

## EDITORIAL

Along with wishing you a traditional Happy New Year, we draw your attention to our new banner line - CANADIAN ACOUSTICS - and hope you too will wish us well!

To those of you exclusively in noise control, you can see from the contents in this issue that we are still very much interested in noise control as a subject. However, with the limited number of acousticians in Canada, we wish to appeal to all fields of acoustics, to develop and maintain as broad a link as possible. In this way we hope to enlarge our circulation, to give as much exposure as possible to our authors and advertisers.

"Acoustics and Noise Control in Canada" began in a modest way in January 1973 as a newsletter form of communication amongst members of the Canadian Committee on Acoustics (now the Canadian Acoustical Association). The first editor was Tony Embleton of National Research Council. The publication has gradually improved in style and contents over the last 9 years and is now internationally recognized and indexed. We hope, with your help, CANADIAN ACOUSTICS will continue this trend.

## EDITORIAL

Bonne année à tous nos lecteurs. Si vous ne l'avez pas encore remarqué, la nouvelle année apporte un changement majeur à notre publication, un nouveau titre : ACOUSTIQUE CANADIENNE! Nous pensons qu'il reflète mieux la diversité et l'étendue du contenu de notre revue.

Ceux parmi vous qui travaillent exclusivement dans le domaine de contrôle du bruit peuvent constater que le contenu de ce numéro-ci témoigne de notre intérêt continu au contrôle du bruit. Cependant, étant donné que le

nombre d'acousticiens au Canada est limité, nous voudrions englober tous les domaines de l'acoustique, développant et entretenant ainsi des liaisons globales. En faisant cela, nous espérons augmenter notre distribution, et par conséquent, faire connaître nos auteurs et annonces à un plus grand public.

"L'Acoustique et la Lutte Antibruit au Canada" a débuté modestement en janvier 1973, en tant que bulletin de liaison entre les membres du Comité Canadien sur l'Acoustique (maintenant L'Association Canadienne de L'Acoustique).

Le premier rédacteur a été Tony Embleton du Conseil National de Recherches. La publication a été considérablement améliorée en style et en contenu pendant les derniers neuf ans, et maintenant, elle est reconnue et indexée au niveau international. Nous souhaitons qu'avec vos contributions, ACOUSTIQUE CANADIENNE continuera dans cette voie de succès.

Nous avons le plaisir d'annoncer à nos lecteurs francophones qu'un séminaire sur le BRUIT et son CONTROLE se tiendra à l'Université de Sherbrooke le jeudi 18 mars 1982.

Organisée par la section d'acoustique du Département de génie mécanique, cette journée est parainée par la section régionale de l'Ordre des ingénieurs du Québec et la Société canadienne des ingénieurs.

Les thèmes abordés toucheront les normes, l'acoustique physiologique, la propagation sonore, les techniques classiques de réduction du bruit et des études de cas.

Pour plus d'information, s'adresser à Jean Nicolas ou N. Galanis au numéro (819) 565-4490.

## NEWS

### XI<sup>e</sup> CONGRÈS INTERNATIONAL D'ACOUSTIQUE/11th INTERNATIONAL CONGRESS ON ACOUSTICS

Le Onzième Congrès International d'Acoustique se tiendra en France, à Paris, du 19 au 27 juillet 1983; il concernera tous les domaines de l'Acoustique. Il sera précédé de Symposiums satellites qui seront organisés:

- à Marseille, les 12 et 13 juillet, sur l'absorption acoustique active et les asservissements acoustiques;
- à Lyon, les 15 et 16 juillet, sur les vibrations des structures mécaniques;
- à Toulouse, les 15 et 16 juillet également, sur la communication parlée.

The 11th International Congress on Acoustics will be held in Paris, France, from July 19 to July 27, 1983. All fields of Acoustics will be covered. Satellite Symposia will be held before or after the Congress, as follows:

- in Marseille, on July 12 to 13 on Active Acoustic Absorption;
- in Lyon, on July 15 and 16 on Vibrations of Mechanical Structures;
- in Toulouse, on July 15 and 16 also on Speech Communication.

Pour tous renseignements s'adresser à/for further information write to: G.A.L.F. Secretariat, B.P. 40, 22301 Lannion-Cedex, France.

### 3rd MEETING OF THE WORLD FEDERATION FOR ULTRASOUND IN MEDICINE AND BIOLOGY

The Third Meeting of the World Federation for Ultrasound in Medicine and Biology/Fifth World Congress of Ultrasound in Medicine and Biology will take place in Brighton, England, 26-30 July, 1982. Abstracts should arrive before 1st December, 1981. For further information contact: Dr. Patricia Morley, Co-Chairman, 3 WFUMB Scientific Committee, Dept. of Diagnostic

Radiology, Western Infirmary, Glasgow  
G11 6NT, Scotland, GB.

