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ACOUSTICS AND NOISE CONTROL IN CANADA

THE CANADIAN ACOUSTICAL ASSOCIATION

L'ACOUSTIQUE ET LA LUTTE ANTIBRUIT AU CANADA

L'ASSOCIATION CANADIENNE DE L'ACOUSTIQUE



July 1978
Vol.6, N° 3

Juillet 1978
Vol.6, N° 3

CONTRIBUTIONS

Articles in English or French are welcome. They should be addressed to a regional correspondent or to a member of the editorial board.

SUBSCRIPTIONS

Acoustics and Noise Control in Canada is distributed free. To have your name put on the mailing list, please contact the Noise Control Division, Environmental Protection Service, Department of the Environment, Ottawa, Ontario K1A 0C8. Postal codes must be provided for all addresses in Canada.

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(continued on inside back cover)

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CONTRIBUTION

Vous êtes invités à faire parvenir des articles en anglais ou en français. Prière de les adresser à un correspondant régional ou à un membre de la rédaction.

SOUSCRIPTION

L'acoustique et la lutte antibruit au Canada est distribué gratuitement. Veuillez communiquer avec la Division de la lutte antibruit, Service de la protection de l'environnement, Ministère de l'Environnement, Ottawa (Ontario), K1A 0C8, pour faire inscrire votre nom sur la liste d'envoi. Il est nécessaire que tous les résidents du Canada indiquent leur code postal.

Ce bulletin d'information est publié par l'Association canadienne de l'acoustique. Le Ministère de l'Environnement s'occupe de l'impression et de la distribution. Le contenu du bulletin ainsi que les avis exprimés ne représentent pas nécessairement l'opinion de l'Association canadienne de l'acoustique ou du gouvernement du Canada et des ministères et organismes fédéraux; ce sont les auteurs qui en assument la responsabilité.

(suite au recto de la couverture inférieure)

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Notice Board

Canadian Acoustical Consultants Directory

"Five copies of the directory of Canadian Acoustical Consultants has gone out to interested parties in Canada. Have you submitted a one page resumé? If not, perhaps you should take time to do so. Send it to your executive secretary, who will be glad to add it to our existing directory."

Third International Congress on Noise as a Public Health Problem

The International Commission on Biological Effects of Noise is pleased to announce the Third International Congress as a Public Health Problem: Biological and Behavioral Effects. The Congress is scheduled to be held during the week of September 25-29, 1978, in Freiburg, Federal Republic of Germany (West Germany). The official language of the Congress is English; simultaneous German translations will be provided. In addition to the invited and contributed paper on scientific research and applications, major discussions are planned on governmental and industrial needs and problems. Other discussions will be held on ways to develop procedures that will permit practical solutions both for governments and for industries.

Inquiries should be addressed to:

International Commission on Biological Effects of Noise
Institut für Arbeits - und Sozialmedizin
Universitätsklinikum
Johannes Gutenberg Universität
Obere Zahlbacher Strasse 67
D-6500 Mainz
Federal Republic of Germany.

The major topics that will be treated during the Congress are Community Response to Noise, Effects of Interactions between Noise and Physical or Chemical Agents, Influence of Noise on Performance and Behavior, Noise and Animals, Noise and Communication, Noise-Disturbed Sleep, Noise-Induced Hearing Loss, and Non-auditory Physiological Effects Induced by Noise.

Problems avances de controle du bruit

Le cours est destiné à des ingenieurs et des scientifiques qui se préoccupent de problèmes de bruit et de vibrations et qui possèdent déjà une formation de base dans ce domaine.

Son but est de présenter divers phénomènes de génération et de propagation du son dans les fluides et les solides et de décrire l'état actuel des techniques de réduction du bruit en s'appuyant sur de nombreux exemples de solutions réussies: un objectif essentiel du cours est d'apporter aux participants des suggestions pratiques.

Le cours sera donné partiellement en français et en anglais. Il comprendra d'importantes périodes de discussion entre les conférenciers et les participants (un traducteur pourra intervenir ponctuellement pour faciliter ces échanges et des traductions de notes et de figures seront disponibles).

Veuillez envoyer votre bon de commande dès à présent à:

Jean-Pierre Sirieys
 commins-bbm
 7, allée des coudraies
 91190 gif-sur-yvette

en indiquant votre spécialité et votre formation.

Les droits d'inscription sont de 1.600 FF HT (+ 17,6% de T.V.A.). Ils comprennent les frais d'inscription, la fourniture des notes de cours et les repas de midi. Vous devez vous en acquitter par un chèque à l'ordre de commins-bbm, sarl, avant la date limite, fixée au 31 juillet 1978.

WANTED: Noise Abatement Engineer

The Noise Abatement Engineer will be a Chemical, Mechanical or Mining Engineer with 2-5 years pertinent experience and advanced training in the field. The incumbent will assist in in-plant analysis of noise problems, definition of appropriate noise protection and control methods, development of new methods as required, and implementation of controls.

Salaries commensurate with qualifications and experience.

Group insurance, retirement income plan, relocation expenses paid.

NORANDA RESEARCH CENTRE
 240 Hymus Boulevard
 Pointe Claire, Quebec H9R 1G5
 (514) 697-6640

Road and Rail Noise: Effects on Housing

Copies of this report (English edition - 107 pages, Reference No. NHA 5156 12/77) are available, free of charge, from Information Services, Central Mortgage and Housing Corporation, Montréal Road, Ottawa, Ontario. K1A 0P7.

This publication, issued as a supplement to Site Planning Criteria, deals specifically with new residential development which may be adversely affected by noise from roads and railways.

In some instances, the availability of National Housing Act financing depends upon the inclusion of noise reduction measures. Therefore, it is hoped that developers and all levels of government will take these criteria into consideration when preparing comprehensive land use plans.

