arranged a talk on "Natural factors influencing the chemistry of precipitation" by Dr. Robert Charlson, Department of Atmospheric Sciences, University of Washington, Seattle. This talk will be given on 19th November, 1981, at 3:00 p.m. at the University of Victoria.
2. We hope to arrange a few more talks.
3. We will support the local Science Fair and will arrange for a prize up to \$50 to be awarded to the best exhibit in the fields of meteorology and/or oceanography.

B.C. Mainland Centre: The British Columbia Mainland Centre have planned their year's activities around the central theme of "Air and Water Pollution in British Columbia". We plan a number of meetings in the present season at which our invited speakers will address various topics within this theme. Our first theme session was held in mid October when Mr. Al Brotherstone of British Columbia Hydro and Power Authority and his consultant Dr. John Lague of Environmental Research Technology addressed us on the possible air quality impacts of the Hat Creek coal development. Their presentation provoked a lively and interesting discussion on this hotly debated issue.

Don Falkner, an executive member of this Centre, presented a paper entitled "A wintertime low-level jet in a Yukon valley" at the AMS conference on mountain meteorology in mid November.

Alberta Centre: On April 7, members met to listen to an address by Dr. W.J. Emery, Assistant Professor of Oceanography and Physics at the University of British Columbia, this year's tour speaker. Dr. Emery described the interactive image processing system being developed by an inter-disciplinary group from Remote Sensing at UBC. A series of colour enhanced slides were presented demonstrating a variety of oceanographic features.

On April 15, Dr. G.A. McBean addressed the centre. Dr. McBean is a senior Scientist with the Inter-Environmental Research Branch of AES and is presently assigned to the Institute of Ocean Sciences at Sidney, British Columbia. Dr. McBean spoke on the STREX experiment conducted in the northeast Pacific Ocean during November and December of 1980. He described in detail the observational system and presented some preliminary results from a case study when a cold front passed OWS Papa.

On September 22, members were treated to a lecture by Dr. Maurice Danard of Atmospheric Dynamics Corporation of Victoria, B.C. Dr. Danard has carried out research in both Canada and the United States. His topic concerned meso-scale wind modelling applied to the Hood Canal disaster and to channelling effects on Lake Okanagan. Dr. Danard stressed the simplicity of a one dimensional model, with limited physics, when used as a real time, diagnostic tool. He also touched on future two dimensional wind models currently under development.

On October 27, the Centre was fortunate in obtaining the services of Dr. Russell Schnell from the NOAA Environmental Research Laboratories in Boulder, Colorado. Dr. Schnell was in Edmonton to conduct a seminar sponsored by the Alberta Department of Agriculture. His topic traced the discovery of the function that certain specific species of bacteria play as ice nuclei. He outlined several experiments in which plants had these bacteria removed from their leaves and subjected to some 10 to 12 hours at -4°C without sustaining damage.

The Centre is completing preliminary plans for the 1983 Congress. The interim Facilities Convenor has reduced the list of possible locations to a choice between Banff and Edmonton, with two or three establishments being considered in each. We plan to set up an information booth at the 1982 Congress.

Saskatchewan Centre: Saskatoon will be hosting the 1983 Canada Wide Science Fair and preparations are already underway. Local CMOS members will be involved in both the organization and judging, and to this end attended several planning meetings during the summer.

A very interesting seminar entitled "The Physics of Rainbows" as given by Alister Frazer on October 22 under CMOS sponsorship. A sequel to his 1979 CMOS Lecture Tour Talk on haloes, it provided the audience with a comprehensive treatise not only on the mechanism and historical observation of rainbows, but also on their use and misuse in contemporary society.

Toronto Centre: The Toronto Centre held its annual general meeting on September 30, 1981. The members of the newly elected executive are:

Prof. H.R. Cho (Chairman)
G. Lesins (Secretary)
D. Chan (Treasurer)
M.A. Jenkins & K. Higuchi (Program Coordinators)

The meeting also featured Dr. R. Stewart from AES who delighted the audience with his talk on "Influence of Melting on Stratiform Clouds". Afterwards a very successful wine and cheese social was held.

