ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

120 WALL STREET, 32nd FLOOR, NEW YORK, NEW YORK 10005-3993

AVRIL BRENIG, Dr. P. H.
STANDARDS MANAGER

Telephone (212) 248-0373
Telefax (212) 248-0146

S3/371

MINUTES

ACCREDITED STANDARDS COMMITTEE ON BIOACOUSTICS, S3

U.S. TAG FOR ISO/TC 43, ACOUSTICS, IEC/TC 29 ELECTROACOUSTICS, AND ISO/TC 108/SC4 HUMAN EXPOSURE TO MECHANICAL VIBRATION AND SHOCK

Denver, Colorado

7 October 1993

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MINUTES OF S3 MEETING HELD IN DENVER, COLORADO, ON 7 OCTOBER 1993

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ISO/TC 108/SC4 HUMAN EXPOSURE TO MECHANICAL VIBRATION AND SHOCK

Denver, Colorado

7 October 1993

The meeting was called to order by Ms. J.D. Royster, Chair S3, at 3:00 PM in the Savoy Room, the Radisson Hotel, Denver, Colorado.

ORGANIZATIONAL MEMBERS PRESENT

Burkard, R.F.	ASHA
Brenig, A.	ASA Standards Manager
Nixon, C.	U.S. Air Force
Nedzelnitsky, V.	National Institute of Standards and Technology (NIST) (alternate for E.D. Burnett)
Royster, J.D.	Chair S3; ASA representative, S3

INDIVIDUAL EXPERTS PRESENT

Eldred, K.M.	Past Chair ASACOS
Galloway, W.J.	Consultant
Guernsey, R.M.	R.M. Guernsey and Associates
Johnson, D.L.	Chair S3/WG62; Chair S12
McKinley, R.	Vice Chair S1; Chair S3/WG71
Young, R.W.	Consultant

OTHERS PRESENT

Arrington, J.R.	U.S. Primary Standards Lab.
Battenberg, P.	Quest Technologies
Daigle, G.	Chair S12/WG27
Embleton, T.F.W.	Chair ASACOS
Nyborg, W.L.	U.S. TAG, IEC/TC 87 Ultrasonics
Schomer, P.D.	Vice Chair S12; Vice Chair, U.S. TAG for ISO/TC 43 and ISO/TC 43/SC1
Wong, G.S.K.	Chair S1

1. Approval of the Minutes of the Ottawa, Canada meeting, held on 20 May 1993 (S3/368).

Upon motion made and seconded, it was

VOTED to approve the Minutes of the S3 meeting (S3/368) held on 20 May 1993, as circulated.

2. Organization

a) A list of current working groups is attached (see ATTACHMENT A).

b) New working groups - S3/WG 83 Sound-Field Audiometry, chaired by T. Letowski.

c) Personnel changes - Mr. Robert Burkard has succeeded Mr. R. Ruth as chair of S3/WG 72.

d) Work in progress - for a summary, see ATTACHMENT B.

3. Standards approved by ANSI in 1992/1993 and published (or being published) by ASA

Standards published by ASA can be ordered from the following address:

Professional Book Distributors (PBD)
ASA Standards Distribution Center
1650 Bluegrass Lakes Parkway
Alpharetta, Georgia 30239

Telephone: (404) 442-8633
Telefax: (404) 442-9742

NOTE: 20% discount on list price is available to ASA individual and sustaining members for all standards published by ASA.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters

a) S3/Advisory - Advisory Planning Committee to S3 - T. Frank, Chair

The list of current S3 standards is appended -ATTACHMENT C.
Mr. Frank's latest report is given in ATTACHMENT D.

b) S3/WG35 Audiometers - R.L. Grason, Chair

A report is expected.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

b) S3/WG35 Audiometers - R.L. Grason, Chair (continued)

Mr. Schomer said previously that the differences between the scopes of S3/WG35 and S3/WG78 were confusing. This would be looked into.

It has been noted that ANSI S3.6-1989 will come up for 5-year revision or reaffirmation soon. At the last meeting Ms. Royster said that it would be desirable, in the next revision, to include calibration values for insert earphones in the body of the standard (rather than the appendix) as well as to include corresponding values for bone vibrators. Mr. Grason has agreed to work on the revision.

c) S3/WG36 Speech Intelligibility - L. Marshall, Chair

o Subgroup 2, J. Kreul

Mr. Kruel has submitted a draft which is being reviewed by Ms. Marshall.

d) S3/WG37 Coupler Calibration of Earphones - B. Kruger, Chair

The revision of ANSI S3.7-1973 Method for Coupler Calibration of Earphones was sent to S3 ballot (LB/S3.7/352) on 8 September 1992. The ballot was closed on 20 October 1992, with results as given in last Minutes (S3/355). (The proposed standard was also sent to S1 for information and comment.) Ms. Kruger is in the process of resolving comments received on this document.

Ms. Kruger reported as follows prior to the meeting:

> Attempting to set up subcommittee of S3/WG 37 to address Hi Fi phones of all sizes under direction of Richard (Dick) Campbell and Alan Woo as Secretary. As yet no meeting has been set up. Hopefully one will be arranged during the ASA meeting.

Ms. Royster said that Ms. Kruger was holding a meeting of her working group following this meeting and was also bringing a reformatted version of the standard. It was expected that the negative votes and comments could be resolved soon and that the publication process could then begin.

Please see ATTACHMENT E for Ms. Kruger's report.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

e) S3/WG39 (S2) - Human Exposure to Mechanical Vibration and Shock - H.E. von Gierke, Chair (Counterpart to ISO/TC 108/SC4)

The last meeting of ISO/TC 108/SC4 took place with ISO/TC 108 in London, U.K. from 29 March to 1 April 1993.

Please see ATTACHMENT F for Mr. von Gierke's report.

f) S3/WG43 Method for Calibration of Bone Conduction Vibrator - T. Frank, Chair

ANSI S3.43-1992 Standard Reference Zero for the Calibration of Pure-Tone Bone-Conduction Audiometers was approved by ANSI on 8 May 1992 and published by ASA.

Mr. Frank, chair, has reported no change from his report at the last meeting.

The recommendations to reaffirm ANSI S3.13-1987 American National Standard Coupler for Measurement of Bone Vibrators and to withdraw ANSI S3.26-1981 (R 1990) American National Standard Reference Equivalent Threshold Force Levels for Audiometric Bone Vibrators were sent to S3 ballot in due course. (See item 6(b), page 11 of these Minutes).

g) S3/WG48 Hearing Aids - D.A. Preves, Chair

ANSI Standard S3.42-1992 Testing Hearing Aids with a Broad-Band Noise Signal was published by ASA.

Ms. Royster read Mr. Preves' report at the last meeting:

1. First draft of proposed revision of ANSI S3.22-1987 prepared and discussed in Phoenix.

2. Round-robin on induction coil measurements completed. New protocol to be inserted in ANSI S3.22-1987 revision.

3. Comments coordinated on IEC documents: proposed revision to 118-1 (hearing aids with induction pickup coil input) and for IEC TC 29 (Secr.) 255 Dimensions of electrical connectors for hearing aids.

4. Recommendations for an improved battery simulator are under consideration.

The working group last met on 14 April 1993 in Phoenix.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

h) S3/WG56 Criteria for Background Noise for Audiometric Testing - T. Frank, Chair

ANSI S3.1-1991 the revision of ANSI S3.1-1977 (R 1986) Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms was published by ASA.

Mr. Frank reported no change from the last meeting as follows:

> ANSI S3.1-1991, Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms.
>
> The chair continues to monitor the literature and ISO standards, as well as conducting research, that would impact on the information presented in ANSI S3.1-1991. This information will be made available to WG members prior to a review of S3.1 for revision/reaffirmation in 1994/95.
>
> The chair and two WG members (J. Durrant and J. Lovrinic) recently published an article in the American Journal of Audiology describing ANSI S3.1-1991. This was done to alert audiologists and ASHA members about the new standard.

i) S3/WG58 Hearing Conservation Criteria - D.L. Johnson and W. Melnick, Co-chairs

ISO 1999:1990 Acoustics-Determination of occupational noise exposure and estimation of noise-induced hearing impairment was published by ISO. Preparation of the national version of this international standard has taken place.

The completed standard was submitted to S3 for ballot. No major differences currently exist between the proposed national version and the international standard, ISO 1999-1990. The ballot, LB/S3.44/357, draft dated October 1992, was submitted to S3 on 25 January 1993 and closed on 8 March 1993. The results were given in the last Minutes (S3/368).

At the last meeting, Mr. Johnson said he saw no problem in resolving the negative votes and comments received on this ballot.

At the meeting, Mr. Johnson said that almost all of the negative votes had been resolved. The document was being prepared for a second ballot and Ms.Royster had agreed to help in editing the draft for the next circulation to S3. It was expected to be able to circulate the draft for ballot prior to the next meeting.

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Telephone (212) 248-0373
Telefax (212) 248-0146

27 January 1994

Administrator
Defense Technical Information Center
U.S. Army Medical Research Acquisition Activity
ATTN: DTIC-DDA
Cameron Station
Alexandria, VA 22314

Dear Sir:

RE: Former Contract No. DAMD17-93-J-3017 between the U.S. Army Medical Research Acquisition Activity and the Acoustical Society of America, effective dates 29 January 1992 to 30 September 1993

We are pleased to enclose one (1) copies of the semiannual report on the activities of Accredited Standards Committee S3, Bioacoustics, which Committee is under the jurisdiction of the Acoustical Society of America. (This report is also being sent to those listed in the former contract.)

We have submitted a specific report on the activities of the Accredited Standards Committee on Bioacoustics, S3, which we believe is of most interest to USAARL. If there are other reports which you would like to receive, please notify us and we shall be glad to supply same. We hope to receive a new contract for 1994, as discussed.

Please let us know if we can be of further assistance. Thanking you, we are

Sincerely,

Avril Brenig
Standards Manager

Enclosure
cc: Embleton w/o enclosure
Johnson w/o enclosure
Lang w/o enclosure
Schmid w/o enclosure

F:\CONTRACT\MINUTES
(1) copy of (S3)

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

j) S3/WG59 Measurement of Speech Levels - H. Levitt, Chair

At the meeting, Ms. Royster said that she had received a document for ballot. With finalization of some sections in the document (editorially), it was expected that the document would soon be issued for S3 ballot.

k) S3/WG60 Measurement of Acoustic Impedance and Admittance of the Ear - D. Lilly, Chair

This working group is preparing a revision of ANSI S3.39-1987.

At the meeting, it was reported that Mr. Frank had communicated with Mr. Lilly and that he (Mr. Lilly) expected to prepare a revision of this standard for ballot as quickly as possible.

Mr. Galloway said that, with the projected publication of the revision of ANSI S1.1, the terminology standard, there should be some resolution of the terms admittance/immittance.

l) S3/WG62 Impulse Noise with Respect to Hearing Hazard - D. Johnson, Chair

The draft ANSI Standard S3.28-1986 for the Evaluation of the Potential Effect on Human Hearing of Sounds with Peak A-Weighted Sound Pressure Levels Above 120 Decibels and Peak C-Weighted Sound Pressure Levels Below 140 Decibels was approved by S3 and published for trial, comment, and criticism for a period of three years (according to ANSI procedures).

Mr. Johnson has said that once the national counterpart to ISO 1999:1990 Acoustics - Determination of occupational noise exposure and estimation of noise-induced hearing impairment were to be approved by S3, then he would propose withdrawal of this document, Draft ANSI S3.28-1986 (with no action this would occur naturally).

m) S3/WG67 Manikins - M.D. Burkhard, Chair

This working group currently exists solely for response to international documents.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

n) S3/WG71 Artificial Mouths - R. McKinley, Chair

A first draft is expected in about three and one half years (i.e. by November 1995).

Please see ATTACHMENT G for Mr. McKinley's report.

o) S2/WG72 Measurement of Auditory Evoked Potentials - R. Burkard, Chair

Robert Burkard assumed the role of chair for this working group (S3/WG72) in July 1993. Committee membership was reconstituted at this time. The most current draft of this standard (dated 1990) was sent to all committee members with the request that they familiarize themselves with the document and provide general comments about the standard content by mid - September 1993. This committee will meet at the 1993 Fall meeting of ASHA in Anaheim, California.

p) S3/WG73 Bioacoustical Terminology - W.J. Galloway, Chair

At the last meeting, it was reported that the first draft of the proposed terminology document, the revision of ANSI S1.1-1960, was circulated to S1 for ballot, and to S2, S3 and S12 for information and comment. The document was sent to S3 as S3/365, on 26 March 1993. The ballot was closed on 7 May 1993 with results as given in the last Minutes (S3/368).

Following the meeting, a revision was prepared, taking into account the comments received, and this document was sent to S1 for 30-Day Review (LB/S1.1/391). It was also circulated to S2, S3, and S12 for information.

At the meeting, it was noted that the document on terminology was nearly complete, having only some terms in S3 to resolve. Those terms unresolvable (possibly only one) would be excluded from the current standard.