For further information, please contact the Director, Professional and Technical Standards, Professional Standards and Technology Sector, CMHC, at the above address. Tel: (613) 746-4611.

Provincial Lottery Funds Environmental Noise Study

The award of a \$65,000 contract to study the health effects of urban noise throughout the Province has been announced by Ontario's Environment Minister George McCague.

The study, to be carried out over a two-year period, will be funded by the Provincial Lottery Trust, with investigations to focus on the effects of noise from highways, railways, airports, construction and industrial activities.

John Hemingway, senior environmental engineer with SNC/GECO will co-ordinate the project and Dr. Phillip Dickinson, director of Bickerdike/Allan/Bramble West, will be principal consultant. John Manuel, supervisor, Environment Ontario's noise pollution control section, will provide liaison with other agencies interested in the project and its findings.

Data will be collected on the health and human well-being implications of urban noise through social surveys, audiometric testing, and examination of medical records. These effects will be correlated against measured sound levels. The study is expected to provide the Ontario Environment Ministry with vital information on the adverse effects of noise in the community.

INTERNATIONAL INSTITUTE OF NOISE CONTROL ENGINEERING
TECHNICAL UNIVERSITY - BUILDING 352 - DK-2800 LYNGBY - DENMARK

April 18th, 1978
I.I. 20/78
FI/sn

The Canadian Acoustical Association
P.O.Box 3651 Station "C"
Ottawa, Ontario
K1Y 4J7
Canada

Dear Sirs,

It is a great pleasure for me to inform you that

THE CANADIAN ACOUSTICAL ASSOCIATION

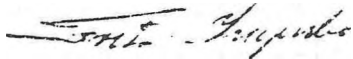
has been elected a member of the

INTERNATIONAL INSTITUTE OF NOISE CONTROL ENGINEERING.

The membership is effective as from the 1st of April, 1978.

The Board of Directors is looking forward to an important collaboration with the purpose of promoting the work of the institute.

Yours sincerely,



Fritz Ingerslev
President,
INTERNATIONAL/INCE

April 18th, 1978
I.I. 21/78
FI/sn

The Canadian Acoustical Association
P.O.Box 3651 Station "C"
Ottawa, Ontario
K1Y 4J7
Canada

Dear Sirs,

At the same time as I forward your membership certificate of INTERNATIONAL INSTITUTE OF NOISE CONTROL ENGINEERING, I/INCE I should like to draw your attention to an obligation for a member society. This obligation is stated in the BYLAWS of ./. I/INCE which are enclosed.

The obligation is that each member society shall appoint one of its members to serve as its official representative on the General Assembly of I/INCE. This member is responsible for coordinating all activities between the member society and I/INCE. If a member is unable to be present at a General Assembly the society is of course permitted to appoint another member of the society to substitute the official representative at this General Assembly. The President should be notified in advance about the nomination of a substitute and the name and address should be sent to the President, if possible not later than a month before the meeting of the General Assembly.

When your society has appointed your official representative of the General Assembly you are requested to inform the representative about his (her) two responsibilities with respect to the Newsletter. He (she) shall verify that his (her) member society nominates and appoints an individual to serve as correspondent with the task of supplying national news and news of activities of the member society in the field of noise control. The news shall be written in English in a prescribed format suitable for dissemination in the Newsletter. Each member

of the General Assembly shall also assume responsibility for circulation of the Newsletter to individual members of his member society.

May I ask you in the near future to send to the President, with a copy of the Secretary-General

1. The name and address of the official representative of the General Assembly appointed by your society.
2. The name and address of the person who is going to serve as correspondent to the Newsletter.

Yours sincerely,



Fritz Ingerslev

P. S. President : Professor Fritz Ingerslev
Technical University
Building 352
DK-2800 Lyngby
Denmark

Secretary-General: Dr. Eric J. Rathe
Wettsteinstrasse 71
CH-8332 Russikon
Switzerland

NEWSLETTER OF THE INTERNATIONAL INSTITUTE OF NOISE CONTROL ENGINEERING

NO. 1, June 1975, Page 4 and 5

BYLAWS OF THE INTERNATIONAL INSTITUTE OF
NOISE CONTROL ENGINEERING

1. Name and Purpose

The International Institute of Noise Control Engineering is a non-profit organization established on the basis of Swiss Civil Law (Schweizerisches Zivilgesetzbuch, Art. 60 ff.). The date of foundation is October 1st, 1974. The purposes of the organization relate to Noise Control Engineering and comprise:

- a) The organization of international conferences.
- b) The international exchange of information and news items.
- c) The promotion of international cooperation in research on noise control and the application of engineering techniques for the control of noise.
- d) The development of interdisciplinary contracts between Noise Control Engineering and other related fields of work.

2. Membership

Membership is open to non-profit societies concerned with the areas of interest defined above, provided they in turn are open to membership for individual persons. Applications are considered by the Board of Directors.

3. Board of Directors and Officers

The Organization of the Institute comprises a Board of Directors and a General Assembly.

The Board of Directors consists of the President, the Secretary-General of the Institute and six Directors. The President and Secretary-General are responsible for conducting the business activities of the Institute and reporting to the Board of Directors. They also serve as Directors. The President and Secretary-General are elected for three-year terms by the Board of Directors. The three-year terms may be renewed.

Of the six Directors, one represents the International Commission on Acoustics (ICA), four represent preceding INTER-NOISE conferences and one is a Director-at-large. The Director-at-Large is appointed by the Institute of Noise Control Engineering of the United States of America as the founder organization of the INTER-NOISE series of conferences. The Director representing the ICA is designated by the president of that organization. The four Directors representing previously-held INTER-NOISE conferences are elected by the Board of Directors. This election shall be held during or after the INTER-NOISE conference. Candidates for election are drawn from the group of individuals who had primary responsibility for the conference. Through 1976, the four Directors representing INTER-NOISE conferences shall include representatives of all INTER-NOISE conferences held. After 1976, the four Directors representing INTER-NOISE conferences shall be drawn from the management of those conferences held outside the United States of America.