The Toronto executive is currently contacting prospective speakers for future meetings and looking forward to a fruitful year. If members from the Toronto Centre have any suggestions or comments, please let us know. Write to: Prof. H.R. Cho, Dept. of Physics, University of Toronto, Toronto, Ontario, M5S 1A7.

Ottawa Centre: Ottawa Centre has held two general meetings since reconvening after the summer. At the first meeting on September 30, the guest speaker was Dr. W.A.B. Douglas, senior historian for the Dept. of National Defence. Dr. Douglas gave a very well received talk to about 40 members and guests relating the discovery of a German automatic weather station placed in Labrador in 1943. The second meeting was held October 27 at which Dr. Olaf Loken, A CMOS member and director of DINA's Beaufort Sea Office spoke to about 30 members and guests. Dr. Loken described current activities in the Beaufort Sea and outlined short and long term future plans for this area.

The noon-hour luncheon meeting format tried last year has been a great success and we are continuing with this type of meeting. We presently have plans for four more of these meetings at approximately monthly intervals in addition to an evening dinner meeting for members and partners.

New Brunswick Chapter: The first fall meeting of the NB Chapter CMOS was held jointly with the Graduate Seminar of the UNB Faculty of Forestry. The speaker, Keith Barr of the NB Department of Natural Resources, spoke on his recent two-year CIDA assignment in Honduras, where he was responsible for implementing a fire danger rating system based on the system used in Canada. Keith outlined comparative climatological and forest fire statistics for Honduras and New Brunswick.

(Cont'd)

Rimouski Centre: Elections de l'exécutif - Le 8 octobre dernier avaient lieu les élections au Centre de Rimouski. Le nouvel exécutif est composé des personnes suivantes:

MM. Jean Lebel, président
Donald Tremblay, trésorier
Michel Khalil, secrétaire

Conférenciers-invités -

11 sept. 1981 - Dr. J.C. Amiard

Laboratoire de Biologie marine du CNRS -
Nantes, France
Titre: Etude in situ su transfert des
métaux dans les chaines alimentaires
estuariennes.

14 oct. 1981 - Dr. Jean Durr

Ecole des Mines de Douai - France
Titre: Utilisation de méthodes physiques
d'analyses rayons-X et décharges
luminescentes.

19 nov. 1981 - MM. Gaston Desrosiers

et J.-Claude Brethes
Département d'Océanographie, UQAR, Rimouski,
Titre: Etude de l'endofaune benthique de
la région des estuaires St-Jean et Romaine
- Basse Côte-Nord.

Newfoundland and Labrador Centre: The slate of officers for the 1981 /82 season of the Newfoundland and Labrador Centre includes

Chairman - L.W. Davidson
Seaconsult Limited
Secretary - J. Bobbitt
OCEANS Limited
Treasurer - C.J. Noll
Newfoundland Petroleum
Directorate

Fall meetings have been held in the months of October and November. A talk and slide presentation on Climatic Change was presented on October 6, 1981, by Gordon McKay, Director of Climatological Applications Branch, AES Downsview to an unusually large CMOS audience of 35 persons. In a joint meeting with the Institute of Electrical and Electronics Engineers (IEEE) November 5, 1981, a similar sized crowd heard an excellent presentation by Lawrence Gray of the Canadian Centre for Remote Sensing on microwave remote sensing of the cold ocean environment.

Halifax Centre: It is not too late to give the composition of the executive elected last May, since summer went by without great local activity. So, we've elected as:

Secretary - Mr. Eldon J. Oja of the Maritimes Weather Office, Bedford
Treasurer - Dr. Francis C. Tan of the Bedford Institute of Oceanography and the undersigned as Chairman.

We had one meeting in mid-October. Mr. Alan Ruffman, President of Geomarine Associates Ltd. spoke of the Real World of a Commercial Geophysicist and the Interface with Physical Oceanography. He presented field observations that sparked discussion with the audience.

Other meetings are planned for the comming months, but our main activity was to keep track of the Meteorological Kits set up by our Centre a few years ago. We are in the process of helping the owners of these kits, mainly high schools, to update the material. It will be mainly an advice process as to where to find replacements for broken parts and new booklets for the outdated ones.