Mr. Galloway was warmly thanked for all of his great efforts in producing this standard of some 700 finely honed definitions, with the assistance of Messrs. Marsh and Young (and also Messrs. Schomer and Winzer).

Mr. Galloway has also agreed to undertake the task of the revision of ANSI S3.20-1973 Psychoacoustical Terminology. He noted that there were questions of organization, philosophy, content, and new definitions, etc. to be responded to on this document. Mr. Burkard agreed to obtain responses, together with the assistance of Ms. Royster and others who may wish to participate in this process.

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

q) S3/WG75 Auditory Masking - S. Buus, Chair

At the meeting, Ms. Royster said she would look into the status of the work in this area.

r) S3/WG76 Computerized Audiometry - J. Franks, Chair

Ms. Royster reported no progress to date, but that the working group was hoping to get to that point soon.

s) S3/WG77 High Frequency Audiometry - J. Fletcher, Chair

Mr. Fletcher reported that although he understood that funding was not probable for the work involving calibration, his working group intended to pursue the development of a document with the material it could gather. It was hoped to have a document for presentation to the working group by the time of the next meeting (June 1994).

t) S3/WG78 Thresholds - W. Yost, Chair

The scope of this working group is to provide a liaison with ISO, IEC and other national working groups for standards dealing with auditory thresholds and procedures to measure these threshold. No meetings are planned.

u) S3/WG79 Calculation of the Articulation Index (Revision of ANSI S3.5-1969 (R 1986)) - C.V. Pavlovic, Chair

The first draft revision of ANSI S3.5-1969 has been received for ballot and is expected to be circulated to S3 shortly.

This working group would prefer to be called METHODS FOR CALCULATION OF THE SPEECH INTELLIGIBILITY INDEX, in line with their draft revision of ANSI S3.5-1969. This title will be listed henceforth.

v) S3/WG80 Probe-Tube Measurements of Hearing Aid Performance - W. Cole, Chair

At the last meeting, Ms. Royster said that she had received a report from Mr. Cole (see ATTACHMENT H). The working group will next meet in October 1993 (Denver, Colorado).

4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

w) S3/WG81 Assistive Listening Devices - M. Wynne, R. Kasten, Co-Chairs

Ms. Royster said that this working group was preparing the beginning of a working draft. The working group has agreed that the best title to describe their activities would be HEARING ASSISTANCE TECHNOLOGIES, which will be listed henceforth.

The next meeting of the working group will be held on 19 November 1993, in Anaheim, California.

x) S3/WG82 Basic Vestibular Function Test Battery - C. Wall III, Chair

At the meeting, Ms. Royster said she would check into progress on this working group.

S3 LIAISON WORKING GROUPS

a) S3/TAG Liaison to IEC/TC 87 Ultrasonics - W. Nyborg, Chair

Mr. Nyborg reported prior to the meeting (see ATTACHMENT I).

5. International Matters

a) International Electrotechnical Commission (IEC)

(i) IEC/TC 29 Electroacoustics - V. Nedzelnitsky, Technical Advisor

A list of documents submitted to the U.S. for vote and/or comment is given in ATTACHMENT J.

Mr. Nedzelnitsky's report is also attached ATTACHMENT K. The last meeting of IEC/TC 29 was held from 24-29 May 1993, in Oslo, Norway.

(ii) Liaison with IEC/TC 87 Ultrasonics - P.D. Edmonds, U.S. Technical Advisor

Please see ATTACHMENT I for Mr. Nyborg's report.

5. International Matters (continued)

b) International Organization for Standardization (ISO)

(i) ISO/TC 43 Acoustics and ISO/TC 43/SC1 Noise - H.E. von Gierke, TAG Chair

A report has been prepared (see ATTACHMENT L). Mr. Schomer's report is given in ATTACHMENT M. The last meeting was held from 31 May to 4 June 1993, in Oslo, Norway.

(ii) ISO/TC 108/SC4 Human Exposure to Mechanical Vibration and Shock - H.E. von Gierke, TAG Chair

A report on the overall activities of ISO/TC 108 (including ISO/TC 108/SC4) is given in ATTACHMENT N.

The last meeting of ISO/TC 108/SC4 was held from 29 March to 1 April 1993, in London, U.K.

At the last meeting Mr. von Gierke reported on a most successful TC 108/SC4 meeting, with seven (7) U.S. delegates in attendance and seven (7) documents reaching the DIS stage of development. On the other hand, he noted that the counterpart national working group, S3/WG39, had meeting with almost no participation, due primarily to the fact that most activity was occurring at the international level.

Mr. von Gierke said at the last meeting that a way should be found to convert the ISO standards to national standards, and that this idea would be explored with ANSI. He noted that there were several options to be explored with ANSI in the matter of adopting international standards for national usage. (See also, New Business, Item 10 (a) page 14 of these Minutes.)

6. Review of Standards more than five years in existence

Section 4.4 of the ANSI Procedures for the Development and Coordination of American National Standards requires that each complete American National Standard (including its supplements and addenda) be reviewed at least every five years to determine whether it should be reaffirmed, revised or withdrawn.

Provision is made for extensions of time, except that no extension is granted beyond ten years from the date of approval by ANSI.

6. Review of Standards more than five years in existence (continued)

a) It should be noted, with respect to ANSI S3.19-1974 (R 1979), that ASACOS decided at its meeting held on 21 May 1990, to continue this standard under S3 jurisdiction, with its S3 designation, until such time as it is revised. Once revised, it will assume an S12 designation, under the jurisdiction of Accredited Standards Committee S12, Noise.

b) Recommendations were made previously to reaffirm the following S2 standards:

(i) ANSI S3.13-1987
American National Standard Mechanical Coupler for Measurement of Bone Vibrators
Recommending Group: T. Frank, Chair S3/WG43

(ii) ANSI S3.18-1979
American National Standard Guide for the Evaluation of Human Exposure to Whole-Body Vibration
Recommending Group: H.E. von Gierke, Chair S3/WG39 (S2)

These were sent to S3 ballot (LB/S3/359) on 29 January 1993. The ballot was closed on 12 March 1993, with results as given in the previous Minutes (S3/368). Following this ballot (and inclusion of ANSI S3.26-1981 (R 1990), a ballot to withdraw this standard (ANSI S3.26-1981) American National Standard Reference Equivalent Threshold Force Levels for Audiometric Bone Vibrators, was circulated to S3 (LB/S3/366) on 24 March 1993. The ballot was closed on 5 May 1993, with results as given in the last Minutes (S3/368).

Accordingly, the recommendations to reaffirm these standards ANSI S3.13-1987 and S3.18-1979, and to withdraw ANSI S3.26-1981 were submitted to ANSI on 22 April 1993. The public comment period in ANSI closed on 29 July 1993 and the formal submittal to ANSI was made on 8 September 1993.

7. New International Standards Available From ANSI

- ISO 8253-2 Acoustics - Audiometric Test Methods - Part 2 - Sound Field Audiometry with pure tone and narrow-band test signals

- IEC 118-2 Amendment 1 - 1993 Hearing Aids - Part 2 - Hearing Aids with automatic gain control circuits

8. Procedural Ballots

(a) At the last meeting, a new work item was proposed for S3 on the subject of Sound-Field Audiometry. This proposal was accordingly sent to S3 ballot (LB/S3/370) on 23 July 1993. The ballot was closed on 10 september 1993 with results as given in ATTACHMENT Q. As a result of the unanimous approval of this proposal, a new working group has been established.

Regarding the new area on Sound-field Audiometry (S3/WG83), Ms. Royster said that the new chair is in the process of formulating the working group.

b) According to ANSI's procedures, under which the Accredited Standards Committees operate, the Officers of the Standards Committees are to be confirmed (at the beginning of their terms), as well as Individual Experts (the latter to be confirmed annually) by the respective Standards Committees.

The Officers and Individual Experts are proposed by the ASA Committee on Standards (ASACOS), as the Secretariat for the Standards Committees, in connection with the Chairs of the respective Standards Committees.

A Letter Ballot was circulated to S3 on the proposed appointments for 1993/1994, (LB/S3/356) on 18 December 1992. The ballot was closed on 29 January 1993 with results as given in the last Minutes (S3/368). The nominations were approved unanimously and the respective appointments therefore took effect following the May 1993 meeting of ASA.

9. Other Business

Project Initiation Notification System (PINS) forms requested by ANSI

The Standards Secretariat has provided ANSI, with a current list of S3 projects for use under ANSI's Project Initiation Notification System (PINS). These are expected to be tabulated in a computerized system eventually by ANSI.

10. New Business

(a) At the last meeting, Ms. Royster said that EDITORIAL COMMITTEES would be formed in S3 to convert the ISO standards into ANSI standards. Mr. Eldred said that the list of ISO and IEC standards would be looked at by each of the S Committee Chairs and Vice Chairs to see which would be suitable candidate standards for conversion.

10. New Business (continued)

(b) At the last meeting, Mr. Seiler brought up a subject related to his working group (S1/WG21 on Electromagnetic Susceptibility of Acoustical Instruments. He wanted to know whether AUDIOMETERS should be covered under the standard his working group was developing. Mr. Seiler referred to a portion of a letter sent to him by Mr. D. Stevens of Lucas Industrial Instruments on 13 April 1993 (see ATTACHMENT P). At the last meeting it was decided that Ms. Royster will ask the chairs of the working group on Audiometers and on Auditory Evoked Potentials, respectively, to address this matter with Mr. Seiler's working group (S1/WG21) at an appropriate time and to report back to S3.

(c) At the last meeting, Mr. Nedzelnistky said that some more direct and formal liaison should be developed with OIML (Organization de Metrologies Legale) since Mr. Sam Chappell of NIST had established coordinating positions in OIML (which is a treaty organization) and was interested in developing standards and making the IEC and ISO standards the basis for OIML work. This would place legal obligations on treaty members, and will be explored. Ms. Brenig reported that she had been in communication with OIML, but that no formal liaison had yet been set up.

(d) At the meeting, Mr. Young said that the prices of the standards noted in the Minutes should be included, whether they are available from ANSI (e.g. ISO standards) or from the Acoustical Society.

11. Future Meetings

The next meeting of S3 will be held on Thursday, 9 June 1994, in Cambridge, Massachusetts, commencing at 1.30 PM.

12. Adjournment

The meeting was adjourned at 4.30 P.M.

Avril Brenig
Standards Manager

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AVRIL BRENIG, Dr. P. H.
STANDARDS MANAGER

Telephone (212) 248-0373
Telefax (212) 248-0146

ATTACHMENT A-1
S3/371

ACCREDITED STANDARDS COMMITTEE ON BIOACOUSTICS - S3

SECRETARIAT: Acoustical Society of America

SCOPE: Standards, specifications, methods of measurement and test, and terminology in the fields of mechanical shock and physiological acoustics, including aspects of general acoustics, shock, and vibration which pertain to biological safety, tolerance and comfort.

CHAIR: J.D. Royster
4706 Connell Drive
Raleigh, NC 27612

Tel: (919) 782-1624
Fax: (919) 781-2396

VICE CHAIR: T. Frank
Penn State University
5-A Moore Bldg.
University Park, PA 16802

Tel: (814) 863-2006
Fax: (814) 863-3759

SECRETARY: A. Brenig
Standards Secretariat
Acoustical Society of America
120 Wall Street, 32nd Floor
New York, NY 10005-3993
Tel: (212) 248-0373
Fax: (212) 248-0146

WORKING GROUP	TITLE AND SCOPE	CHAIR
(a) S3/Advisory	S3 Advisory Planning Committee - Be cognizant of standards needs within the scope of the Committee, and organize those needs in accordance with priority, and other relevant factors, into a coherent three year plan for Committee activity. This three year plan for the preparation of standards should include those which need updating, having regard to the international work items and standards, and the need for timely review (reaffirmations, revisions, withdrawals, etc.) of all national standards, and the priority of new standards needs. The plan of action should be developed with attention to (i) the overall Committee scope, (ii) its technological needs, (iii) the relation of national to international standardization, (iv) the rate of development of new standards, and (v) the timeliness of the preparation of revisions of standards.	T. Frank