The Board of Directors defines the policies of the Institute. The Board has the right to change the Bylaws or to dissolve the Institute by an affirmative vote of at least two-thirds of all the members of the Board of Directors.

4. General Assembly

The General Assembly consists of the President, Secretary-General, Board of Directors and one representative of each member society.

Each member society shall appoint one of its members to serve as its official representative on the General Assembly of the Institute. This member is responsible for coordinating all activities between the member society and the Institute.

The President shall issue the call for meetings and chair the meetings of the General Assembly, which shall preferably be held in conjunction with an INTER-NOISE conference.

It shall be the responsibility of the General Assembly to develop recommendations for the accomplishment of purposes c) and d) of Bylaw 1. These recommendations shall be submitted to the Board of Directors.

The General Assembly shall receive reports from the President and/or Secretary-General on the activities of the Institute.

5. Organization of International Conferences

In fulfilling purpose a) of Bylaw 1, the Institute will initiate and/or sponsor INTER-NOISE conferences in countries of member societies. The Board of Directors will invite a member society for a group of member societies to consider undertaking the organization of an INTER-NOISE conference. The composition of the Organizing Committee of the INTER-NOISE conference shall be approved by the Board of Directors before the public announcement of the Conference.

6. Newsletter

In fulfilling purpose b) of Bylaw 1, the Institute will issue a Newsletter. Each member of the General Assembly shall have two responsibilities with respect to the Newsletter. He (she) shall verify that his (her) member society nominates and appoints an individual to serve as correspondent with the task of supplying national news and news of activities of the member society in the field of noise control. The news shall be written in English in a prescribed format suitable for dissemination in the Newsletter. Each member of the General Assembly shall also assume responsibility for circulation of the Newsletter to individual members of his member society. For this purpose, a limited number of copies of the Newsletter will be supplied to each member society without charge. Member societies may order additional copies and have the right to further reproduction of the Newsletter.

7. Finances

Member societies are required to assist in defraying the operating expenses of the Institute, including the publication of the Newsletter. The sum to be paid by each member society is 300 Swiss Francs per annum. It is payable by January 1st of each year for that year. If it is not received by the Institute within 90 days of this date, a second notice is issued, and after another 60 days the membership of the member society may be cancelled. The payments are to be made to the following account of the Institute:

International INCE, Account No. P4-623,116
Swiss Bank Corporation,
Zurich, Switzerland.

8. Legal Status

The Institute is established at the address: International INCE, 8332 Zurich-Russikon, Switzerland, and all legal actions are restricted to Zurich 1 (Gerichtsstand).

September 20th, 1974

The Canadian Acoustical Association l'Association Canadienne de l'Acoustique



P.O. Box 3651, Station "C"
Ottawa, Ontario
K1Y 4J7

May 26, 1978.

Dr. C.W. Bradley,
President,
The Canadian Acoustical Association,
C/O William Bradley & Assoc.,
3550 Ridgewood Avenue,
Montreal, Quebec.
H3S 1C2.

Dear Bill:

I enclose a copy of the draft agenda for the Fourth General Assembly of the I/INCE meeting which was held on the 11th of May in San Francisco.

The agenda was accepted without amendment. The president gave a general review of the activities of International INCE. In this review he particularly pointed to the growth of the Institute. This is summarized in the enclosed xerox of the relevant page from the proceedings of INTER-NOISE 78. Some mention was made of problems concerning the finances of INCE, a point which I shall discuss later.

W.W. Lang's report on INTER-NOISE 78 was short and to the point. He confirmed that which was apparent to the participants that the conference had been a substantial success in every possible way.

Item 5, S. Czarnecki invited the membership to Warsaw in 1979, and handed out initial announcement and call for papers. Please see the xerox enclosure (this might be of interest to the editor).

There was a discussion on the activities of International INCE and particular reference was made to the present unsatisfactory budgetary position of the organization. It was of concern to the Directors that steps should be taken to improve the finances. It was agreed that no further charge should be made to the individual members of the Institute, but that other sources of subscription would be sought. The Directors of the Institute were to consider ways and means at their next meeting.

..... 2

President:
C. W. Bradley
William Bradley & Assoc.
3550 Ridgewood Ave.

Post President:
Dr. H. W. Jones
Physics Dept.
Univ. of Calgary

Executive Secretary:
C. W. Sherry
Domtar Inc.
Domtar Research Centre

Editor:
G. Faulkner
Mechanical Engineering Dept.
Univ. of Alberta

Treasurer:
L. T. Russell
Mechanical Engineering Dept.
Nova Scotia Technical Coll.
Halifax, N.S.

There were no other items of business and the meeting was closed.

Although it was not a formal agenda item, at the opening of the meeting the president of the Institute "Fritz Ingerslev" particularly welcomed the Canadian Acoustical Association on the occasion of their first attendance.

If there is any further information which I can supply, please let me know.

Yours sincerely,

H.W. Jones

HWJ/ds
Encls.

c.c. C.W. Sherry
c.c. G. Faulkner

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INTERNATIONAL INSTITUTE OF NOISE CONTROL ENGINEERING
TECHNICAL UNIVERSITY - BUILDING 352 - DK-2800 LYNGBY - DENMARK

March 15th, 1978
I.I. 13/78
FI/sn

D R A F T A G E N D A

for the Fourth General Assembly of the
INTERNATIONAL INSTITUTE OF NOISE CONTROL ENGINEERING
to be held on Thursday the 11th May, 1978
in San Fransisco

The meeting will start at 9⁰⁰ a.m.
Conference room: Twin Peaks Room, Jack Tar Hotel.