NEW MEMBERS

Nicole Benchimol Vancouver, B.C.	Neil Wanless Vancouver, B.C.
C. Sue Grimmond Vancouver, B.C.	Clifford Raphael Vancouver, B.C.
Sheila Loudon North Vancouver, B.C.	James R. Drummond Toronto, Ont.
Hesham Nabih Richmond, B.C.	Zygmunt Misztal Edmonton, Alta.
William Milne St. John's, Nfld.	Michel Morissette Point-au-Pere, P.Q.
Glenn Mainprize Edmonton, Alta.	Leo M. Burns Fredericton, N.B.
Allan Coldwells Edmonton, Alta	Michel Beland Montreal, P.Q.
Guynemer Roussel Appleton, Nfld.	Peggy Hauschmidt Kingston, Ont.

NEW MEMBERS (Cont'd)

H. Laban Davis
Mount Pearl, Nfld.

William Buckingham
Vancouver, B.C.

Ian Borthwick
Portugal Cover, Nfld.

G. Brett Maxwell
Gloucester, Ont.

Rick Lee
Nepean, Ont.

W. Paul Budgell
Burlington, Ont.

CORPORATE MEMBERS

Alberta Agriculture Advisory
Committee on Weather Modification
Three Hills, Alberta

Geneq Inc.
Anjou, Quebec

Airflow Development Canada Ltd.
Mississauga, Ontario

Hermes Electronics Ltd.
Dartmouth, N.S.

Beak Consultants
Vancouver, B.C.

MacDonald Dettweiler Assoc. Ltd.
Richmond, B.C.

Bendix Aviation Electric Ltd.
St. Laurent, P.Q.

MacLaren Plansearch Ltd.
Dartmouth, N.S.

Bristol Aerospace Ltd.
Winnipeg, Manitoba

NORDCO Ltd.
St. John's, Nfld.

Dobrocky Seatech Ltd.
Victoria, B.C.

Ontario Hydro
Oakville, Ontario

Frederick Goertz Ltd.
Willowdale, Ontario

SUSTAINING MEMBER

N. Sargent
Downsview, Ontario.

DR. LOUIS M. LAUZIER

Dr. Louis M. Lauzier's many friends and colleagues were deeply grieved to learn of his death in Ottawa, October 18, 1981.

Dr. Lauzier was born in Quebec City on February 16, 1917 and was the holder of four degrees including the D.Sc. from Laval University. His oceanographic career began with the Ministry of Fisheries, Province of Quebec, and during the period 1945-1949 he was seconded to the Atlantic Herring Investigation Committee in St. Andrews, New Brunswick. On completion of the research studies on herring stocks in the Gulf of St. Lawrence, he joined the Fisheries Research Board of Canada, St. Andrews, in 1949. During his tenure in St. Andrews, Dr. Lauzier was the chief scientist responsible for oceanographic research in the Gulf of St. Lawrence and became a recognized authority in climate and ocean circulation in the Atlantic Canada region. At the same time he was a research advisor and consultant to many of his scientific colleagues in the Maritimes on oceanographic studies related to fisheries on the Scotian Shelf and Grand Banks.

In 1970, Dr. Lauzier came to Ottawa as Program Coordinator for the Fisheries Research Board, and was later appointed Executive Secretary for the Canadian Committee on Oceanography (CCO), a position he held until his retirement from the Department of Fisheries and Oceans in 1978. His contributions while Executive Secretary of the CCO embraced the interests of the academic and industrial communities of Canada and were recognized both nationally and internationally.

Dr. Lauzier was a member of numerous professional societies and was nominated to the Royal Society of Canada in 1970. He served as an advisor and member of many committees in Canada and abroad, and for his outstanding contributions to science in Canada, he was awarded the Centennial Medal of La Société de géographie de Québec.

Dr. Lauzier was truly a distinguished Canadian scientist who unselfishly gave of himself to assist in the development of Canadian oceanography in its formative years.