ATTACHMENT A-2
S3/371

WORKING GROUP	TITLE AND SCOPE	CHAIR
(b) S3/WG35	Audiometers (counterpart to IEC/TC 29/WG10, ISO/TC 43/WG1 and ISO/TC 43/WG3) - To review IEC and ISO documents concerning audiometers.	R.L. Grason
(c) S3/WG36	Speech Intelligibility - Preparation of recommended methods for the measurement of the intelligibility of speech as affected by spectral, amplitude and temporal distortions of the speech signals, and by noises that arise from or in the acoustical, electrical (if any) and ear receptor paths used for transmitting speech from the talker to the listener.	L. Marshall
S3/WG36 (SG-2)	Subgroup 2 - Speech Audiometry - Standardization of speech and audiometry procedures; speech discrimination tests for clinical and diagnostic use.	J. Kruel
(d) S3/WG37	Coupler Calibration of Earphones (counterpart to IEC/TC 29/WG3) - Coordinate ANSI projects with IEC working groups. Prepare revisions to existing earphone calibration standards, prepare new standards for circumaural earphones, study and prepare standards for simulation of the human ear for measurement purposes.	B. Kruger
(e) S3/WG39 (S2)	Human Exposure to Mechanical Vibration and Shock (counterpart to ISO/TC 108/SC4) - Standardization in the field of shock, vibration and related biodynamic environments with regard to health, safety, performance and comfort criteria and guidelines regarding the effects of occupational and non-occupational exposures on the human population (environments of primary interest are: vibration, rotational oscillations, shock and impact transmitted to the whole-body or parts thereof). Preparation of standard terminology and characterization of the biodynamic properties of humans with and without support and restraint devices by means of biodynamic models or analogues is also included as a basis for the description of the physical, behavioral and physiological effects of the mechanical environments under consideration.	H.E. von Gierke
(f) S3/WG43	Method for Calibration of Bone Conduction Vibrator - (a) U.S. standards on audiometric bone vibration calibration; (b) review of related international standards.	T. Frank
(g) S3/WG48	Hearing Aids - (a) all aspects of hearing aid measurement except couplers; (b) review of related international documents.	D.A. Preves

ATTACHMENT A-3
S3/371

WORKING GROUP	TITLE AND SCOPE	CHAIR
(h) S3/WG56	Criteria for Background Noise for Audiometric Testing - To establish maximum tolerable background noise levels during audiometric tests (revision of S3.1-1977 Criteria for Permissible Ambient Noise During Audiometer Testing).	T. Frank
(i) S3/WG58	Hearing Conservation Criteria (counterpart to ISO/TC 43/SC1/WG19 (ISO 1999) - To determine hearing conservation criteria.	D.L. Johnson/ W. Melnick Co-chairs
(j) S3/WG59	Measurement of Speech Levels - To develop a standard method for measurement of speech and speech-to-noise ratios in technical reports and equipment specifications. The standard should provide the best measurement of speech levels and indicate the number of samples, weighting (overall vs. A-level) and total length of speech sample. In addition, approximations may be suggested to determine speech for simple sound level meter observations. The standard would not consider microphone type, placement or other specification for the physical measurement of speech, but would concentrate on assessment after the speech is in recorded form.	H. Levitt
(k) S3/WG60	Measurement of Acoustic Impedance and Admittance of the Ear - The measurement of acoustic immittance (acoustic impedance or acoustic admittance) within the human external auditory canal. The measurements are to ensure that acoustic-immittance measurements will be substantially the same for a given individual when these measurements are obtained with any instruments that meet the specifications and tolerance outlined in a standard, and when comparable test conditions prevail.	D. Lilly
(l) S3/WG62	Impulse Noise with Respect to Hearing Hazard - To develop criteria for predicting the changes in hearing due to human exposure to impulsive noise.	D. Johnson

ATTACHMENT A-4
S3/371

WORKING GROUP	TITLE AND SCOPE	CHAIR
(m) S3/WG67	Manikins - (counterpart to IEC/TC 29/WG13) - To prepare a standard describing a device that simulates a person for acoustic measurements. Monitor and coordinate with international standards.	M. Burkhard
(n) S3/WG71	Artificial Mouths - To develop a standard specification for sound sources used as artificial mouths to measure the performance of microphones positioned close to the talker.	R.L. McKinley
(o) S3/WG72	Measurement of Auditory Evoked Potentials - To draft a standard dealing with the instrumentation and methods of calibration associated with the measurements of auditory evoked potentials.	R. Burkard
(p) S3/WG73	Bioacoustical Terminology - To prepare a draft standard on bioacoustical terminology to supersede ANSI S3.20-1973.	W.J. Galloway
(q) S3/WG75	Auditory Masking - To define a psychological frequency scale and auditory filter characteristics. These definitions permit calculation of detection threshold for a signal in the presence of noise. The listeners are assumed to have normal hearing and the noise to be continuous in the time and frequency domains.	S. Buus
(r) S3/WG76	Computerized Audiometry - Standardization of computer applications to audiometry, including automated psychophysical procedures.	J. Franks
(s) S3/WG77	High Frequency Audiometry - Development of standards for high frequency audiometers in the frequency range of 8,000 to 20,000 Hz. Coordination with ISO working groups with similar scopes.	J. Fletcher
(t) S3/WG78	Thresholds - To provide a liaison with ISO, IEC and other national working groups for standards dealing with auditory thresholds and procedures to measure these thresholds.	W. Yost

ATTACHMENT A-5
S3/371

WORKING GROUP	TITLE AND SCOPE	CHAIR
(u) S3/WG79	Methods for Calculation of the Speech Intelligibility Index - To consider revision of the current standard on calculation of the articulation index: ANSI S3.5-1969 (R 1986).	C.V. Pavlovic
(v) S3/WG80	Probe-tube Measurements of Hearing Aid Performance - To develop standards for the determination of the real ear electroacoustic performance of hearing aids in situ.	W. Cole
(w) S3/WG81	Hearing Assistance Technologies - To provide definitions for various types of assistive listening devices. To determine which assistive listening devices can be measured acoustically and to provide standard procedures for such acoustical measurement.	M. Wynne, R. Kasten, Co-chairs
(x) S3/WG82	Basic Vestibular Function Test Battery Standardization of a basic vestibular function test battery consisting of six separate tests: spontaneous nystagmus, gaze-evoked nystagmus, saccade test, pursuit testing, positional nystagmus and caloric testing.	C. Wall III
(y) S3/WG83	Sound-Field Audiometry To develop a standard specifying parameters for sound-field audiometry, instrumentation and tolerances for measuring stimuli presented in a sound-field, and reference threshold values for measurement of hearing.	T. Letowski

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S3 LIAISON WORKING GROUPS

(a) S3/L-1	S3 TAG Liaison to IEC/TC 87 Ultrasonics - To provide liaison on documents and activities emanating from IEC/TC 87 Ultrasonics.	W.Nyborg

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ATTACHMENT B-1
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.1-1991	Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms (A revision of S3.1-1977 (R 1986)) (S3/WG56)	UD			
S3.2-1989	Monosyllabic Word Intelligibility, Method for Measurement (S3/WG36) (Revision of ANSI S3.2-1960)	UD		S	
S3.3-1960 (R 1990)	Electroacoustical Characteristics of Hearing Aids, Methods for Measurement (S3/WG48)	RV		S	
S3.4-1980 (R 1992)	Procedure for the Computation of Loudness of Noise	RV		S	
S3.5-1969 (R 1986)	Articulation Index, Methods for the Calculation of the (S3/WG79)	RV	1	S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-2
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.6-1989	Specification for Audiometers (revision ANSI S3.6-1969) (S3/WG35)	UD		S	
S3.7-1973 (R 1986)	Coupler Calibration of Earphones, Method for (S3/WG37)	RV;ES		S	
S3.8-1967 (R 1976)	Hearing Aid Performance, Method of Expressing (S3/WG48)	WD		S	Withdrawn; superseded by S3.22-1982
S3.9-199x	**Method for Measuring Speech Levels** (S3/WG59)	**NS**	**3**	**S**	
S3.10	Permissible Noise Exposure for Hearing Conservation (S3/WG58)	SP	2	S	
S3.12	Speech Level Measurement of Bone Vibrators (S3/WG36)	SP;UD		S	

STATUS		ACTIVITY		METHOD
NS - NEW STD IN PROCESS	NR - NEEDS REVIEW	0-NONE	4-ANSI STANDARDS ACTION	C-ACCREDITED CANVASS
RF - REAFFIRMATION IN PROC.	AP - ANSI APPROVED	1-FORMATIVE STAGE	5-OBJECTIONS BEING CONSIDERED	O-ACCREDITED ORGANIZATION
RV - REVISION IN PROCESS	OP - OUT OF PRINT	2-DRAFTING STANDARD	6-ANSI CONSIDERING APPROVAL	S-ACCREDITED STDS. COMMITTEE
WD - WITHDRAWAL IN PROCESS	NA - NOT YET AVAIL.	3-VOTING ON PROPOSAL		X-NOT INTENDED FOR ANSI
ES - ENVIRONMENTAL SOUND	UD - UP-TO-DATE			

ATTACHMENT B-3
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.13-1987	Mechanical Coupler for Measurement of Bone Vibrators	UD		S	
S3.18-1979	Human Exposure to Whole-Body Vibration, Guide for the Evaluation (S3/WG39 (S2))	UD		S	
S3.19-1974 (R 1990)	Method for the Measurement of Real-Ear Protection of Hearing Protectors and Physical Attenuation of Earmuffs (see also under S12/WG10--partially revised by ANSI S12.6-1984)	RV	1	S	See also under S12
S3.20-1973	Psychoacoustical Terminology (S3/WG73)	RV		S	
S3.21-1978 (R 1992)	Manual Pure-Tone Threshold Audiometry, Method for (S3/WG35)		UD;ES	S	
S3.22-1987	Specification of Hearing Aid Characteristics (revision of S3.22-1982) (S3/WG48)	UD		S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-4
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	COMMENTS OR EXPECTED DATE ACTIVITY	METHOD	OF SUBMISSION TO ANSI
S3.25-1989	Occluded Ear Simulator (revision of ANSI S3.25-1979) (S3/WG37)	UD		S	
S3.26-1981 (R 1990)	Reference Equivalent Threshold Force Levels for Audiometric Bone Vibrators	UD		S	
DRAFT ANSI S3.28-1986	Methods for the Evaluation of the Potential Effects on Human Hearing of Sounds with Peak A-Weighted Sound Pressure Levels Above 120 Decibels and Peak C-Weighted Sound Pressure Below 140 Decibels (S3/WG62)	UD	5	S	Published for trial, comment and criticism for a period of three years
S3.29-1983 (R 1990)	Evaluation of Human Exposure to Vibration in Buildings (S3/WG39 (S2))	NA			

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.31	Determining the Threshold Level for Speech, Method for (S3/WG36/Subgroup 1)	NS;SP	2	S	
S3.32-1982 (R 1990)	Mechanical Vibration and Shock Affecting Man-Vocabulary - ISO 5805-1981 (S3/WG39(S2))	UD		S	
S3.34-1986 (R 1992)	Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand (S3/WG39(S2))	UD		S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-6
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.35-1985 (R 1990)	Method for Measurement of Performance Characteristics of Hearing Aids Under Simulated in situ Working Conditions (S3/WG48)	UD		S	
S3.36-1985 (R 1990)	Specification for a Manikin for Simulated in situ Airborne Acoustic Measurements (S3/WG67)	UD		S	
S3.37-1987 (R 1992)	Preferred Earhook Nozzle Thread for Postauricular Hearing Aids (S3/WG48)	UD		S	
S3.39-1987	Specifications for Instruments to Measure Aural Acoustic Impedance and Admittance (Aural Acoustic Immittance) (S3/WG60)	UD		S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-7
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS
COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.40-1989	Measurement and Evaluation of Gloves Which are Used to Reduce Exposure to Vibration Transmitted to the Hand (S3/WG39(S2))	UD		S	
S3-W-39	The Effects of Shock and Vibration on Man (S3/WG39(S2))	WD		S	
Z24-X-2	Relations of Hearing Loss to Noise Exposure, The			S	
Z24.18-1956 (R 1971)	Ultrasonic Therapeutic Equipment, Specification for	WD		S	
S3.XX	Impulsive Noise with Respect to Human Response (S3/WG62)		2	S	
S3.XX	Hearing Loss from Impulse/Impact Noise (S3/WG62)	ES	1	S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
W:D - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM

NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-8
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.XX	Speech Audiometry (S3/WG36/Subgroup 2)			S	
S3.XX	Communication Equipment Evaluation (formerly S3/WG36 Subgroup 3)		1	S	
S3.XX	Effects of Head and Torso on Sound Fields as Related to Dosimetry and Hearing Aids (formerly S3/WG61)		0	S	Information document prepared for publication in JASA
S3.41-1990	Audible Emergency Evacuation Signal (counterpart to ISO 8201:1987) (S3/WG63)	UD;SP		S	

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-9
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.42-1992	Testing Hearing Aids with a Broad-Band Noise Signal (S3/WG48)	SP;UD		S	
S3.43-1992	Standard Reference Zero for the Calibration of Pure-Tone Bone-Conduction Audiometers (S3/WG43)	SP;UD		S	
S3.44-199x	Determination of Occupational Noise Exposure and Estimation of Noise - Induced Hearing Impairment, Methods for the (counterpart to ISO 1999:1990) (S3/WG58)	NS;SP	3	S	
S3.XX	Assistive Listening Devices (S3/WG81)	SP;NS	1		
S3.XX	Probe-Tube Measurements of Hearing Aid Performance (S3/WG80)	NS	1		

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM
NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

ACTIVITY

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL
4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