1. Opening of the meeting.
2. Approval of the Draft Agenda.
3. Report by the President on the activities of INTERNATIONAL/INCE.
4. Report by W.W.Lang on INTER-NOISE 78.
5. Report by S.Czarnecki on INTER-NOISE 79.
6. Discussion on the activities of INTERNATIONAL/INCE.
7. Other items.
8. Closing of the meeting.

INTERNATIONAL INCE

President

Fritz H. B. Ingerslev

Secretary-General

Eric J. Rathe

Directors

Peter K. Baade, USA

John C. Johnson, USA

William W. Lang, USA

Takamoto Nimura, Japan

Jean Mattei, France

Ole Juhl Pedersen, Denmark

Ernst H. Rothauer, Switzerland

MEMBER SOCIETIES

Australia

Australian Acoustical Society

Division of Building Research

P.O. Box 56

Highbett Vic. - Australia

Canada

The Canadian Acoustical Association

P.O. Box 3651, Station "C"

Ottawa, Ontario K1Y 4J7 - Canada

Denmark

Danish Acoustical Society

Lundtoftevej 100

DK-2800 Lyngby - Denmark

Germany

Verein Deutscher Ingenieure

VDI-Kommission Lärminderung

4 Düsseldorf 1

Postfach 1139 - Germany

Japan

Acoustical Society of Japan

Iweda Building

7 Yoyogi 2-chome, Shibuya-ku

Tokyo - Japan

The Institute of Noise Control

Engineering of Japan

Kobayasi Institute of Physical Research

Kokubuji, Tokyo 185 - Japan

Netherlands

Nederlands Akoestisch Genootschap

Postbus 162

Delft - Holland

Norway

The Acoustical Society of Norway

E L A B

Norges tekniske hogskole

N-7034 Trondheim - Norway

Poland

The Committee on Acoustics of

Polish Academy of Sciences

Skrytka pocztowa 24

00-901 Warszawa - Poland

South Africa

The South African Acoustics Institute

National Physical Research Laboratory

P.O. Box 395

Pretoria - South Africa

Switzerland

Schweizerische Gesellschaft für Akustik

Postfach 2334

CH-3001 Bern - Switzerland

U.S.A.

Acoustical Society of America

325 East 45th Street

New York, N.Y. 10017 - U.S.A.

Institute of Noise Control Engineering/U.S.A.

P.O. Box 3206

Arlington Branch

Poughkeepsie, N.Y. 12603 - U.S.A.

The following organizations, among others, are considering membership in International INCE:

Acoustical Commission of the Czechoslovak Academy of Sciences

Acoustical Commission of the Hungarian Academy of Sciences

Association Belge des Acousticiens

British Institute of Acoustics

Comite Bulgare sur la Lutte Contre le Bruit

Groupement des Acousticiens de Langue Française

Grupo de Acusticos Latino-Americanos

Svenska Akustiska Sällskapet

inter-noise



WARSZAWA
POLAND

79

INTER - NOISE 79

IPPT-PAN

ul. Świętokrzyska 21

00-049 WARSZAWA, POLAND

GENERAL INQUIRIES

INTER-NOISE 79

IPPT PAN

ul. Świętokrzyska 21

00-049 Warszawa POLAND

telephone: 26 78 31

telex: 81 56 38 ippt pl

THE INTERNATIONAL CONFERENCE
ON NOISE CONTROL ENGINEERING

inter-noise

WARSZAWA - POLAND
11-14 SEPTEMBER 1979

79

announcement & call for papers

GENERAL CHAIRMAN

prof. Stefan Czarnecki

TECHNICAL CHAIRMAN

prof. Zbigniew Engel

GENERAL SECRETARY

dr Michał Vogt

GENERAL INFORMATION

The eighth International Conference on Noise Control Engineering will be held in the conference rooms of the Palace of Culture and Science in the center of Warsaw, Poland on 11 - 14 September 1979. The conference will include technical sessions consisting of invited, contributed; verbal and poster form^x presentations in all branches of noise control activities and an exhibition of the latest equipment and instrumentation for noise control.

English will be the working language for presentation and all printed records.

^xAuthors willing to present their papers in poster form will have 5 minutes to present their work during the session for contributed papers. Subsequently they will stay half an hour at their displays /booths of area about 2 m²/ to present their papers and discuss details with any interested participants. The materials for presentation may include figures, diagrams, photographs, numerical data, fragments of text etc.

SPONSORSHIP

INTER-NOISE 79 is sponsored by the International/INCE and is organized by the Institute of Fundamental Technological Research of the Polish Academy of Sciences /IPPT-PAN/ in cooperation with the Acoustical Committee of the Polish Academy of Sciences, the Polish Acoustical Society and other leading professional and governmental organizations.

Sponsored by
**INTERNATIONAL INSTITUTE OF
NOISE CONTROL ENGINEERING**

President

Fritz H.B. Ingerslev

Secretary-General

Eric J. Rahe

Directors

Peter K. Baade, USA

John C. Johnson, USA

William W. Lang, USA

Tadamoto Nimura, Japan

please type

Surname First Name Title /Profession/

Organization Tlx

Address

Address for correspondence Tel

I intend to submit a paper on topic N^o and present it in contributed verbal/poster form

NOTE: This form is not valid as a registration form

.....
Date

.....
Signature

INVITED AND CONTRIBUTED PAPERS, ABSTRACTS

Contribution on the following topics have been selected for the technical program:

- | | |
|--------------------------------------------|----------------------------------------------------------------------------|
| 1. Community Noise | 8. Designing and Planning for Industrial Noise Control |
| 2. Aircraft and Airport Noise | 9. Noise Measurement, Analysis and Instrumentation |
| 3. Rail Transportation Noise | 10. Materials and Products for Noise Control |
| 4. Traffic Noise Abatement | 11. International Standards and Legislative Requirements for Noise Control |
| 5. Machinery Noise Reduction at the Source | 12. Construction Noise |
| 6. Reduction of In-Plant Noise | |
| 7. Noise Control Engineering in Buildings | |

Abstracts should be informative rather than descriptive and be typed double-spaced on standard letter paper. The text of the abstract should be 400 words in length, including equations and references.