### ACOUSTICAL IMAGING '82

The Twelfth International Symposium on Acoustical Imaging is to be held 12-22 July, 1982, in London, England. It is being arranged by the Institution of Electrical Engineers in association with the Sonics and Ultrasonics Group of the IEEE and other relevant learned societies. The symposium will cover all aspects of acoustical imaging and is being timed to coordinate with the 3rd meeting of the World Federation for Ultrasound in Medicine and Biology. All enquiries should be directed to: Acoustical Imaging '82, IEE, Savoy Place, London WC2R 0BL, England.

### INTER-NOISE 82

INTER-NOISE 82, the eleventh International Conference on Noise Control Engineering, will be held at the Jack Tar Hotel in San Francisco, 17-19, 1982. For further information contact James G. Seebold, Standard Oil Co. of California, P.O. Box 3069, San Francisco, CA 94119, U.S.A., Telephone (415) 894-2484.

### 1982 CSHA CONVENTION

The 1982 Convention of the Canadian Speech and Hearing Association will be held in Vancouver, May 17-22, 1982. For further information contact Monica Brekelmans, 4230 Blenheim Street, Vancouver, B.C., V6L 2Z4.

### NEW RESEARCH CONTRACTS

To Optech Incorporated, Downsview, Ont., \$160,557 for "Development construction and testing of a system to assess noise levels associated with ocean roughness measurements", by the Department of National Defence.

To Tektrend International Incorporated, Lachute, Que., \$142,217 for "Design and development of a correlation acoustic emission monitoring program". Awarded by the Department of National Defence.

To Asecor Ltd., Manotick, Ont., \$38,404 for "Development of a computer code for the computation of the blast noise environment of recoilless rifles". Awarded by the Department of National Defence.

To Hermes Electronics Ltd., Dartmouth, N.S., \$245,000 to "Investigate the designs for directional sonobuoy sensors with a view to achieving a small, cost effective, and viable design having appropriate frequency response characteristics". Awarded by the Department of National Defence.

To Woods-Gordon Management Consultants, Toronto, Ont., \$175,000 for a "Study of the sound recording industry in Canada". Awarded by the Department of Communications.

To Dr. N. Georganis, Dept. of Electrical Engineering, University of Ottawa, Ottawa, Ont., \$39,705 for a "Study of frequency spectrum management methods for mobile communications systems". Awarded by the Department of Communications.

To P. Kabal, Télécommunications, Institut national de la recherche scientifique, Verdun, Qué., \$29,920 for "Coding by voice conversion". Awarded by the Department of Communications.

To Techno Scientific Inc., Downsview, Ont., \$13,685 for "Ultrasonic monitoring of crack extension by corrosion fatigue in oil pipelines". Awarded by the Department of Energy, Mines and Resources.

To Tektrend International Ltd., Lachute, Que., \$134,636 for "Development of an on-line acoustic emission monitoring system for welding

thick-walled vessels". Awarded by the Department of Energy, Mines and Resources.

To Dr. W. Steenaart, Department of Electrical Engineering, University of Ottawa, Ottawa, Ont., \$29,383 for "Development of a sonar signal injector". Awarded by the National Research Council.

To Acres Consulting Services Ltd., Niagara Falls, Ont., \$62,624 for a "Study on radiation of sound by ships hull structure". Awarded by the Department of National Defence.

To Mesotech Systems Ltd., North Vancouver, B.C., \$15,000 for "Further development and modifications to the model 440 acoustic navigations system". Awarded by the Department of Fisheries and Oceans.

#### NEXT CAA TORONTO CHAPTER MEETINGS

The next meeting of the CAA Toronto Chapter is scheduled for Monday, January 11, 1982 at 7:00 p.m. in the Ontario Hydro Auditorium, 700 University Avenue, Toronto. Topics for the meetings are: 1. Acoustics of the Ontario Hydro Building, and 2. Sound Re-enforcement. Contributors are A. Edwards (Ontario Hydro), and M.V. Merritt (Engineered Sound Systems Ltd.). The meeting convenors are Andy McKee and John Swallow. The following meeting is scheduled for sometime in April 1982 at the same location. The topic for the meeting will be Industrial Audiometry and the meeting convenors are S. Abel and W. Zydenborgh.

#### FUTURE MEETINGS

Spring 1982, Budapest, Hungary, 8th Colloquium on Acoustics. Details from: OPAKFI, Anker Köz 1, 1061 Budapest.

Spring 1982, Mexico City, Mexico, VI Latin American Meeting in Acoustics.