METHOD

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTE
X-NOT INTENDED FOR ANSI

ATTACHMENT B-10
S3/371

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.XX	Basic Vestibular Function Test Battery (S3/WG82)	NS	1		

STATUS

NS - NEW STD IN PROCESS
RF - REAFFIRMATION IN PROC.
RV - REVISION IN PROCESS
WD - WITHDRAWAL IN PROCESS
ES - ENVIRONMENTAL SOUND
SP - SUBMITTED PINS FORM

ACTIVITY

NR - NEEDS REVIEW
AP - ANSI APPROVED
OP - OUT OF PRINT
NA - NOT YET AVAIL.
UD - UP-TO-DATE

0-NONE
1-FORMATIVE STAGE
2-DRAFTING STANDARD
3-VOTING ON PROPOSAL

METHOD

4-ANSI STANDARDS ACTION
5-OBJECTIONS BEING CONSIDERED
6-ANSI CONSIDERING APPROVAL

C-ACCREDITED CANVASS
O-ACCREDITED ORGANIZATION
S-ACCREDITED STDS. COMMITTEE
X-NOT INTENDED FOR ANSI

ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

AVRIL BRENIG, Dr. P. H.
STANDARDS MANAGER

120 WALL STREET, 32nd FLOOR, NEW YORK, NEW YORK 10005-3993

Telephone (212) 248-0373
Telefax (212) 248-0146

S3/371
ATTACHMENT C-1

S3 STANDARDS ON BIOACOUSTICS

ANSI S3.1-1991	Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms
ANSI S3.2-1989	Method for Measuring the Intelligibility of Speech over Communication Systems
ANSI S3.3-1960 (R 1990)	Methods for Measurement of Electroacoustical Characteristics of Hearing Aids
ANSI S3.4-1980 (R 1986)	Procedure for the Computation of Loudness of Noise
ANSI S3.5.1969 (R 1986)	Methods for the Calculation of the Articulation Index
ANSI S3.6-1989	Specification for Audiometers
ANSI S3.7-1973 (R 1986)	Method for Coupler Calibration of Earphones
ANSI S3.13-1987	Mechanical Coupler for Measurement of Bone Vibrators
ANSI S3.14-1977 (R 1986)	Rating Noise with Respect to Speech Interference
ANSI S3.18.1979 (R 1986)	Guide for the Evaluation of Human Exposure to Whole-Body Vibration
ANSI S3.19-1974 (R 1990)	Method for the Measurement of Real-Ear Protection of Hearing Protectors and Physical Attenuation of Earmuffs
ANSI S3.20-1973 (R 1986)	Psychoacoustical Terminology
ANSI S3.21-1978 (R 1986)	Method for Manual Pure-Tone Threshold Audiometry

S3 STANDARDS ON BIOACOUSTICS (continued)

ANSI S3.22-1987	Specification of Hearing Aid Characteristics
ANSI S3.25-1989	An Occluded Ear Simulator
ANSI S3.26-1981 (R 1990)	Reference Equivalent Threshold Force Levels for Audiometric Bone Vibrators
DRAFT ANSI S3.28-1986	Methods for the Evaluation of the Potential Effect on Human Hearing of Sounds with Peak A-Weighted Sound Pressure Levels Above 120 Decibels and Peak C-Weighted Sound Pressure Levels Below 140 Decibels
ANSI S3.29-1983 (R 1990)	Guide to the Evaluation of Human Exposure to Vibration in Buildings
ANSI S3.32-1982 (R 1990)	Mechanical Vibration and Shock Affecting Man--Vocabulary
ANSI S3.34-1986	Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand
ANSI S3.35-1985 (R 1990)	Method of Measurement of Performance Characteristics of Hearing Aids under Simulated in situ Working Conditions
ANSI S3.36-1985 (R 1990)	Specification for a Manikin for Simulated in situ Airborne Acoustic Measurements
ANSI S3.37-1987	Preferred Earhook Nozzle Thread for Postauricular Hearing Aids
ANSI S3.39-1987	Specifications for Instruments to Measure Aural Acoustic Impedance and Admittance (Aural Acoustic Immittance)
ANSI S3.40-1989	Guide for the Measurement and Evaluation of Gloves which are used to reduce Exposure to Vibration Transmitted to the Hand

S3 STANDARDS ON BIOACOUSTICS (continued)

ANSI S3.41-1990	Audible Emergency Evacuation Signal
ANSI S3.42-1992	Testing Hearing Aids with a Broad-Band Noise Signal
ANSI S3.43-1992	Standard Reference Zero for the Calibration of Pure-Tone Bone-Conduction Audiometers

S3/371
ATTACHMENT D-1

ASA S3 BIOACOUSTICS
COMMITTEE CORRESPONDENCE

Tom Frank, Ph.D.
5-A Moore Building
Department of Communication Disorders
Penn State University
University Park, PA 16802
(Phone: 814/863-2006 FAX: 814/863-3759)

Date: July 16, 1993
To: Avril Brenig
From: Tom Frank
Re: Report of S3 Vice-Chair for 1993 ASA Fall Meeting

At the ASA 1992 Fall meeting, a three-year plan concerning S3 activities was presented to the ASACOS. The following is an update concerning implementation of the three-year plan.

1. Development of a schedule for S3 standards that need revision/reaffirmation.

The S3 Vice-Chair has developed a reference book providing a summary and detailed listing of S3 standards and working group (WG) chairs. The reference book is updated semi-annually following each ASA S3 meeting or as needed. The S3 Chair is provided with a copy of the reference book and all up-dates.

Attachment A shows the most recent summary of the S3 standards. Note that standards S3.5, 3.7, 3.22, and 3.39 are long overdue for revision/reaffirmation. This is known to the WG chair of each standard. Hopefully, the draft revision of these standards will be submitted for voted in the near future. Note that there are no S3 standards that need revision/reaffirmation in 1993.

2. Conversion of international standards.

The S3 Chair and Vice-Chair are monitoring ISO and IEC work efforts and are providing WG chairs with this information. Further, WG chairs are being asked to incorporate ISO and IEC standards into the S3 standards that they are responsible for. The theory is to incorporate international standards into exiting or new S3 standards.

3. Development of new standards.

The Vice-Chair has submitted a recommendation for establishing a WG to be called "Sound-Field Audiometry" including the scope of the WG and chair, Tomasz R. Letowski. The Chair approved the recommendation and forwarded the recommendation to A. Brenig for action.

The Vice-Chair sent a letter (Attachment B) to 125 individuals listed as editors,

consultants, or reviewers for four primary audiology journals. The letter explained ASA standards, requested input concerning existing standards and those that are being developed, solicited individuals to become members of WGs. As a result, only 6 responses were obtained from the 125 letters sent where 3 individuals wanted to be on working groups and 3 individuals described in the need for standards in specific areas. The responses were forwarded to the S3 Chair for action. Even though, the response was minimal the effort was worth it. For the first time, 125 leaders in audiology were informed of all of the ANSI standards and WGs.

4. New committee procedures.

The Vice-Chair developed a data base mail-merge system for informing WG chairs of the due date and need to revise/reaffirm standards that they are responsible for. Attachment C shows an example of the letter that was sent to all S3 WG chairs responsible for an existing S3 standard. The letter will be sent yearly (around July 1) and hopefully will prompt chairs to start the revision/reaffirmation process early enough so that they finish on time.

5. Future plans.

The S3 activities three-year plan is in place and working very well. For the next two years the plan will implemented. Looking ahead, I perceive a need to consolidate existing S3 standards. As such, I would strongly suggest that consideration be given to the following.

a. Development of one standard concerning audiometers and reference thresholds. This standard would combine the existing S3.6 (Specification for audiometers), S3.21 (Method of manual pure-tone audiometry), S3.43 (Standard reference zero for the calibration of pure-tone bone conduction audiometers), and reference threshold levels for sound-field audiometry (being developed).

b. Development of one standard dealing with couplers. This standard would combine S3.7 (Method for coupler calibration of earphones), S3.25 (Occluded ear simulator), and S3.13 (Mechanical coupler for measurement of bone vibrators).

c. Development of one standard dealing with all aspects of hearing aids and assistive listening devices. This standard would combine S3.3 (Methods for measurement of electroacoustic characteristics of hearing aids), S3.22 (Specification of hearing aid characteristics), S3.35 (Method of measurement...under simulated in-situ working conditions), S3.37 (Preferred earhook nozzle thread), S3.42 (Testing hearing aids with broad-band noise), assistive listening devices (being developed), and probe-microphone measurements (being developed).

cc: J. Royster

ACCREDITED STANDARDS COMMITTEE ON BIOACOUSTICS - S3
SUMMARY OF STANDARDS AS OF 07/16/93

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1991/1992:

S3.5-1969 (R 1986) METHODS FOR THE CALCULATION OF THE ARTICULATION INDEX (S3/WG79, C. Pavlovic, Chair) [NOTE: Revision in progress]

S3.7-1973 (R 1986) METHOD FOR COUPLER CALIBRATION OF EARPHONES (S3/WG37, B. Kruger, Chair) [NOTE: Revision has been completed, balloting has been done, and currently resolving a negative vote]

S3.14-1977 (R 1986) (ASA 21) RATING NOISE WITH RESPECT TO SPEECH INTERFERENCE (S3/WG59) [NOTE: Moved to S12]

S3.20-1973 (R 1986) PSYCHOACOUSTICAL TERMINOLOGY (S3/WG73, W. Galloway, Chair) [NOTE: Information in S3.20 has been incorporated into S1.1 Acoustical Terminology, once S1.1 has been approved, recommend that S3.20 be withdrawn]

S3.22-1987 [Revision of ANSI S3.22-1982] (ASA 70) SPECIFICATIONS OF HEARING AID CHARACTERISTICS (S3/WG48, D. Preves, Chair) [NOTE: Revision in progress]

S3.39-1987 (ASA 71) SPECIFICATIONS FOR INSTRUMENTS TO MEASURE AURAL ACOUSTIC IMPEDANCE AND ADMITTANCE (AURAL ACOUSTIC IMMITTANCE) (S3/WG60, D. Lilly, Chair) [NOTE: Revision in progress]

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1993:

NONE

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1994:

S3.2-1989 [Revision of S3.2-1960 (R 1982)] (ASA 85) METHOD FOR MEASURING THE INTELLIGIBILITY OF SPEECH OVER COMMUNICATION SYSTEMS (S3/WG36, L. Marshall, Chair)

S3.6-1989 [Revision of S3.6-1969] (ASA 81) SPECIFICATION FOR AUDIOMETERS (S3/WG35, R. Grason, Chair)

S3.25-1989 [Revision of ANSI S3.25-1979] (ASA 80) OCCLUDED EAR SIMULATOR (S3/WG37, B. Kruger, Chair)

S3.40-1989 (ASA 79) GUIDE FOR THE MEASUREMENT AND EVALUATION OF GLOVES WHICH ARE USED TO REDUCE EXPOSURE TO VIBRATION TRANSMITTED TO THE HAND (S3/WG39, H. von Gierke, Chair)

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1995:

S3.3-1960 (R 1982, 1990) METHODS FOR MEASUREMENT OF ELECTROACOUSTIC CHARACTERISTICS OF HEARING AIDS (S3/WG48, D. Preves, Chair) [NOTE: Will be withdraw once S3.22 is revised]

S3.19-1974 (R 1990) (ASA 1) METHOD FOR THE MEASUREMENT OF REAL-EAR PROTECTION OF HEARING PROTECTORS AND PHYSICAL ATTENUATION OF EAR MUFFS (No S3 WG Assigned) [Should be withdrawn once S12.?? is approved]

S3.29-1983 (R 1990) (ASA 48) GUIDE TO THE EXPOSURE OF VIBRATION IN BUILDINGS (S3/WG39, H. von Gierke, Chair)

S3.32-1982 (R 1990) (ASA 43) MECHANICAL VIBRATION AND SHOCK AFFECTING MAN-VOCABULARY (S3/WG39, H. von Gierke, Chair)

S3.35-1985 (R 1990) (ASA 59) METHODS OF MEASUREMENT OF PERFORMANCE CHARACTERISTICS OF HEARING AIDS UNDER SIMULATED IN-SITU WORKING CONDITIONS (S3/WG48, D. Preves, Chair)

S3.36-1985 (R 1990) (ASA 58) SPECIFICATION FOR A MANIKIN FOR SIMULATED IN-SITU AIRBORNE ACOUSTIC MEASUREMENTS (S3/WG67, M. Burkhard, Chair)

S3.41-1990 (ASA 96) AUDIBLE EMERGENCY EVACUATION SIGNAL (S3/WG63, M. Whitcomb, Chair)

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1996:

S3.1-1991 [Revision of ANSI S3.1-1977 (R 1986)] (ASA 99) MAXIMUM PERMISSIBLE AMBIENT NOISE LEVELS FOR AUDIOMETRIC TEST ROOMS (S3/WG56, T. Frank, Chair)

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1997:

S3.4-1980 (R 1986, 1992) (ASA 37) PROCEDURE FOR THE COMPUTATION OF LOUDNESS OF NOISE (S3/WG51, J. Goldstein, Chair)

S3.21-1978 (R 1986, 1992) (ASA 19) METHOD OF MANUAL PURE-TONE AUDIOMETRY (S3/WG35, R. Grason, Chair)

S3.34-1986 (R 1992) (ASA 67) GUIDE FOR THE MEASUREMENT AND EVALUATION OF HUMAN EXPOSURE TO VIBRATION TRANSMITTED TO THE HAND (S3/WG39, H. von Gierke, Chair)

S3.37-1987 (R 1992) (ASA 69) PREFERRED EARHOOK NOZZLE THREAD FOR POSTAURICULAR HEARING AIDS (S3/WG48, D. Preves, Chair)

S3.42-1992 TESTING HEARING AIDS WITH A BROAD-BAND NOISE SIGNAL (S3/WG48, D. Preves, Chair)

S3.43-1992 STANDARD REFERENCE ZERO FOR THE CALIBRATION OF PURE-TONE BONE-CONDUCTION AUDIOMETERS (S3/WG43, T. Frank, Chair)

STANDARDS THAT NEED REVISION/REAFFIRMATION IN 1998:

S3.13-1987 (R 1993) [Revision of ANSI S3.13-1972] (ASA 74) MECHANICAL COUPLER FOR MEASUREMENT OF BONE VIBRATORS (S3/WG43, T. Frank, Chair)

S3.18-1979 (R 1986, 1993) (ASA 38) GUIDE FOR THE EVALUATION OF HUMAN EXPOSURE TO WHOLE-BODY VIBRATION (S3/WG39, H. von Gierke, Chair)

STANDARDS IN PROGRESS:

S3.44-199X DETERMINATION OF OCCUPATIONAL NOISE EXPOSURE AND ESTIMATION OF NOISE INDUCED HEARING IMPAIRMENT (S3/WG58, D.L. Johnson, Chair)

S3.XX-199X MEASUREMENT OF SPEECH LEVELS (S3/WG59, H. Levitt, Chair)

ISO WORK EFFORTS AND S3.0 ASSIGNMENTS

ISO TC43/SC 1 REFERENCE HEARING THRESHOLD LEVELS FOR ACOUSTIC TEST SIGNALS OF SHORT DURATION. [US Member/Documents L. Wilber, S3/WG72-Measurement of Auditory Evoked Potentials, R. Ruth, Chair]

ISO TC43/SC 1 REFERENCE THRESHOLD LEVELS FOR PURE TONES IN THE FREQUENCY RANGE 8 - 16 kHz. [US Member/Documents L. Wilber, J. Fletcher, S3/WG77-High Frequency Audiometry, J. Fletcher, Chair]

ISO TC43/SC 1 ACOUSTICS-AUDIOMETRIC TEST METHODS. PART 3: SPEECH AUDIOMETRY. [US Member/Documents L. Wilber, S3/WG35-Audiometers, R. Grason, Chair]

ISO TC43/SC 1 NOISE EMISSIONS FROM SOUND SOURCES PLACED AT THE EARS. PART 1: NOISE IMMISSIONS ESPECIALLY BY OPEN HEADPHONES AND PUSH-IN EARPHONES. PART 2: NOISE IMMISSIONS ESPECIALLY BY HALF-OPEN AND CLOSED HEADPHONES EXCEPT PUSH-IN EARPHONES. [US Member/Documents R. Campbell, S3/WG37-Coupler Calibration of Earphones, B. Kruger, Chair]

ISO TC43/SC 1 ACOUSTICS-EQUAL-LOUDNESS CONTOURS FOR OTOLOGICALLY NORMAL LISTENERS. PART 1: REFERENCE THRESHOLD OF HEARING UNDER FREE-FIELD AND DIFFUSE-FIELD LISTENING CONDITIONS. [US Member/Documents L. Wilber, S3/WG78-Thresholds, W. Yost, Chair]

ATTACHMENT B

S3/371
ATTACHMENT D-6

Tom Frank, Ph.D.
5-A Moore Building
Department of Communication Disorders
Penn State University
University Park, PA 16802
(Phone: 814/863-2006 FAX: 814/865-3759)

Date: May 24, 1993

To:

From: Tom Frank, Vice-Chair, ANSI S3.0 Bioacoustics

Subject: ANSI Standards

The Standards Program of the Acoustical Society of America (ASA) contains four accredited standards committees known as S1 Acoustics, S2 Mechanical Shock and Vibration, S3 Bioacoustics, and S12 Noise. Each committee operates according to procedures approved by the American National Standards Institute (ANSI) and establishes Working Groups to assist in the development, preparation, and revision of standards in a specific area. In part, the purpose of the S3 Bioacoustics Standards Committee is to develop, maintain, and revise standards in the fields of psychological and physiological acoustics. As such, the S3 Bioacoustics Standards Committee is responsible for several standards concerning various aspects and topics related to hearing and hearing aids.

Hopefully, the S3 standards are meeting your needs. Attachment A shows a complete list of current ANSI S3 standards, some of which are currently under revision. I would appreciate receiving any comments that you have concerning these standards (Attachment A), especially how these standards could be improved in reference to new scientific information and current practices. I am also aware that there is a need for new standards in many areas. Attachment B shows S3 Working Groups that have been organized to develop new standards related to: 1) Measurement of Auditory Evoked Potentials, 2) Auditory Masking, 3) Computerized Audiometry, 4) High-Frequency Audiometry, 5) Probe-Tube Measurements of Hearing Aid Performance, 6) Assistive Listening Devices, 7) Basic Vestibular Function Test Battery, and 8) Sound-Field Audiometry. Since these standards are in the developmental stage, your input concerning the content of these standards would be appreciated. Further, I would like to obtain your input concerning other areas where there is a need for developing a standard. Finally, if you or a colleague are interested in becoming a member of a S3 Bioacoustics Committee Working Group please let me know.

ATTACHMENT C

S3/371
ATTACHMENT D-7

ASA S3 BIOACOUSTICS
COMMITTEE CORRESPONDENCE

Tom Frank, Ph.D.
5-A Moore Building
Department of Communication Disorders
Penn State University
University Park, PA 16802
(Phone: 814/863-2006 FAX: 814/863-3759)

Date: July 7, 1993

From: Tom Frank, Vice-Chair ASA S3.0 Bioacoustics

To: Lynne Marshall, Naval Submarine Med. Res. Lab., Box 900, Groton, CT 06349

Subject: ANSI Standard(s) Needing Revision/Reaffirmation

As Chair of WG36 you have the responsibility for the revision or reaffirmation of S3.2-1989 [Revision of S3.2-1960 (R 1982)] (ASA 85) METHOD FOR MEASURING THE INTELLIGIBILITY OF SPEECH OVER COMMUNICATION SYSTEMS. It is important that this standard be revised or reaffirmed on time. This occurs because standards should take into account the newest scientific information and practices. Further, standards are inter-dependent since in most cases one standard will reference information and/or practices contained in another standard.

I have attached a listing of the current ANSI standards categorized by the year in which the standard needs revision/reaffirmation. **Please note the time (year) by which S3.2-1989 [Revision of S3.2-1960 (R 1982)] (ASA 85) METHOD FOR MEASURING THE INTELLIGIBILITY OF SPEECH OVER COMMUNICATION SYSTEMS should be revised or reaffirmed and plan accordingly.**

If you have any questions in the meantime please give me a call.

cc: Julia D. Royster, Chair ASA S3.0

BARBARA KRUGER, Ph.D.

AUDIOLOGY & COMMUNICATION SERVICES
37 Somerset Drive
Commack, NY 11725
(516) 543-HEAR (4327)

To: Members of S3-37
From: Barbara Kruger, Ph.D., Chair
Subject: Progress of WG S3-37 -
Date: September 27, 1993

I. Voting comments of Draft Standard ANSI S3.7 - 1992 can be considered minor and editorial. They are primarily ones that require reordering the information to meet present ANSI standards format. The others have (or will have been) incorporated into the standard with the help of Drs. Alan Woo, Julie Royster, and Avril Brenig, without need for taking working group time.

II. IEC/ANSI: Coordination of ANSI standard actions with IEC has been slow. Dick Campbell has been appointed as the IEC TC29WG3 secretariat. He and Alan Woo attended at meeting in May. Status of documents is unclear at this time.

I look forward to receiving information from Dick on: A. The coupler proposal from Germany for a new pinna simulator, B. IEC Reports on the Status of Draft of Ear Simulator for Headphones .. not used in Audiometry - 29 Secretariat/WG3)1 January 1991 and its updates, and the Revision of IEC 268-7: Sound system equipment: Headphones and earphones.

III. The ANSI organization of a subcommittee of S3-37 to address matters of calibration of "hi-fi" type earphones for purposes other than audiometry to be directed by Dick Campbell is also slow in forming. Ira Leonard did send Dick Campbell the names from the commercial headphone industry by December 1992. Action in this effort is awaited.

IV. THERE IS NO SCHEDULED MEETING OF WG S3-37 AT THE DENVER ASA MEETING. Although Bill Cole and Dave Preves and I tentatively considered an S3-37 meeting on Friday 10/8/93 from 8:00 AM - 9:30 A.M., I do not think we need to schedule such a "breakfast" meeting.

ENJOY THE EXTRA SLEEP !!!!

ATTACHMENT F
S3/371

Report of S3/WG39 - Human Exposure to Mechanical Vibration and Shock (counterpart to ISO/TC 108/SC4)

The working group had no meeting since 6 month ago, because of insufficient participation of working group members. The draft of the revision of ISO 2631 has been prepared for circulation as a DIS by the chairman with input by correspondence and submitted to the ISO TC 108/SC4 Secretariat for circulation. No other US action of this working group is expected until this document will be circulated for vote with other documents from ISO TC 108/SC4.

H.E. von Gierke, Chair
S3/WG39
7 October 1993

S3/371
ATTACHMENT G

COMMITTEE CORRESPONDENCE

7 Oct 1993

Julia Royster, Chair S3,

S3/WG71 did not meet at the Denver meeting of the Acoustical Society. Data continues to be collected supporting the development of the draft standard for artificial mouths. The working group is developing definitions and basic procedures during this time of data collection and data gathering. The working group plans to meet at the Boston meeting of the Acoustical Society to review the definitions, basic procedures, data which has been collected. A draft of the standard should be completed no later than Nov 95.

Sincerely,

Richard L McKinley

Richard L. McKinley
Chair, [redacted] S3/WG71

COMMITTEE CORRESPONDENCE

41 Byron Ave., Dorchester, ON, CANADA, N0L 1G0, Phone 519-268-3313, FAX 519-268-3256

ASA STANDARDS COMMITTEE
S3/WG80

November 1, 1993

Ms. Julia D. Royster Ph.D
Chair S3, Bioacoustics
4706 Connell Drive
Raleigh NC 27612

Dear Julie:

This WG met Oct. 8, 1993 in Denver CO with 16 members present. Comments on the draft document from members attending a May meeting of ISO/IEC WG1 in Oslo were dealt with, along with others from members present. The ISO/IEC working group has accepted our document as the basis for their work and the chairman of S3/WG80 addressed the differences between the latest draft of the two groups. It was decided to resist pressure to eliminate the prefix "Real Ear" from the basic terminology as this has become accepted usage in North America. The chairman was given direction on other points of difference to carry to the ISO/IEC WG1 meeting in Nuremberg Oct 20. Due to a lack of time and a shortage of submitted comments, no progress was made on the text for Appendices. It appears that we will require several more meetings to complete this draft document. Working closely with the ISO/IEC group will make rapid progress more difficult but, in the final analysis, will benefit everyone.

The members of this WG have voted to hold the next meeting on April 9, 1994 in Pittsburg, in conjunction with the meeting of S3.48 to honor Sam Lybarger.

I am enclosing an updated membership list for your records.