Authors should include name, complete mailing address, phone number, and they should indicate the program topic to which the abstract is directed. Abstracts are due on 15 December 1978. Authors will then receive special masters on which their manuscripts must be typed. The firm deadline for receipt of manuscripts is 15 March 1979. Abstracts and manuscripts should describe new material that has not previously been presented at a conference or published in a journal. Instructions relating to the presentation of accepted papers will be sent to each author. At INTER-NOISE 79, standard 2x2-inch and overhead projectors will be provided. Requests for special facilities should be added to the abstract as a footnote.

PARTICIPATION

These individuals who will return the Application Form will receive further information concerning the participation conditions and forms for registration and hotel booking. The Conference is open to all who have registered and paid the registration fee.

PROCEEDINGS AND FINAL PROGRAM

All invited, contributed and poster form papers will be included in the Proceedings, available to all participants at final registration. Final program will be mailed to all participants who have registered by 1 July 1979.

EXHIBITION

A comprehensive exposition of noise control equipment and materials will be featured at the Conference. There will be opportunities for viewing exhibits and demonstrations and for discussion with manufacturer's representatives. Parties interested in sponsoring an exhibit at the exposition should contact the Conference Secretariat.

Transport Canada Transports Canada
Surface Surface

15

Your file Votre référence

Our file Notre référence

S3300-29

Ottawa, Ontario,
K1A 0N5,
May 18, 1978

Dr. D.N. May,
Associate Editor,
Acoustics and Noise Control
in Canada,
The Canadian Acoustical
Association,
Systems Research and Development
Branch,
Ontario Ministry of Transportation
and Communications,
1201 Wilson Avenue,
Downsview, Ontario,
M3M 1J8.

Dear Dr. May:

This is in response to the request forwarded by some CAA members at the 1977 CAA Annual Meeting in Ottawa last October, 1977 that the membership be kept posted on the change of the Federal Noise regulations.

Transport Canada has proposed to amend Section 1106 of Schedule E of the Canada Motor Vehicle Noise Standards (CMVSS), regulating the noise emission levels of new motor vehicles. Full text of the proposed amendment was published in the Canada Gazette, Part I, No. 18, Vol. 112, pp. 2688-2690 (May 6, 1978), and is enclosed herein for possible publication in Acoustics and Noise Control in Canada.

Shown in the attached Table are the prominent features of the proposed amendment compared with the corresponding current requirements. The proposed amendment will go into effect of January 1, 1979, barring any complications.

...2

Any interested person may make representations concerning the proposed amendment to the Minister of Transport, before July 1, 1978.

Yours very truly,

A handwritten signature in cursive script, appearing to read "H.K. Lee".

H.K. Lee, Ph. D.,
Noise Specialist,
Vehicle Systems,
Road and Motor Vehicle Traffic Safety.

Attach.

HKL/ssm

TABLE: Comparison of Prominent Features of the Proposed and Current Exterior Vehicle Noise Emission Level Requirements

Vehicle Type	Proposed Amendment		Current Requirements	
	Permitted Noise Level (dBA)	Measurement Method	Permitted Noise Level (dBA)	Measurement Method
Heavy Duty (I) (>4500 Kg)	83+2	MVSTM 1106*	88+2	SAE** J366
Heavy Duty (II) (>2722 Kg) (<4500 Kg)	83+2	SAE*** J986a	88+2	SAE J366
Light Duty (<2722 Kg) (excl. motor-cycles)	80+2	SAE J986a	86+2	SAE J986a

* Motor Vehicle Safety Test Methods, Section 1106 "Noise Emissions Tests for Motor Vehicles", approved November 1, 1977. May be obtained by writing to the Director, Road and Motor Vehicle Traffic Safety Branch, Transport Canada, Ottawa, Ontario, K1A 0N5.

** Society of Automotive Engineers Recommended Practice J366, "Exterior Sound Level for Heavy Trucks and Buses". (July, 1969).

*** Society of Automotive Engineers Standard J986a, "Sound Level for Passenger Cars and Light Trucks". (July, 1972).

DEPARTMENT OF TRANSPORT
MOTOR VEHICLE SAFETY ACT

Notice is hereby given, pursuant to section 9 of the Motor Vehicle Safety Act, that the Governor in Council proposes to make the annexed amendment to the Motor Vehicle Safety Regulations.

The annexed amendment to section 1106 of Schedule E of the said Regulations proposes that the noise emission levels for heavy duty trucks and buses of more than 4 500 kg (10,000 pounds) GVWR shall not exceed 83 dbA, effective January 1, 1979.

The annexed amendment also supersedes Schedule No. 1038 published in the *Canada Gazette* Part I, of July 10, 1976. The revision proposed in Schedule No. 1038 to the motorcycle noise emission standard has been revoked pending further investigation into a suitable test method. The proposed emission levels for passenger cars and other vehicles under 4 500 kg (10,000 pounds) is the same as proposed in Schedule No. 1038. The proposed effective date for these vehicles is January 1, 1979.

The referenced Motor Vehicle Test Method, section 1106, approved November 1, 1977, may be obtained by writing to the Director, Road and Motor Vehicle Traffic Safety Branch, Transport Canada, Ottawa, Ontario K1A 0N5.