CANADIAN EXECUTIVE SERVICES OVERSEAS (CESO)

CESO NEEDS VOLUNTEERS EXPERIENCED IN CHEMICAL
OCEANOGRAPHY AND MARINE METEOROLOGY

Canadian Executive Service Overseas, a non-government aid organization, is presently looking for volunteers with backgrounds in the oceanographic profession.

Briefly stated, CESO was founded in 1967 in order to offer the expertise of retired Canadians to industry and private institutions in the developing world for short-term consulting projects. It is a concept of 'face-to-face' assistance rather than infusions of money or equipment. Hundreds of Canadians in various professional and technical fields have offered their services and these 'volunteer consultants' have completed more than 6,000 projects overseas and over 5,000 with our Canadian native people.

CESO pays economy class air fare to and from the project site. The client company or institution provides accommodation, food and a small per diem allowance. It also offers local transportation, office facilities and translation services, if necessary. Projects may last from one to six months, with three months as an average length of time. A spouse is included in the arrangements for projects longer than one month. There is no salary or remuneration to the volunteer.

Because project proposals originate with the clients in the developing country, CESO does not guarantee that all volunteers will receive assignments. However, every effort is made to ensure that as many of our roster members as practical are considered for assignment in keeping with the policy of making the best possible match between the client's known needs and available skills.

For further information, please contact the Canadian Executive Service Overseas, Public Relations, Suite 350, 1130 Sherbrooke Street West, Montreal, Quebec H3A 2M8 (Telephone: 514-282-0556).

CMOS PRIZES AND CITATIONS

GUIDELINES FOR NOMINATIONS

The following guidelines are proposed to assist nominators of candidates for CMOS prizes and citations. It is hoped that they will result in a fair degree of uniformity in the type of material submitted in support of nominations. They should be viewed as suggestions rather than strict rules and there may be instances where nominators feel they must depart somewhat from the guidelines.

Nominations should be sent before January 15, 1982 to:

Mr. J.R. Mathieson
Regional Director, Pacific
Atmospheric Environment Service
Suite 700, 1200 West 73 Avenue
Vancouver, British Columbia
V6P 6H9

No current member of the Society Council or of the Awards Committee is eligible for any prize.

1. PRESIDENT'S PRIZE

A President's prize may be awarded each year to an individual or individuals for a recent paper of special merit in the field of oceanography or meteorology. The paper must have been published in Atmosphere-Ocean or have been presented to the CMOS membership at a national or local conference and have been accepted for publication in a refereed journal.

The nominators are requested to submit the following information in addition to the names of the nominee(s):

- a) The title of the paper for which the author(s) is(are) being nominated
- b) If the paper has been published in Atmosphere-Ocean, the year of the publication should be given; otherwise, the following should be provided:
 - i) the date and place of the CMOS conference at which the paper was presented
 - ii) the name of the journal that has accepted the paper for publication, the year of publication and page numbers (if the paper has been published). If the paper has been accepted but not yet published this should be stated. In this case the nominator(s) should endeavor to supply a typed manuscript or, if this is not possible, an abstract of the paper.

- c) A concise statement (less than 300 words) explaining the merits of the paper.

Note: If the prize is awarded for a paper having two or more authors, it will be shared by all the authors.

2. THE DR. ANDREW THOMSON PRIZE IN APPLIED METEOROLOGY

A prize in applied meteorology may be awarded for each calendar year to a member (or members) of the Society for an outstanding publication in the field of applied meteorology.

In addition to the name(s) of the nominee(s), the nominators are requested to submit the following information:

- a) A copy of the publication for which the author(s) is (are) being nominated. If this is not feasible, all pertinent details, such as the year of publication, the name of the journal or publisher, etc., should be provided to allow the Prize Committee to locate the publication
- b) A concise statement (less than 300 words) explaining the merits of the publication.

3. GRADUATE STUDENT PRIZE

When a publication or thesis of special merit in meteorology and/or oceanography by a graduate student comes to the notice of the Awards Committee, a special graduate student prize may be awarded.

The nominators are requested to submit the following information in addition to the name of the nominee:

- a) A copy of the publication or thesis
- b) In the case of a publication which has two or more authors, a statement by the student's research supervisor indicating the level of participation of the student in the publication
- c) A concise statement (less than 300 words) explaining the merits of the publication or thesis.