Sincerely,

W.A. Cole
Chair

cc ASA Standards Secretariat, 120 Wall St.,32nd Floor, New York, NY 10005-3993

ANSI WRITING GROUP S3.80 MEMBERSHIP. A = ACTIVE MEMBER, C = CORRESPONDING MEMBER

STATUS								PHONE	FAX
A	Dr. Jeremy	Agnew	Starkey Laboratories Inc.(Research)	3020 N. El Paso	Colorado Springs	CO	80907	719-632-9331	719-520-9915
A	Dr. Lucille	Beck	VA Medical Center, Audiology 126	50 Irving Street	Washington	DC	20422	202-745-8270	202-745-8579
A	Dr. Ruth	Bentler	University of Iowa Dept. of Audiology	119 WJSHC	Iowa City	IA	52242-1012		319-335-8851
C	Mr. Stefan	Bergtsson	Rastronics Division	Dr. Traergade 46	1302 Copenhagen K		DENMARK		
C	Mr. Richard	Brander	Beltone Electronics Inc.	4201 W. Victoria Street	Chicago	IL	60646	312-583-3600	312-583-0252
A	Mr. Edwin	Burnett	Natl. Inst. Standards & Technology	Sound Building, Room A149	Gaithersburg	MD	20899	301-975-6636	301-417-0514
C	Mr. R.H.	Campbell	Bang-Campbell Associates	3 Water Street PO Box 47	Woods Hole	MA	02543	508-540-1309	508-540-8347
C	Mr. Christian	Christiansen	Madsen Electronics	Markaervej 2A PO Box 119	DK-2630 Taastrup		Denmark	0114543716000	0114543716240
A	Mr. William	Cole	Etymonic Design Inc.	41 Byron Ave.	Dorchester	ON	NOL 1G0	519-268-3313	519-268-3256
A	Mr. Chris	Conger	3M Hearing Health	3M Center 260-6A-18	St. Paul	MN	55144-1000	612-736-9797	612-736-3892
C	Dr. David	Fabry	Dept. of Otorhinolaryngology	Mayo Clinic	Rochester	MN	55905	507-284-2577	507-284-3907
A	Mr. George	Frye	Frye Electronics Inc.	PO Box 23391	Tigard	OR	97281	800-547-8209	503-639-0128
A	Dr. David	Hawkins	University of South Carolina	Dept. of Speech-Language-Audiology	Columbia	SC	29208	803-777-4813	803-777-3081
C	Mr. Ture	Heline	Gentex Electro Acoustics	5 Tinkham Ave.	Derry	NH	03038	603-434-0311	603-434-3002
A	Dr. Barbara	Kruger	Audiology and Communication Services	37 Somerset Drive	Commack	NY	11725	516-543-4327	516-543-7515
A	Mr. Fred	Kruger	Kruger Associates	37 Somerset Drive	Commack	NY	11725	516-543-5392	516-543-7515
C	Mr. Ira	Leonard	Winchester Eng. & Analytic Ctr, US FDA	109 Holton Street	Winchester	MA	1890	617-729-5700	617-729-5700
C	Mr. Peter	Mercola		630 N. Chelan #B-7	Wenatchee	WA	98801	509-663-2157	
C	Mr. Victor	Nedzelnitsky	Natl. Inst. of Standards and Technology	Sound Bldg. (233), Rm A147	Gaithersburg	MD	20899-0001	301-975-6638	301-417-0514
A	Dr. David	Preves	Argosy Electronics Inc.	10300 West 70th	Eden Prairie	MN	55344	612-942-9232	612-942-0503
A	Mr. Lawrence	Revit	Etymonic Design Inc.	41 Byron Ave.	Dorchester	ON	NOL 1G0	519-268-3313	519-268-3256
A	Dr. Christopher	Schweitzer	Audiologic Inc.	6655 Lookout Road	Boulder	CO	80301	303-581-9556	303-581-9250
C	Mr. Ellsworth	Sharp	FDA - HFZ476	1390 Piccard Drive	Silver Springs	MD	20910		
A	Dr. Roy	Sullivan	Sullivan and Sullivan	50 Willow Street	Garden City	NY	11530	516-294-0253	516-741-5131
C	Dr. Laura Ann	Wilbur	Northwestern U, Audiology Dept.	2299 Sheridan Rd.	Evanston	IL	60208	708-256-8116	708-491-4975

TOTAL: 25

PRINTED ON: 11.2.93

The University of Vermont

DEPARTMENT OF PHYSICS
COOK PHYSICAL SCIENCE BUILDING
BURLINGTON, VERMONT 05405-0125
(802) 656-2644

23 August 1993

Dr. Avril Brenig
Standards Manager,
Acoustical Society of America
120 Wall St., 32nd Floor
New York NY 10005-3993

Subject: Report on activities of the US TAG for IEC/TC8 (Ultrasonics).

Dear Dr. Brenig:

Since my last report on this topic (15 May 1993) there have been n meetings of the above TAG, but I have received the following tw documents for comment.

(1) IEC 87(C.O.)30 - Draft International Standard: IEC 1102 - Amendment 1: Measurement and Characterization of Ultrasonic Fields using Hydrophones in the Frquency Pange 0.5 to 15 MHz.

(2) IEC/62B/87(Sec.)199/53 Committee Draft 601-2-xx, Medical electrical equipment. Part 2. Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment.

(3) IEC Draft Document, 87/WG12(Secretary)20 June 1993. Ultrasonic-Field safety.

On the first (1), the 87 TAG chair (P.D. Edmonds) was informed that I found no reason to dissent.

The second (2), although generated by IEC TC62 (a committee that deals with safety of medical devices), was circulated to the TAGs of TC87 as well as TC62, in accord with an earlier agreement. This draft document describes the labeling of diagnostic ultrasound equipment, in respect to quantities descriptive of the acoustic output. The purpose of the labeling is to inform users on hazards which might arise from temperature elevation, cavitation, or other biophysical mechanisms for tissue damage.

The document, produced by a committee dominated by U.S. manufacturers, proposes labeling essentially the same as in a voluntary standard recently produced in the U.S. My general comment was that, while the above-mentioned U.S. standard is a significant development, it is known to be far from perfect, and the 62 committee should show willingness to learn from ideas being put forward outside the U.S., especially in Europe and Japan.

The third document (3) describes proposed methods for determining the safety class of an item of diagnostic ultrasound equipment. As proposed in "Part 1" (reported briefly in my letter to you of 15 May 1993) the class is to be either A or B, the former designating equipment which can be used without concern for safety. The determination of class is to be made experimentally, using thermocouples to measure temperature rise and hydrophones to measure acoustic pressure produced by ultrasound fields in "phantoms" designed to mimic attenuation in the human body.

The document is surprisingly well advanced, and the methods described seem reasonable. My comments were partly editorial and partly technical. Among the latter were suggestions for improving the models for measuring temperature rise when the path includes bone (this being the most critical situation in respect to possible hazard from temperature elevation). Another suggestion was that the experimental methods be supplemented by computational ones based on simple algorithms put forward by the National Council of Radiation Protection and Measurements in a recent report.

Sincerely yours,

Wesley

Wesley L. Nyborg
Representative of ASA to U.S. TAG for IEC 87.

cc: J. Royster, S3
G. Wong, S1
A. Atchley, Physical Acoustics

• IEC/TC 29 ELECTROACOUSTICS

U.S. Technical Advisor: V. Nedzelnitsky

Documents processed by the ASA Standards Secretariat from April through September 1993.

The following documents were received for VOTE AND/OR COMMENT by the U.S. Member Body:

Coordinator	TAG	CENTRAL OFFICE (CO) DOCUMENTS
J. Tichy V. Nedzelnitsky	S1/S12	IEC/TC 29 (Central Office) 185 - Draft IEC 1043: Electroacoustics - Instruments for the Measurement of Sound Intensity. Measurements with Pairs of Pressure Sensing Microphones.

announced to S1 and S12 (S1/381) on 29 March 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 13 August 1993.

R.W. Krug	S1/S12	IEC/TC 29 (Central Office) 203 - Draft IEC 651: Amendment 1: Sound Level Meters.

announced to S1 and S12 (S1/385) on 14 May 1993. The U.S. position, NEGATIVE WITH COMMENTS, was sent to USNC by the Technical Advisor on 29 July 1993, and from USNC to IEC on 31 July 1993.

Coordinator	TAG	CENTRAL OFFICE (CO) DOCUMENTS
R.W. Krug	S1/S12	IEC/TC 29 (Central Office) 204 - Draft IEC 804: Amendment 2: Integrating-Averaging Sound Level Meters.

announced to S1 and S12 (S1/386) on 14 May 1993. The U.S. position, NEGATIVE WITH COMMENTS, was sent by the Technical Advisor on 29 July 1993, and from USNC to IEC on 31 July 1993.

A.H. Marsh	S1	IEC/TC 29 (Central Office) 167 - Draft IEC 1183 Random-incidence and diffuse-field calibration of sound level meters.

announced to S1 (S1/393) on 25 August 1993.

V. Nedzelnitsky	S1	IEC/TC 29 (Secretariat) 256 1st CD: Measurement Microphones. Part 3: Primary method for free-field calibration of Laboratory Standard Microphones by the reciprocity technique.

announced to S1 (S1/383) on 23 April 1993. The U.S. position was sent to USNC from the Technical Advisor on 14 June 1993.

D.A. Preves	S3	IEC/TC 29 (Secretariat) 252 Second CD 118-1: Hearing Aids with induction pick-up coil input audiometry.

announced to S3 (S3/363) on 8 March 1993. The U.S. position, ABSTENTION WITH COMMENTS, was submitted to L. Nielsen from USNC on 4 May 1993.

R.L. Grason	S3	IEC/TC 29 (Secretariat) 253 IEC 654-4: Audiometers Part 4: Equipment for extended high frequency audiometry.

announced to S3 (S3/364) on 8 March 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to USNC by the Technical Advisor on 26 April 1993, and from USNC to L. Nielsen on 4 May 1993.

Coordinator	TAG	SECRETARIAT DOCUMENTS
C. Bautz	S1/S12	IEC/TC 29 (Secretariat) 261 Electroacoustics - Instruments for Measurement of Aircraft Noise, etc.

announced to S1 (S1/390) on 30 July 1993.

OTHER ACTIONS

New Work Items proposed for IEC/TC 29:

- IEC/TC 29 (U.K.) 105
  Proposal from the British Committee for an addition to the IEC 118 series of hearing aid standards.

- IEC/TC 29 (U.K.) 106
  Extension of EMC Measurements to cover the region 20 to 900 Hz for checking immunity of hearing aids.

- IEC/TC 29 (U.K.) 107
  Addendum to IEC 118-0 to cover the measurement of immunity of hearing aids from electromagnetic interference.

Affirmative votes with comments on the three above items, were submitted to the USNC for IEC by the U.S. Technical Advisor on 20 July 1993.

NIST | UNITED STATES DEPARTMENT OF COMMERCE
National Institute of Standards and Technology
Gaithersburg, Maryland 20899

COMMITTEE CORRESPONDENCE Building 233 (Sound), Room A147

October 1, 1993

REPORT TO: ASACOS, TAG for TC 29 Electroacoustics, and other directly and materially interested parties

From: Victor Nedzelnitsky, Sc.D. VN
Technical Advisor to USNC/IEC
for TC 29 Electroacoustics

SUBJECT: Activities concerning IEC/TC 29 since the previous report of the Technical Advisor

1. Published copies of IEC International Standard 1252 Electroacoustics - Specifications for personal sound exposure meters, First edition 1993-06, have been received by USNC/IEC. This Standard can be purchased at $70.00 per copy, plus shipping and handling, from USNC/IEC, 11 West 42nd Street, New York, NY 10036, telephone 212-642-4936, FAX (for sales only) 212-302-1286.

2. Documents received and/or processed for ballot or comment are announced via the ASA Standards Secretariat and are listed separately in the ASACOS/S1/S3 Minutes. Consequently, a list is not repeated in this report.

3. The USNC/IEC ExCo had set up an *ad hoc* committee, chaired by Dr. Stanley I. Warshaw of NIST, to examine ways in which the USNC/IEC and ANSI can act to increase U.S. user (as opposed to "producer", e.g., manufacturer) participation in its standards activities. Among many others, I was offered the opportunity to provide suggestions, and did so (copy was attached to my January 25, 1993 report to ASACOS, to the TAG for TC 29, and to others, including a copy of a letter to me from Dr. Kruger that illustrates the lack of U.S.A. support for participation by users, even those who serve as Chairs/Conveners of IEC WGs). This committee has issued its report (copy attached). Also attached is the related excerpt (title page and pages 17 and 18) of USNC 270 August 30, 1993, the Minutes of the USNC/IEC Executive Committee Meeting in Vancouver, British Columbia, at which this report was presented and discussed. There was some discussion of this report by the USNC/IEC ExCo at its meeting at NIST in Gaithersburg on September 28, 1993.

4. Also considered at this USNC/IEC ExCo meeting was USNC 2271 Attachment O, a letter from George T. Willingmyre, P.E., Vice President Washington Operations, ANSI, to which he attached for

discussion the document "INTERNATIONAL STANDARDS ISSUES, a Statement to the Secretary of Commerce by the Visiting Committee on Advanced Technology of the National Institute of Standards and Technology, July 28, 1993." A copy is attached.

cc:
L. G. Eitzen
R. C. Geiseman
S. I. Warshaw
C. T. Zegers

Attachments.