Any manufacturer, distributor, importer and other interested persons may make representations concerning the proposed amendment to the Minister of Transport, before July 1, 1978. All such representations must cite *Canada Gazette* Part I and the date of publication of this notice.

Schedule No. 1038 published in the *Canada Gazette* Part I of July 10, 1976, is withdrawn.

Given at Ottawa, this 28th day of April, 1978

HENRI CHASSÉ
Assistant Clerk of the Privy Council

SCHEDULE NO. 1062

1. The definition "system or device" in section 1100 of Schedule E to the *Motor Vehicle Safety Regulations* is revoked and the following substituted therefor:

"system or device" means any modification of a vehicle or vehicle engine that prevents or lessens the emission of any air pollutant or noise into the atmosphere;"

2. Section 1106 of Schedule E to the said Regulations is revoked and the following substituted therefor:

"1106. (1) Every vehicle shall be so constructed that

(a) it complies with section 6 Specifications of ECE Regulation No. 9 Uniform Provisions Concerning the Approval of Vehicles With Regard to Noise (March 1974), except that the test described in annex 3, paragraph 3.2 of those provisions shall be omitted, or

(b) the noise emitted by it is

(i) in the case of a heavy duty truck with a GVWR of more than 4500 kg (10,000 lbs), not in excess of 83

MINISTÈRE DES TRANSPORTS
LOI SUR LA SÉCURITÉ DES VÉHICULES
AUTOMOBILES

Avis est donné par les présentes, en vertu de l'article 9 de la *Loi sur la sécurité des véhicules automobiles*, que le gouverneur en conseil propose d'apporter la modification ci-jointe au *Règlement sur la sécurité des véhicules automobiles*.

La modification ci-jointe a pour objet de modifier l'article 1106 de l'annexe E dudit règlement pour que les niveaux d'émission de bruit des autobus et des camions lourds d'un PNB de plus de 4 500 kg (10,000 livres) ne dépasse pas 83 dbA, et elle entrera en vigueur le 1^{er} janvier 1979.

La modification ci-jointe a pour objet d'annuler l'annexe n° 1038 publiée dans la *Gazette du Canada* Partie I, du 10 juillet 1976. La modification proposée à l'annexe n° 1038 et touchant la norme d'émission de bruit d'une motocyclette a été abrogée en attendant de plus amples recherches sur une méthode d'essais appropriée. La proposition pour les niveaux de bruit des voitures particulières et autres véhicules de moins de 4 500 kg (10,000 livres) est identique à celle proposée à l'annexe n° 1038. Le 1^{er} janvier 1979 est la date d'entrée en vigueur proposée pour ces véhicules.

La méthode d'essais des véhicules moteurs mentionnée, section 1106, approuvée le 1^{er} novembre 1977, peut s'obtenir en écrivant au Directeur, Direction de la sécurité automobile et routière, Transports Canada (Ontario) K1A 0N5.

Tout fabricant, distributeur, importateur et autres personnes concernées peuvent présenter des observations au ministre des Transports au sujet de ce projet de modification avant le 1^{er} juillet 1978. Toutes ces représentations devront citer la *Gazette du Canada* Partie I, et mentionner la date de publication du présent avis.

L'annexe n° 1038 publiée dans la *Gazette du Canada* Partie I du 10 juillet 1976 est donc annulée.

Fait à Ottawa, le 28 avril 1978

Le greffier adjoint du Conseil privé
HENRI CHASSÉ

ANNEXE N° 1062

1. La définition de «système ou dispositif», à l'article 1100 de l'annexe E du *Règlement sur la sécurité des véhicules automobiles* est ainsi remplacée:

«système ou dispositif» désigne les modifications à un véhicule ou à son moteur empêchant ou réduisant l'émission de polluants ou de bruits dans l'atmosphère;»

2. L'article 1106 de l'annexe E est ainsi remplacé:

«1106. (1) Les véhicules sont construits

a) de façon à être conformes à l'article 6 du règlement n° 9 de la CEE. Dispositions uniformes concernant l'approbation des véhicules quant au bruit (mars 1974), mais en omettant l'essai visé au paragraphe 3.2, de l'annexe 3, ou

b) de façon que le bruit émis soit

(i) inférieur à 83 dbA, mesuré selon les Méthodes d'essai de sécurité des véhicules automobiles, article

dba when measured in accordance with Motor Vehicle Safety Test Methods, section 1106 "Noise Emissions Tests for Motor Vehicles", approved November 1, 1977,

(ii) in the case of a heavy duty bus with a GVWR of more than 4500 kg (10,000 lbs) not in excess of 83 dbA when measured in accordance with Motor Vehicle Safety Test Methods, section 1106 "Noise Emissions Tests for Motor Vehicles", approved November 1, 1977,

(iii) in the case of a heavy duty vehicle with a GVWR of 4500 kg (10,000 lbs) or less, not in excess of 83 dbA when measured in accordance with SAE Standard J986a, Sound Level for Passenger Cars and Light Trucks (July 1972),

(iv) in the case of a light duty vehicle, not in excess of 80 dbA when measured in accordance with SAE Standard J986a, Sound Level for Passenger Cars and Light Trucks (July 1972), or

(v) in the case of a motorcycle, not in excess of 86 dbA when measured in accordance with SAE Standard J986a, Sound Level for Passenger Cars and Light Trucks (July 1972),

when a value of 2 dbA, to allow for variations in test site, temperature gradients, wind velocity gradients, test equipment and inherent differences in nominally identical vehicles, is subtracted from the highest average noise value recorded during the test described in the publication referred to in subparagraph (i), (ii), (iii), (iv) or (v), whichever is applicable.