4. THE RUBE HORNSTEIN PRIZE IN OPERATIONAL METEOROLOGY

A prize known as the Rube Hornstein Prize in Operational Meteorology may be awarded for each calendar year to an individual for providing outstanding operational meteorological service in its broadest sense, but excluding the publication of research papers as a factor, unless that research is already incorporated as an aid in the day-by-day performance of operational duties. The work for which the prize is granted may be cumulative over a period of years or may be a single notable achievement.

A nomination should be supported by a statement of less than 500 words describing the work of the nominee and how it constitutes an outstanding operational meteorological service.

5. PRIZE IN APPLIED OCEANOGRAPHY

A CMOS prize for applied oceanography may be awarded to a member, or members, for a significant contribution to the application of oceanography in Canada.

A nomination should be supported by a statement of less than 500 words describing the contribution of the nominee(s) to the application of oceanography in Canada. Publications by the nominee(s) may be submitted if judged pertinent.

6. CITATIONS

The Society may award citations to individuals or groups who in the opinion of Council have, in the previous year, made some outstanding contribution in helping alleviate pollution problems, in promoting environmental improvements, or in developing environmental ethics.

A nomination should be supported by a statement of less than 500 words describing the work of the individual(s) or group(s) which is deserving of a citation.

CALL FOR NOMINATIONS - 1981 AWARDS

Nominations are requested from members and Centres for 1981 CMOS Awards to be presented at the 1982 Annual Meeting. Five awards are open for competition: (a) the President's Prize, for an outstanding contribution in the field of meteorology and/or oceanography by a member of the Society; (2) the Dr. Andrew Thomson Prize in Applied Meteorology, for an outstanding contribution by a member in that field; (e) the Graduate Student Prize, for a contribution of special merit; (4) the Rube Hornstein Prize in operational Meteorology, for outstanding service in providing operational meteorological service; and (5) the Applied Oceanography Prize, for a significant contribution to the application of oceanography in Canada.

Nominations are also requested for the award of citations to individuals or groups in Canada who have made some outstanding contribution in helping alleviate pollution problems or in developing environmental ethics.

All correspondence should be forwarded to the prizes and awards secretary no later than January 15, 1982 to J.R. Mathieson (see page 14 for address).



Books

OCEAN WAVE CLIMATE, edited by M.D. Earle and A. Malahoff. 250 mm x 160 mm, pp. xi + 368, ill. Plenum Press, New York and London 1979. US \$36.00 (+20% outside USA).

This volume contains the proceedings of the Ocean Wave Climate Symposium held at Herndon, Virginia, in 1977. It is concerned with the present state of knowledge of wave climate and with requirements for improving that knowledge. It is mainly concerned with coastal waters of the United States although the techniques described have quite general applications. The book is split into three sections. The first deals with wave models and with applications of wave data, the second deals with wave measurements and the third consists of recommendations from the symposium working groups. The second section will be of limited interest to most meteorologists since it deals mainly with the technical aspects of wave measurement. It concentrates on remote measurement by radar and several different methods are described. The first section is of more direct interest. Chapter 1 describes the National Meteorological Centre (NMC) and Fleet Numerical Weather Central methods for analysing and forecasting sea surface winds. Many of the comments made about the NMC models are applicable to those used in the United Kingdom. The remaining chapters describe wave simulation methods used in the United States, ranging from very crude systems to the most advanced ones available and very thoroughly covering the field. There are also chapters on methods of determining the influences of waves on ships.

CLIMATIC CHANGE IN CANADA. National Museum of Natural Sciences project on climatic change in Canada during the past 20,000 years. 1977-78. Ed. C.R. Harington. *Syllogeus* No. 26, published 1980. pp. 246.

The importance of studying climatic change in Canada is stressed by the editor in an opening paper, in which he cites somewhat speculative prehistoric events but also well-documented recent cases to show Canada's vulnerability to climatic change. This vulnerability has stimulated the comprehensive research programme, which is beginning necessarily with systematic collation of data and aims eventually to increase our knowledge of climatic change in Canada over the past 20,000 years.