U.S. NATIONAL COMMITTEE OF THE IEC

11 West 42nd Street, New York, NY 10036

TEL. 212.642.4936
FAX. 212.398.0023
212.302.1286 (Sales Only)
Cable: Standards, New York
International Telex: 42 42 96 ANSI UI

USNC 270
August 30, 1993

MINUTES
USNC/IEC Executive Committee Meeting
Tuesday, July 22, 1993
Hyatt Regency Hotel
Vancouver, British Columbia

Members Present	Position	Affiliation
R.H. Reimer	President	Allen-Bradley Co.
M.E. Cox	Member	UL
F. Finnegan	Member	Texas Instruments
D.C. Fleckenstein	Member (Immediate Past President)	IEEE
R.C. Geiseman	Member	Micro Switch
E.R. Kelly	Vice President	AMP Inc.
J.M. Kinn	Member	EIA
B. Liebler	Member	HIMA
C.R. Luebke	Member	Square D Co.
P.M. Piqueria	Member	General Electric Co.
J. Rennie	Member	Factory Mutual Research
R.M. Showers	Vice President	Univ. of Pennsylvania
C.T. Zegers	Secretary	ANSI
Guests		
R.H. Arendt	TA - TC 32/SC 32A	-
G.W. Carter	TA - Chmn - TC 75	MEC Inc.
G.R. Dauberger	TA - SC 23A	Thomas & Betts Corp.
W. Dettwiler	VP, Canadian National Committee/IEC	MacDonald & Dettwiler
J.W. Esty*	Rep IEEE Power Engineering Society	S&C Electric Co.
J. Gorman	-	IEEE Staff
T.A. Pinkham	TA - TC 36/SC 36B/SC 36C	Lapp Insulator Co.
A. Shpilman*	TA - TC 51	Philips Components
J.M. Van Name Jr.*	TA - Chmn/TC - TC 78 - DTA/TC 11	-
C.H. White	-	NEMA
Members Absent		
A.R. Daniels	Member	NCR Corp.
W.F. Hanrahan	Member	CBEMA
F.K. Kitzantides	Vice President	NEMA
E.M. Nesvig	Member	ERDCO Engineering Co.
S.I. Warshaw	Member	NIST/U.S. Dept. of Commerce
J.T. Weizeorick	Member	AHAM

*Part time

It was moved, and seconded

That based on the NEMA proposal the Executive Committee extend an official invitation to TC 17 and its Subcommittees (A, B, C and D) to hold their 1995 meeting in the U.S.

During discussion Mr. Esty emphasized that Mr. Harner's proposal did not intend to exclude SC B and D and that the IEEE PES would be willing to provide full financial and administrative support for these meetings in a cooperative approach with other interested organizations such as NEMA, EEI and others.

A long discussion followed in which Mr. Esty emphasized that the primary goal in all this effort is that the meetings be held in the U.S. The details can be resolved. Several members felt that as a "friendly" amendment NEMA should be encouraged to work with all other interests.

It was moved, seconded and

Voted #7

That based on the NEMA proposal the Executive Committee extend an official invitation to TC 17 and its Subcommittees, (A, B, C, and D) to hold their 1995 meeting in the U.S. NEMA is urged to work with all other interests involved to administer these meetings. (This motion was approved with 3 negatives.)

Action Item #6
CRL
TAs/TAGs for TC 17, SCs A, B, C, D

It was confirmed that the TAs and TAGs for the TC and SCs will work out the details of venue and dates and that Mr. Luebke will coordinate the activity so that as soon as possible Mr. Zegers can communicate details to the appropriate international contacts.

15. ANSI Membership Campaign - R.H. Reimer

Mr. Reimer called attention to the list of perspective ANSI members (ATTACHMENT H) and reminded those present that ANSI membership is part of the revenue stream that pays IEC dues and helps to support USNC activities. Mr. Zegers indicated that, in March, Mr. Reimer circulated a special letter to USNC contacts whose employers were not ANSI members inviting them to consider joining the Federation. Five or six did so and the list attached reflects those that remain. Help in encouraging ANSI membership was solicited.

16. Report from USNC Subgroups

16.1 Ad Hoc Committee on User Involvement in USNC/IEC - J. Rennie

Mr. Rennie, reporting for Dr. Warshaw - Committee Chairman, and additional member Mr. Piqueira, called attention to the Report of the USNC Ad Hoc Committee on User Involvement in the USNC/IEC circulated April 23 as ExCo 2244 (ATTACHMENT I).

Using overhead slides (ATTACHMENT J) he highlighted the report and stated the basic conclusion that little is known about the interests represented on TAGs. The Committee suggested 3 areas for action.

a. Funding
b. "Awaken" Senior Management
c. Public Relations

It was suggested that items b and c might be somewhat addressed if the publicity effort is effective. The Committee also felt that if the subject of TAG "balance" was pursued the effort to increase user involvement would be advanced. Its recommendations are as follows:

a. USNC/IEC should adopt guidelines for balance
b. Committee members should define interest
c. TAs need to assure maintenance of balance

During discussion, several members felt that the more correct word to use would be "dominance" rather than "balance". In the ANSI Criteria Document no test of dominance is required unless challenged. Several different opinions were expressed about the definition of the word "user". The same company or organization might be a user in one instance and a producer in another. TAs may have difficulty in classifying TAG members as a result. In answer to questions, Mr. Rennie indicated that the Committee did not consider the possibility of a TAG corresponding membership category via electronic means in order to facilitate users nor did they note the existence of organized "User Associations" in the electrotechnical area.

After discussion, Mr. Reimer suggested that the ANSI Criteria for balance could be reiterated and that a letter could be circulated to TAs attempting to sensitize and remind them of the need for user participation in their activities.

Action Item #7
Ad Hoc Committee

Mr. Rennie agreed that the Ad Hoc Committee would prepare the 1st draft of that letter for circulation by the Secretary. With this item concluded the Ad Hoc Committee would be dissolved.

16.2 Nominating Committee - J. Rennie

No specific items to report.

16.3 U.S. Coordinating Committee on EMC - R.M. Showers

Dr. Showers reported that he was pursuing several possibilities with respect to a Secretariat for the USCCEMC and, in anticipation of resolving this issue, the next meeting has been set for October 7 at NEMA Headquarters.

To: ExCo

John Rennie will give this report formally for Stan Warshaw at the July meeting. Any comments in the meantime should be sent to both. C T Zegers

ExCo 2244

4/23/93

USNC 2270
ATTACHMENT I

S3/371
ATTACHMENT K-6

REPORT OF THE UNECE AD HOC COMMITTEE ON USER INVOLVEMENT IN THE USNC/IEC

Background:

The Executive Committee of the United States National Committee of the IEC appointed the "Ad Hoc Committee on User Involvement in the USNC" at its 31 August 1992 meeting. This Ad Hoc Committee was charged with studying User involvement and with developing recommendations for improving the opportunities for individuals from the User community to become involved in the work of the USNC-IEC. The initial appointments to the Ad Hoc Committee were Dr. Stanley Warshaw, NIST, as Chair; Mr. Philip Piqueira, GE; and Mr. John Rennie, FMRC.

In a letter dated September 4, 1992, Charles T. Zegers, Secretary, USNC/IEC, reported on the formation of the Ad Hoc Committee to the members of the U.S. National Committee and to the Chairs of ANSI's Company Member Council, Organizational Member Council, Government Member Council, Consumer Interest Council, and Executive Standards Council, as well as to the Chair, US TAG for JTC 1. He relayed the Ad Hoc Committee's request for suggestions concerning ways to improve User participation in the USNC/IEC work.

Discussion of Comments Received:

Comments were received from the following seven individuals, identified by their committee affiliations (see numbers in parentheses) for subsequent reference:

(xx) Karen DeChino, IEEE Standards Department
(17) R.H. Harner, S&C Electric Co., TC17 TA
(29) Victor Nedzelnitsky, NIST, TC29 TA
(34) T.A. Pickett, GE, SC34A and SC34B TA
(46) James Tyler, Essex Group, TC46 and SC46 TA
(56) Lawrence Hoffman, Townley and Updike, TC56 TA
(72) Jamie Lankford, TC72 Secretary

Five of these commenters are Technical Advisors (TC or SC) and one is a TC Secretary; the seventh commenter represents a Professional Society/Standards Developer. All appear to be technical people, but it is not clear whether any of them are paid by producers.

The essence of the comments concerning current user participation in USNC/IEC activities is shown below, identified by source:

- o - IEEE committees are balanced. (xx)

  - User members of IEEE committees are generally unresponsive to documents and proposed positions. (17)

groups and professional societies, and video tape(s) concerning IEC and USNC activities. However, USNC would have to find the funds to support these. (72)

Ad Hoc Committee Identification of Issues:

After reviewing its charter and the comments described above, the Ad Hoc Committee recognized the reaffirmation that Users may be underrepresented in USNC/IEC activities and the difficulties that may be encountered in attempting to increase User representation. The Committee raised the question whether the amount of User participation is the most important consideration, or whether committees and TAG's have reasonable balance.

In particular, it may be more appropriate to investigate whether individual committees currently meet prescriptions for balance and fairness as specified by ANSI for ISO and IEC activities and by other major organizations. Pertinent extracts from ANSI, ASTM, and ISA documents are reproduced below:

ANSI: The ANSI Board of Directors approved on March 26, 1990, its Procedures for U.S. Participation in the International Standards Activities of the ISO -- Annex B: Criteria for the Development and Coordination of U.S. Positions in the International Standardization Activities of the ISO and IEC.

> *B4.2 Balance. The process of developing U.S. positions should have a balance of interests and shall not be dominated by any single interest category.*
>
> *Dominance means a position or exercise of dominant authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints. The requirement implicit in the phrase "shall not be dominated by any single interest category" normally will be satisfied by the historical criteria for balance; that is 1) no single interest category constitutes more than one third of the membership of a committee dealing with safety standards or 2) no single interest category constitutes a majority of the membership of a committee dealing with product standards.*
>
> *Unless it is claimed by a directly and materially affected person (organization, company, government agency, individual, etc.) that a single interest category dominated the development of a U.S. position, no test for dominance is required.*
>
> *In defining the interest categories appropriate to U.S. TAG membership, consideration shall be given to at least the following:*
>
> *1. Producer*
> *2. User*
> *3. General interest*
>
> *Where appropriate more detailed subdivisions should be considered.*

ASTM: ASTM's Regulations Governing ASTM Technical Committees, September 1982

> *7.1.1 On classified committees, a member shall be classified by the Executive Subcommittee, at the time his application is accepted, according to his individual or organizational interest.*

- o - Users are heavily represented in the Acoustical Society. (29)

  - The Insulation Cable Engineers Association has an effective working group (TWCSTAC) for users and producers to develop its standards. (46)

- o - The lack of active user participation is painfully obvious. (Stated by most commenters)

  - Efforts to recruit users are generally unsuccessful; user members on TAGs are generally unresponsive to requests for comment on documents and prospective positions. (17)

  - We need mechanisms to strengthen the role of professional societies. (29)

  - Some non-producers participate (e.g., UL and DoD), but do not sustain their interest; others are inactive, information members. (34)

  - Additional user representatives might be sought from Consumers Union, UL, National Safety Council, etc. (56)

  - Some cooperation with GAMA, AGA, UL, plus "presentations" to AHAM provide some help. (72)

- o - Most technical consultants and retirees often donate their time since they lack financial support from their employers, Trade Associations, Professional Societies, or government and frequently must depend on "charity" or resign their positions. (29)

  - USNC and ANSI have unreasonable expectations for (unfunded) technical developments. (29)

The commenters offered suggestions for actions that might be taken, again identified by source:

- * Funding sources must be found:

  - from Trade Associations such as the Edison Electric Institute and EPRI. (72)

  - perhaps from industry/government consortia comparable to EC counterparts; perhaps even from regional groupings under NAFTA. (29)

- * Awaken senior management of users in industry to global events and the importance of standards. (72)

- * Establish a Public Relations program through articles in professional and trade journals, speeches to trade

7.1.2 Classification of committee members by organizational and technical interest is needed to ensure fairness and balance among affected interests in keeping with Society Bylaw 7.1.2. Such classification may be the same or different at main committee and subcommittee levels. It may also be different for committee organizational or standards voting purposes. Classification shall be related to the scopes of the committee and its subcommittees.

7.1.3 Organizational interest is typified by employer, employee, consultant, client, contractor, or sales representative as well as by types of products and services provided. Consultants or other individuals serving more than one kind of interest shall declare their principal interest.

7.3 Classes of Committee Members -- The classes of committee members, unless authorized by COTCO, shall be:

7.3.1 Producer -- A member who represents an organization that produces or sells materials, products, systems, or services covered in the committee scope shall be classified as a producer.

7.3.2 User -- A member who represents an organization that purchases or uses materials, products, systems, or services other than household covered in the committee scope shall be considered as a user provided that the member could not also be classified as a producer.

7.3.3 Consumer -- A member who primarily purchases or represents those who purchase products or services for household use for which a standard is developed.

7.3.4 General Interest -- A member who does not fit into any of the preceding categories.

7.4 Consultants -- A consultant (such as a consulting chemist or engineer or an employee of a consulting firm) retained under an indefinitely continuing arrangement for an organization, which arrangement includes representing it in an ASTM committee, shall be classified in accordance with the classification of the organization by which the member is retained. Consultants representing themselves or their employer and not concerned with the production or sale of the materials, products, systems, or services with which the committee is concerned shall be classified as users or general interests, as appropriate.