Details to be announced.

April 26-30, 1982, Chicago, USA, Meeting of the Acoustical Society of America. Chairman: Mahlon D. Burkhard, Industrial Research Products, Inc., 321 North Bond St., Elk Grove Village, Illinois U.S.A., 60007.

May 17-22, 1982, Vancouver, B.C., Convention of Canadian Speech and Hearing Association. See page 2 for details.

May 17-19, 1982, San Francisco, USA, INTER-NOISE 82. See page 2 for details.

July 12-22, 1982, London, U.K., Twelfth International Symposium on Acoustical Imaging. See page 2 for details.

July 26-30, 1982, Brighton, U.K., Third Meeting of the World Federation for Ultrasound in Medicine and Biology/Fifth World Congress of Ultrasound in Medicine and Biology. See page 2 for details.

July 19-27, 1982, Paris, France, The Eleventh International Congress on Acoustics. See page 2 for details.

September 13-17, 1982, Göttingen, Federal Republic of Germany, 3rd FASE CONGRESS jointly with DAGA '82. The Congress program will cover: Speech research, Architectural acoustics, structure borne sound; Aero acoustics, underwater sound, nonlinear acoustics. General Secretariat: FASE '82, c/o Physikalisch-Technische Bundesanstalt, Post Box 3345, D-3300 Braunschweig.

September 1982, Warsaw, Poland, Noise Control Conference. Details from: Prof. S. Czarnecki, Committee for Acoustics of the PAN, PKiN p.2321, 00-301 Warsaw.

October 1982, High Tatra, Czechoslovakia, 21st Acoustical Conference on Noise and Environment. Secretariat: House of Technology,

Ing.L.Goralíková, Škultétyho Street, 881 30 Bratislava.

November 8-12, 1982, Orlando, Florida, USA, Meeting of the Acoustical Society of America. Chairman: Joseph E. Blue, Naval Research Laboratory, P.O. Box 8337, Orlando, Florida, U.S.A., 32856.

#### STUDY OF KILLER WHALE "TALK" MAY BENEFIT PACIFIC FISHERIES

Can the sounds made by the killer whales that range the British Columbia coastal waters in their tightly knit family groups or pods have a commercial application to the fisheries in that area?

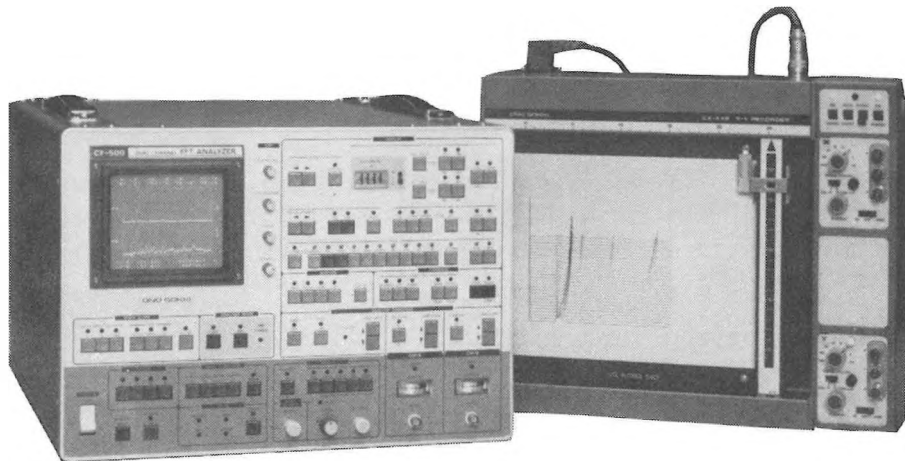
The answer would seem to be "Yes".

This is the implication of a two-year study into the acoustic behavior of the killer whale in the waters of eastern and southern Vancouver Island under a \$21,792 contract negotiated and managed by the DSS Science Centre on behalf of the Department of Fisheries and Oceans.

The study was carried out by John K.B. Ford, a Ph.D. student at the University of British Columbia, working closely with the scientific authority for the project, Dr. Michael Bigg, program head, marine mammal unit, Pacific Biological Station, Nanaimo, B.C.

"Killer whales feed on salmon and other commercial fish and their vocal sounds do frighten their prey into fleeing for safety", says Dr. Bigg. "Such sounds could be usefully applied, for example, for herding the fish. Another practical application would be to turning on these underwater sounds in areas where seals and sea lions are marauding commercial fishermen's nets, causing considerable damage in addition to robbing the catch."

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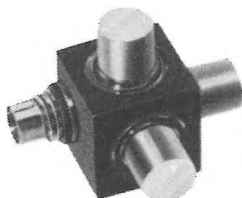
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