After giving a brief account of the values and shortcomings of historical documentary information of climate, A.J.W. Catchpole summarizes the available historical information for Canada. The records of the Hudson's Bay Company are shown to be of particular value. They have only been exploited to a limited extent. The need for careful analysis of inhomogeneous data is noted.

C. Hillaire-Marcel, S. Occhietti and G. Prichonnet present very brief summarized plans of their projects. Occhietti and Prichonnet intend to use historical documentation, Occhietti from periodicals as systematic sources, and Prichonnet on river and lake ice and floods as systematic parameters. However the authors recognize the ambiguous interpretation of data such as dates of spring thaw of rivers: for this reason Hillaire-Marcel plans to use independent data, for example dendrochronologies. Hillaire-Marcel approached the study of climate from the narrow standpoint that cycles, particularly solar ones, are the sole means of understanding and prediction.

The bulkiest section of the volume is a review of palaeobotanical studies (pollen cores, etc.) by L.V. Hills and E.V. Sangster. The 120-page summary table covers the main results of several hundred works dealing with the last 20,000 years and will be of considerable value to researchers in the field - for a few years until it becomes dated.

Finally, J.G. Ogden presents a small tabular palaeobotanical review for eastern Canada only and overlapping with the previous chapter. Ogden is disappointed with the methods used hitherto for analysis of palaeobotanical data but is optimistic that improved statistical techniques and large computers will allow easy extraction and synthesis of all relevant information.

FERRY COMMAND by Don McVicar, tells the story of the RAF Ferry Command from its conception in 1940 until September 1942 as seen throughout the eyes of one of its Captain/Navigators. In 1940, the RAF being fully stretched, civilian pilots were recruited to transport much needed aircraft from the USA to the battle front. They spanned the North Atlantic, Mid and South Atlantic and finally the Pacific; the author was the first man to fly the Polar route from Europe to Vancouver. This exciting story, which is largely autobiographical, is a full account of one of the most remarkable episodes of World War II.

The Airlife Publishing Company, 7 St. John's Hill, Shrewsbury SY1 1JE, Salop, England. Telephone Shrewsbury (0743) 3651. 225x140 mm 210 pages 0 906393 12 4 Case Bound Half tone photographs.

SEA ICE PROCESSES AND MODELS. (proceedings of the AIDJEX- -ICSI (IAHS) Symposium at Seattle, Sept. 1977). IAHS Pub. No. 124. xiv + 474 pages; figures and tables. Papers in English. Obtainable from Office of the Treasurer, IAHS, 2000 Florida Avenue NW, Wash., D.C. 20009, U.S.A. Price \$38.00.

A first perusal of these symposium proceedings show that many of the papers discuss and review research carried out during the USA's Arctic Ice Dynamics Joint Experiment (AIDJEX) programme, a programme with very well-defined objectives. These objectives (which are laid out in N. Untersteiner's review article) may be summarized as follows: to relate large-scale ice deformation to the external stress field; to derive the external stress field from a few fundamental and easily measured parameters; to investigate mechanisms by which ice can be deformed; to relate ice deformation and morphology to the heat balance. The diversity of these objectives has led to considerable advances in our understanding of the ice-atmosphere-ocean system in polar regions, in our studies of sea ice as a material on a large scale, and in the development of numerical simulations which can be used to model ice-covered regions. The proceedings include several papers on each of these topics which satisfy the original AIDJEX objectives and also provide a review of AIDJEX-inspired sea-ice research.

This book presents a valuable collection of articles on current sea-ice research.

LIGHTNING AND ITS SPECTRUM - AN ATLAS OF PHOTOGRAPHS. By Leon E. Salanave. Tucson (University of Arizona Press) 1980. xvii + 136 pages; numerous photographs. Price: U.S. \$25.00.

This beautiful book will be enjoyed by almost everyone - layman, scientist, and lightning specialist. The photographs were taken by the author and by colleagues from various parts of the world. Some have been published before, but readers of the original articles will be grateful to Salanave for combining them among his reproductions of unprecedented beauty and fidelity. In preparing this elegant atlas, Salanave has done for lightning what Bently and Nakaya did for snow crystals and what Scorer did for clouds.