(2) Every truck, bus and chassis-cab with a GVWR of more than 4500 kg (10,000 lbs) shall be so constructed that the interior sound level at the driver's seating position does not exceed 90 dbA when measured as follows:

(a) the vehicle is located so that no other vehicle or signboard, building, hill or other large reflecting surface is within 15.2 m (50 feet) of the driver's seating position;

(b) all vehicle doors, windows and ventilators are closed;

(c) all power-operated accessories are turned off;

(d) the driver is in his normal seated driving position and the person conducting the test is the only other person in the vehicle;

(e) a sound level meter is used that is set at the A-weighting "fast" meter response and meets the requirements of

(i) the American National Standards Institute, Standard ANSI S1.4-1971, "Specification for Sound Level Meters", for Type 1 Meters; or

(ii) the International Electrotechnical Commission (IEC), Publication No. 179 (1973), "Precision Sound Level Meters";

(f) the microphone is located so that it points vertically upward, 150 mm (6 inches) to the right and directly in line with and on the same plane as the driver's ear;

(g) if the motor vehicle's engine radiator fan drive is equipped with a clutch or similar device that automatically either reduces the rotational speed of the fan or completely disengages the fan from its power source in

1106, «Essai pour bruit émis par véhicules automobiles», approuvées le 1^{er} novembre 1977, pour camions lourds d'un PNBV de plus de 4 500 kg (10 000 lb),

(ii) inférieur à 83 dbA, mesuré selon les Méthodes d'essai de sécurité des véhicules automobiles, article 1106, «Essai pour bruit émis par véhicules automobiles», approuvées le 1^{er} novembre 1977, pour autobus lourds d'un PNBV de plus de 4 500 kg (10 000 lb),

(iii) inférieur à 83 dbA, mesuré selon la norme SAE J986a, «Sound Level for Passenger Cars and Light Trucks» (juillet 1972), pour véhicules lourds d'un PNBV de 4 500 kg (10 000 lb) ou moins,

(iv) inférieur à 80 dbA, mesuré selon la norme SAE J986a, «Sound Level for Passenger Cars and Light Trucks» (juillet 1972), pour véhicules légers, et

(v) inférieur à 86 dbA, mesuré selon la norme SAE J986a, «Sound Level for Passenger Cars and Light Trucks» (juillet 1972), pour motocyclettes,

après avoir soustrait une valeur de 2 dbA du niveau de bruit moyen le plus élevé enregistré au cours des essais visés aux sous-alinéas (i), (ii), (iii), (iv) ou (v), afin de compenser pour les différences de conditions selon l'endroit des essais, les écarts de température, les différences de vitesse du vent, l'équipement d'essai et les différences inévitables entre véhicules nominale-ment identiques.

(2) Les camions, autobus et chassis d'un PNBV de plus de 4 500 kg (10 000 lb) sont construits de manière que le niveau sonore intérieur à la place assise du conducteur ne puisse dépasser 90 dbA, cette norme étant mesurée comme suit:

a) placer le véhicule de façon qu'il n'y ait pas de grande surface réfléchissante tel que colline, édifice, panneau ou autre véhicule, à moins de 15,2 m (50 pi) de la place assise du conducteur,

b) fermer les portes, fenêtres et orifices de ventilation,

c) mettre hors circuit les accessoires électriques,

d) le conducteur étant à sa position normale de conduite et le seul autre occupant du véhicule étant la personne chargée de l'essai,

e) utiliser un sonomètre, réglé pour obtenir une réponse rapide sur le réseau de prépondération A, conforme aux exigences de

(i) la norme ANSI S1.4-1971 de l'«American National Standards Institute, Specification for Sound Level Meters», relatives aux sonomètres de Type 1, ou

(ii) la Publication n° 179 (1973) de la Commission électrotechnique internationale (CEI), «Sonomètres de précision»,

f) tenir le microphone pointé verticalement vers le haut, à moins de 150 mm (6 po) de l'oreille droite du conducteur, à la même hauteur et parallèlement à celle-ci,

g) lorsqu'un véhicule automobile possède une commande de ventilateur munie d'un embrayage ou un dispositif semblable qui permet de réduire automatiquement la vitesse du ventilateur ou de l'arrêter complètement, ce qui

response to reduced engine cooling loads, the vehicle may be parked before testing with its engine running at high idle or any other speed the operator chooses for sufficient time, but not more than 10 minutes, to permit the engine radiator fan to automatically disengage,

(h) with the vehicle's transmission in neutral gear, the engine is accelerated to

(i) its maximum governed engine speed, if it is equipped with an engine governor, or

(ii) its speed at its maximum rated horsepower, if it is not equipped with an engine governor,

and the engine is stabilized at that speed;

(i) the A-weighted sound level reading on the sound level meter for the stabilized engine speed condition referred to in subparagraph (h)(i) or (ii) is observed and, if it has not been influenced by extraneous noise sources, is recorded;

(j) the vehicle's engine speed is returned to idle and the procedures set out in paragraphs (h) and (i) are repeated until two maximum sound levels within 2 dbA of each other are recorded and the maximum sound level readings are numerically averaged; and

(k) the numerical average obtained in accordance with paragraph (j), with a value of 2 dbA subtracted therefrom to allow for variations in test conditions and in the capabilities of metres, is the vehicle's interior sound level at the driver's seating position for the purposes of determining compliance with the requirements of this subsection."