It is much more than just a pretty picture book. An excellent text is provided, giving information on the details of each picture, the peculiarities of the flash, how it was formed. Often, interesting data are given on camera, lens, exposure, film and filters. The author states in the preface that he tried to avoid matters in the realm of speculation and theory. Happily he has succeeded in doing so, with the possible exception of when he explains the branching of lightning beneath the cloud as being...a result of charge being drained from pockets of electrification in the air surrounding the main channel. Whether or not this speculation ultimately proves to be true, Salanave will certainly achieve his object in writing a book which will remain for many years a useful and accurate presentation of optical phenomena associated with lightning.

In addition to the photographs taken with ordinary still cameras, there are fascinating time-resolved pictures taken with cine cameras, moving-film and swinging cameras that spread the lightning image out in time to reveal the detailed history of its development.

The pictures of lightning spectra (one reproduced in beautiful colour) reveal much about the physics of the lightning channel, such as its pressure and temperature. An interesting comparison is provided between the spectrum of a natural lightning flash and that of a laboratory spark 4.5 m long. The spectra show that significant differences exist between these two closely-related phenomena.

By presenting these pictures, by explaining how the pictures were taken, and by stimulating his readers' interest in lightning. Salanave will undoubtedly encourage laymen and scientists to go out and take pictures of their own. Since throughout the world there are about as many lightning flashes in one second as appear in this book, we may be confident that future photographs will reveal new aspects of atmospheric electrical discharges. Some years hence we may hope that Salanave will have the opportunity of preparing a second volume revealing phenomena that have so far escaped the camera's eye, such as the strong lightning in tornadoes, horizontal discharges many hundreds of kilometres long, flashes from the top of the cloud into the stratosphere and the recently discovered lightning on Venus and Jupiter.

CALL FOR PAPERS

FIRST INTERNATIONAL SEMINAR ON EXTRATROPICAL CYCLONES
AND INSTABILITY LINES

October 11-22, Pelotas, Rio Grande do Sul, Brazil

The First International Seminar on Extratropical Cyclones and Instability Lines will be held 11-22 October 1982 in Pelotas, Rio Grande do Sul, Brazil. The Seminar will be organized by the Federal University of Pelotas, Federal University of Rio de Janeiro and Brazilian Meteorological Society.

The Seminar will cover all aspects of Extratropical Meteorology with special emphasis on Extratropical Cyclones, Instability Lines, Air Masses, Fronts and adverse phenomena such as: Frost, Hail, Severe Storms and others.

This first announcement is to alert interested individuals of this event. Details concerning the abstract deadline and other instructions will be available in a second announcement. The idioms of the Seminar are English, Spanish and Portuguese.

For further information, please contact:

Prof. Luiz Francisco Pires Guimaraes Maia,
Chairman of the Organizing Committee,
First International Seminar on Extratropical
Cyclones and Instability Lines,
Universidade Federal de Pelotas,
Instituto de Fisica e Mathematica,
Nucleo de Meteorologia Aplicada, Campus,
Pelotas-Rio Grande do Sul, Brazil, 96100

Day-One Weather Forecast

The ability of numerical models to predict large-scale flow patterns has been improving rapidly in recent years. It appears that remaining problems in day-one weather forecast is an area that deserves special attention of our community. The specific problems which come to mind include 6-12 hour forecasts of thunderstorms (initiation, intensity, etc.), unexpected intensification of cyclones, etc. We would like to encourage members of our Society, particularly operational meteorologists at the Weather Centres, to submit papers in areas of short range weather prediction and mesoscale dynamics to the upcoming 15th Annual Congress to be held in Ottawa. If there is a large number of submission, perhaps we could persuade the Scientific Program Committee to organize a session devoted to this subject.

Han-Ru Cho
University of Toronto
G.S. Strong
ASD, Alberta Research Council

CALL FOR PAPERS - SIXTEENTH ANNUAL CONGRESS
CANADIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY

The Sixteenth Annual Congress and Annual General Meeting of the Canadian Meteorological and Oceanographic Society will be held at the University of Ottawa, Ottawa, Ontario, Canada on May 26-28, 1982. The theme for the Congress will be Sea Ice. In addition to invited and contributed papers relating to the general theme, sessions will be held on any other aspects of meteorology and oceanography depending on contribution. Poster sessions may be held depending on response.

Titles and definitive abstracts (less than 300 words) should reach the program committee by February 1, 1982 and should be addressed to Dr. George Isaac, Cloud Physics Research Division, Atmospheric Environment Service, 4905 Dufferin Street, Downsview, Ontario, M3H 5T4; telephone (416) 667-4683. Please indicate if the paper is suitable for presentation in a poster session.

Other congress activities, including tours, are planned. In addition, commercial exhibits will be on display during the Congress. Organizations interested in obtaining display space should contact Brian O'Donnell, Atmospheric Environment Service, Ottawa, Ontario, K1A OH3; telephone (819) 997-3511.

INVITATION A PRESENTER DES COMMUNICATIONS - SEIZIEME CONGRES ANNUEL
SOCIETE CANADIENNE DE METEOROLOGIE ET D'OCEANOGRAPHIE

Le seizième congrès annuel et réunion générale annuelle de la Société canadienne de météorologie et d'océanographie auront lieu à l'université d'Ottawa, à Ottawa (Ontario) du 26 au 28 mai 1982. Le congrès a pour thème "La glace de mer". Outre les communications présentées par des personnalités invitées et d'autre participants sur le thème général, il y aura des sessions sur d'autres aspects de la météorologie et de l'océanographie en autant qu'un nombre suffisant de communications soient contribuées. Des présentations par affichage pourront avoir lieu également, dépendant de l'intérêt manifesté.

Le résumé définitif (moins de 300 mots) et le titre des communications doivent parvenir au comité du programme au plus tard le 1er février 1982. On doit envoyer le tout à Dr. Georges Issac, Physique des nuages, Division de la recherche, Service de l'environnement atmosphérique, 4905 rue Dufferin, Downsview (Ontario) M3H 5T4; téléphone: (416) 667-4683. Veuillez indiquer si l'on peut inclure votre communication au programme de présentation par affichage.

Diverses activités (telles que visites organisées) sont prévues. De plus, une exposition commerciale aura lieu pendant le congrès. Les organisations désireuses d'y participer devraient contacter M. Brian O'Donnell, Service de l'environnement atmosphérique, Ottawa (Ontario) K1A OH3; téléphone: (819) 997-3511.

CONFERENCES

San Antonio, TA.	Jan. 11-15, 1982	12th Conference on Severe Local Storms.
San Antonio, TA.	Jan. 11-15, 1982 AMS/APCA	3rd Joint Conference on Applications of Air Pollution Meteorology.
Washington, D.C.	March 14-18, 1982	Sixth Symposium on Temperature - Its Measurement and Control in Science and Industry.
The Hague, Netherlands	May 10-14, 1982 AMS/KNMI	1st International Conference on Meteorology and Air/Sea Interaction of the Coastal Zone.
Ottawa, Ont.	May 26-28, 1982	16th Annual CMOS Congress.
San Diego, CA.	June 8-11, 1982	4th Conference on Ocean-Atmosphere Interaction.
Denver, CO.	June 13-17, 1982 AMS/AWRA	International Symposium on Hydrometeorology.
Fredericton, N.B.	June 14-15, 1982	Canadian Hydrology Symposium - 82. Hydrological Processes of Forested Areas.
Kingston, Ont.	June 21-24, 1982	1982 CAP Congress and Annual General Meeting.
Seattle, WA.	June 26-27, 1982	12th Conference on Weathercasting.
Seattle, WA.	June 28-July 2, 1982	9th Conference on Weather Forecasting and Analysis.
Rolla, MO.	August 2-6, 1982	6th International Symposium on the Physics and Chemistry of Ice.
Chicago, Ill.	Oct/Nov	Conference on Cloud Physics

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SUITE 805
151 SLATER
OTTAWA, ONTARIO, CANADA
K1P 5H3