[18-1-o]

a pour effet d'alléger la charge du dispositif de refroidissement du moteur, garer le véhicule avant de procéder aux essais, en ne laissant pas tourner le moteur trop au ralenti ou en le laissant tourner à toute vitesse que le conducteur jugera utile (pendant une période suffisante mais ne dépassant pas 10 min) afin que le ventilateur du radiateur puisse s'arrêter automatiquement,

h) la transmission étant au point mort, accélérer le régime du moteur et le maintenir ainsi

(i) à sa vitesse de rotation maximale, si le moteur est muni d'un régulateur, ou,

(ii) dans le cas contraire, au régime de puissance maximale indiqué,

i) observer le niveau sonore du réseau de pondération A indiqué par le sonomètre pour les conditions de régime constant de rotation du moteur visées aux sous-alinéas h) (i) ou (ii) et effectuer le relevé s'il n'y a pas d'influence indue des bruits extérieurs,

j) ramener le moteur au ralenti et répéter les opérations des alinéas h) et i) jusqu'à l'obtention de deux relevés maximaux séparés par moins de 2 dbA et calculer la moyenne, et

k) la moyenne obtenue, moins 2 dbA (de façon à prévoir une marge d'erreur qui tienne compte des variations dans les conditions de l'essai et de l'équipement), constitue le niveau sonore intérieur du véhicule à la place assise du conducteur et sert à déterminer la conformité du véhicule aux exigences du présent paragraphe.»

[18-1-o]

DEPARTMENT OF TRANSPORT

Ottawa, April 20, 1978

Public notice is hereby given that by Transport Order No. 155 in 1978, dated April 20, 1978, permission has been granted, under the provisions of section 64 of the Canada Shipping Act, to change the name of the motor vessel MONIQUE H. BEL B., O.N. 345527, of the port of Caraquet, N.B., registered in the name of Edmond Hache, of Caraquet, N.B., to MONIQUE H.

D. L. FINDLAY

Director, Ship Safety, Coast Guard

[18-1-o]

MINISTÈRE DES TRANSPORTS

Ottawa, le 20 avril 1978

Avis public est par les présentes donné qu'en vertu des dispositions de l'article 64 de la *Loi sur la marine marchande du Canada*, l'ordonnance des Transports n° 155 en 1978, en date du 20 avril 1978, accorde l'autorisation de changer le nom du navire MONIQUE H. BEL B., numéro officiel 345527, du port de Caraquet (N.-B.), immatriculé au nom de Edmond Hache, de Caraquet (N.-B.), à MONIQUE H.

Le directeur, Sécurité des navires, Garde côtière

D. L. FINDLAY

[18-1-o]

DEPARTMENT OF TRANSPORT

Ottawa, April 20, 1978

Public notice is hereby given that by Transport Order No. 156 in 1978, dated April 20, 1978, permission has been granted, under the provisions of section 64 of the Canada Shipping Act, to change the name of the motor vessel VICTORIA III, O.N. 346953, of the port of Toronto, Ont., registered in the name of Frank Gillmor Stevens Hibbard, of

MINISTÈRE DES TRANSPORTS

Ottawa, le 20 avril 1978

Avis public est par les présentes donné qu'en vertu des dispositions de l'article 64 de la *Loi sur la marine marchande du Canada*, l'ordonnance des Transports n° 156 en 1978, en date du 20 avril 1978, accorde l'autorisation de changer le nom du navire VICTORIA III, numéro officiel 346953, du port de Toronto (Ont.), immatriculé au nom de Frank Gillmor Stevens

ENVIRONMENTAL NOISE ACTIVITY
IN THE PROVINCE OF ONTARIO
1977-78
=====

The Noise Pollution Control Section of the Ontario Ministry of the Environment received 368 new noise complaints in 1977-78 from all areas of the province excluding the City of Toronto who independently report receiving 778 noise complaints for the same period. No new prosecutions were initiated in the past year by the Ministry pursuant to provisions of The Environmental Protection Act. One conviction for excessive noise from a building central air conditioning system is being appealed before the Courts and an appeal against one Control Order was withdrawn by the appellant and the case closed.

Five municipalities have now adopted qualitative noise control by-laws which, pursuant to the legislation, have been approved by the Minister of the Environment. Of these, the by-laws of North Bay, Barrie and Guelph have been printed for general distribution and information. In addition, the City of Hamilton has adopted a more comprehensive by-law including many quantitative noise control limits.

The third year of the Environmental Acoustics Technology training program has been completed; more than 100 additional candidates received instruction in noise control and in noise abatement techniques in land use planning. Four of the Ministry training manuals in the series were revised and reprinted to meet public demand.

During the year, the Noise Pollution Control Section provided technical analysis and comment on 410 new land use projects including changes in Official Plan and new subdivisions. It also analysed potential noise impacts from 40 new industrial projects submitted to the Ministry for approval.

A railway noise symposium co-sponsored by CP Rail and the Ministry was held in Toronto in May to discuss the environmental land use problems arising from noisy railway activities. Most Federal agencies and concerned Provincial agencies attended and contributed to the symposium. A comprehensive report on the symposium and background documents was later circulated to all participants.

Two noise related projects were funded by the Ministry under the Ontario Experience '77 program and considerable data was gathered by students working under professional supervision. In addition, work continued on four major in-house projects related to aircraft noise, freeway noise, impulsive noise and truck noise. Interim reports on aspects of the research are being prepared for distribution and comment.

To date, only one research project application has been received for funding under the Ontario Provincial Lottery program. This application concerns the effect of traffic noise on health. In contrast, three research projects on occupational noise research have already been approved by the Ontario Ministry of Labour and funded.

In conclusion, it is estimated that developers of new subdivisions in Ontario have invested between \$300,000 of \$400,000 in impact studies during the past year in support of development applications in potentially noisy areas. However, the actual investment in physical noise control measures on site and in construction is an intangible. Another statistic of interest is the fact that over the past three years, 486 man-weeks of training in acoustics theory, instrumentation and noise abatement techniques has been provided. Many trainees have had a total of three weeks of training while others only have had one or two weeks of training. Since certificates of competency issued by the Ministry are valid for three years only, Noise Control Officers trained in the first year of the Ministry educational program must return in 1978/79 for retaining and recertification.

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