7.5 Balance of Interest -- Balance of interest in a committee or subcommittee requires that the combined number of voting user, consumer, and general interest members shall equal or exceed the number of voting producer members.

7.6 Consideration and Review -- Members dissatisfied with their classification may request reconsideration by the Executive Subcommittee. Ultimate appeal may be made to COTCO.

ISA: ANSI-Approved (1992) Standards and Practices Manual of Procedures

3.5.4.1 In recommending appropriate action to the Committee on applications for membership, the Chairperson shall consider the following:

(1) the need for active participation by each interest;

(2) the potential for domination by a single interest category or organization;

(3) the extent of interest expressed by the applicant and the applicant's willingness to participate actively; and

(4) the qualifications of the representative (and the alternate if proposed) identified by the applicant's organization, company, or government agency.

The Chairperson may consider reasonably limits on Committee size.

Committee Recommendations:

- The USNC/IEC Executive Committee should adopt specific guidelines for balance patterned after the ratios prescribed by ASTM, for example, the proviso that no interest group have a majority voice.

- Each member of a USNC/IEC committee or TAG should self-classify his or her interest (as Producer, User, Consumer, or General Interest) subject to appeal by other members.

- Technical Advisors should assume responsibility for assuring that prescribed balance has been maintained; in the event of imbalance, the committee or TAG should be required to take appropriate steps to acquire and maintain balance, preferably by adding members of the underrepresented interest or by withdrawing voting privileges from the most recent members of the overrepresented interest group.

- The Executive Committee should have appeals procedures in place for the resolution of disputes concerning interest classification or committee balance.

ANSI
American National
Standards Institute 655 15TH ST N W SUITE 300 WASHINGTON D C 20005-5794
TEL. 202 639 4090
FAX. 202 628 1866

GEORGE T. WILLINGMYRE, P.E.
VICE PRESIDENT
WASHINGTON OPERATIONS

USNC 2271
ATTACHMENT 0

August 24, 1993

CMC 93-9/NIST Visit. Comm.

TO: The CMCEC

FROM: George T. Willingmyre, P.E.

RE: International Standards Issues
Attached document--A statement to the Secretary of Commerce by Visiting Committee on Advanced Technology of NIST

Attached is a report on international standards issues recently submitted to the Secretary of Commerce by the NIST Visiting Committee. The report includes four potential recommended actions that NIST had presented to the committee and that the committee supports.

I would appreciate your thoughts on both the issues portion as well as the four recommended actions by September 23. We will solicit input at the October CMCEC meeting as well.

BW/GTW/skh

Attachment

INTERNATIONAL STANDARDS ISSUES

A Statement to the Secretary of Commerce

by the

Visiting Committee on Advanced Technology

of the

National Institute of Standards and Technology

July 28, 1993

U.S. Representation -- Issues and Problems

In 1992 and 1993, the Visiting Committee studied the current international standards situation with particular regard to the following questions:

- How important is a strong U.S. position in international standards to the nation's economic competitiveness in the global economy?
- Is the current U.S. international standards process effective?
- What is NIST's role, and is that role adequate to meet national needs?

Regarding the first question, interested parties in industry, government, and the standards community generally agree that effective participation in international standards affairs is crucial to the strength of the national industrial base and its success in world commerce. A strong U.S. voice is needed to ensure that decisions made by international standards committees include due consideration of technical and economic issues of importance to the United States and to prevent the use of standards and certification practices by other nations as trade barriers to U.S. goods.

As the Office of Technology Assessment concluded in its recent study, "In an information-based global economy, where standards are not only employed strategically as marketing tools but also serve to interconnect economic activities, inadequate support for the standards setting process will have detrimental effects."[1] Historical precedents bear out the importance of U.S. leadership in international standards. In the post-war period, the strong U.S. influence in television equipment and broadcasting standards, pressure vessel codes governing boilers and other commercial and industrial equipment, flow metering standards for petroleum products and natural gas, and in many other areas led to wide-spread formal or de facto adoption of U.S. standards and codes. Unfortunately, the U.S. position in international standards has begun to erode in recent years relative to those of our principal economic competitors.

The question is thus not whether the U.S. should be strongly represented, but how. Leaders in the standards community maintain that the pluralistic U.S. standards system, in which a host of standards organizations have carved out dominant positions in particular technical and

commercial areas, provides adequate representation in international standards affairs.[2] However, many industry observers are critical of the fragmented and often fractious U.S. system and question whether the United States is putting forth its strongest possible effort. Several of us, who work for U.S. corporations with substantial interests in international trade, share these concerns. Among the problems we see is the difficulty in establishing effective interfaces with the monolithic standards systems of other countries. In the eyes of foreign observers and participants from standards systems in which a single entity ultimately represents each nation, the U.S. has no corresponding institution to represent itself.

However, the U.S. system's problems extend beyond difficulties in meshing with its foreign counterparts. It is not clear to us that our international standards representatives, even those who are volunteers from industrial firms, always have the mandate to speak credibly for U.S. industry; more often, they speak as members of the standards community. Nor are the interests of the nation as a whole always represented in an evident way. Finally, because the nation's standards system is connected only weakly to the sovereignty of the land, the link between the organizations that represent the U.S. in the international standards arena and the government agencies that deal with related matters of international commerce and trade agreements is also weak.

A number of policies and strategies have been put forward to improve our nation's effectiveness in international standards. The OTA report describes several options for major change;[3] at our request, NIST discussed the possible future scenarios with us. Several of the proposals to revamp our standards system are worthy of careful consideration. However, after examining the proposals and what would be required to implement them, we conclude that substantive, far-reaching improvement in U.S. participation in international standards requires a consensus among interested parties that currently does not exist. In particular, the problems are unlikely to be fixed until industry speaks with a strong voice. At this time, although many in industry are indeed concerned, there is no broadly based call for improvement. Many companies unfortunately do not fully appreciate the consequences of international standards.

We raise these issues before turning to NIST's present and future role in international standards because they are vital to the nation's economic future and because they define the environment in which NIST functions as the nation's standards and metrology laboratory. Our intention here is not to recommend specific changes in our international standards policies and practices, because the proper course is not clear to us -- nor, except in the broadest outlines, does it seem to be clear to anyone else. Rather, we merely state our belief that ***the difficult tasks of forging a consensus and increasing the effectiveness of U.S. participation in international standards are crucial to our economic prosperity and should be high priorities of our export industries, the Department of Commerce, and U.S. standards organizations.***

NIST's Current Standards Role and Leadership Opportunities

NIST has numerous responsibilities in domestic and international standards, and its role continues to expand and gain in importance in response to technical, commercial, and political developments. NIST's functions in physical standards and measurements are fairly well defined. NIST develops physical standards and carries out the research to support advances in the fundamental units of scientific measurement that underpin them. NIST keeps, fabricates, and sells many physical standards and provides traceability for the bases of standards-related measurements. NIST also accredits laboratories that make measurements of many kinds and works with both the standards community and industry to promote understanding and application of good standards practices.

Inevitably, the growing importance of information technology and its integration into manufacturing have propelled NIST into operating standards and conventions as well, as we discussed in our 1992 annual report.[4] NIST is an important player in developing and implementing PDES/STEP for the digital exchange of product data, government-wide computer protocols to ensure inter-operability of hardware and software, and the Integrated Services Digital Network.

In addition, NIST has a number of legislatively assigned standards-related tasks. NIST was designated by the Department of Commerce as the U.S. inquiry point for the General Agreement on Tariffs and Trade (GATT), a function assigned to the department under the Trade Agreements Act of 1979. Other NIST assignments include accreditation of all U.S. laboratories that make asbestos measurements, direct support to the Consumer Product Safety Commission on fabric flammability, and fastener certification.

Within the standards community, NIST scientists and engineers sit on hundreds of standards committees (and chair many of them) and provide valuable technical input. NIST's director is an ex-officio member of the board of directors of the American National Standards Institute (ANSI).

NIST's role then, is largely technical and educational. NIST is not a major force in standards policy; neither, for that matter, is the Department of Commerce, in the sense of providing strong government leadership and coordination. NIST recently proposed and discussed with us four specific measures to increase its efforts in international standards. We review and comment on each of the proposals in the remainder of this section.

NIST proposes to develop and implement a comprehensive, computerized database of standards-related information for broad dissemination to all interested parties. In a closely related activity, ***NIST also proposes to make standards documents available to the requesting public under arrangements with copyright holders.*** NIST's goal is to improve the currency of standards information through electronic communication. NIST envisions providing on-line access to world-wide, standards-related information, including bulletins on standards development schedules, standards meetings of interest, and standards voting. In conjunction with the NIST Computer Systems Laboratory, the Office of Standards Services at NIST proposes to develop the technology needed to offer documents to the public electronically and to circulate developmental drafts of standards for comments and revision by standards committee members. Once this program is established, NIST proposes to work in collaboration with the National

Technical Information Service, which will serve as a central distributors, providing finished electronic documents to the public and collecting fees from them for the participating standards organizations.

Although individual standards associations provide some of the services contained in these two proposals to their own constituents, such information is limited and currently unavailable to a broad audience. NIST reports that U.S. standards bodies generally support the establishment of a central data bank; however, as the OTA report observes, some in the standards community will probably oppose a greater federal role in its development.[5] While some may regard NIST's proposal as government encroachment, we believe that NIST is a logical place for a federally funded, national electronic standards database and that such a database could be of considerable value to our nation's industrial firms. This is an activity for which NIST, with its unique combination of standards, database, and computer expertise, is eminently qualified. Furthermore, the maintenance and operation of a comprehensive and widely available database is probably beyond the financial and operational capability of any individual standards body.

Two cautionary notes are in order. First, we recommend that NIST work closely with the major U.S. standards organizations in designing and implementing its standards information network with the goal of maximum "buy-in" among them. A national standards database must be supported and used by the standards community to be effective. Second, the Department of Commerce must be prepared to commit to reliable, long-term funding if the database is to be accepted by the potential user base.

NIST's proposals have the advantage that they would allow many firms and organizations to be brought into the standards information loop quickly and easily. These new activities seem to us to complement NIST's charge to serve as the GATT inquiry point as well as its appointment by ANSI as the domestic focal point for ISONET, an information network on ISO standards. We also note that, while the information to be compiled and disseminated by NIST will come from both the private sector and government, these proposals are consistent in spirit and intent with the Administration's stated aim to "make government information available to the public in a timely and equitable manner."[6]

NIST proposes to ***expand the Standards Assistance Program, in which standards experts assigned to U.S. embassies around the world promote acceptance of U.S. standards, conformity assessment procedures, legal metrology concepts, and technology.*** Under the Standards Assistance Program, NIST now maintains two standards representatives: one in Brussels to the European community and another to Saudi Arabia. NIST's priorities for placing additional foreign standards representatives are based on economic analyses indicating that representatives would be most useful in Russia, Mexico, and Japan.

The importance of cooperation with other nations in standards development is well illustrated by the case of Saudi Arabia. The Standards Assistance Program in Saudi Arabia began in 1989 in response to the deteriorating U.S. business position in Saudi Arabia and neighboring gulf states. Many pre-1989 Saudi product standards, developed with assistance from our major economic competitors including Japan, the United Kingdom, and Germany, were incompatible

with U.S. products. A 1991 study by the U.S. Embassy to Saudi Arabia estimated the resulting decrease in export opportunities as $100 million to $500 million annually.[7]

U.S. representation in Saudi Arabia under the Standards Assistance Program has been successful in helping the U.S. to reclaim business in Saudi Arabia and other members of the Gulf Cooperation Council, which generally follows the Saudi technical standards practices. Since the program began, Saudi Arabia has promulgated no standards incompatible with U.S. products, and the program is making an effort to revise incompatible standards developed earlier. In addition, the U.S. standards advisor and NIST staff have processed more than 450 draft Saudi standards and provided the Saudis with over 300 sets of comments from U.S. organizations. The U.S.-Saudi Arabian agreement was extended most recently in a March 1993 memorandum of understanding.

The current Saudi Arabian program was created by NIST with the driving force and collaboration of the American/Saudi Roundtable, an association of U.S. companies with business interests in Saudi Arabia. Public-private cooperation began with the private sector supporting the standards advisor at the U.S. embassy in Riyadh and NIST providing the standards dissemination and review system. NIST currently also underwrites the standards advisor, with the Roundtable providing in-kind support, i.e., technical and business expertise and representation.

We recommend that the pattern of public-private cooperation be continued as the Standards Assistance Program expands to other nations. NIST, as the standards arm of the Department of Commerce and a rich source of standards and technical expertise, is the obvious federal partner. The management of organized, private sector participation is less clear. In Saudi Arabia, the mechanism was straightforward because a formal association of U.S. companies with business interests there was in place and ready to participate (and, at least initially, to commit to monetary support). Generally, such a convenient situation cannot be expected elsewhere. As a result, we recommend that the Department of Commerce seek a working alliance with a national standards or industrial organization that can and will agree to represent industry broadly in the Standards Assistance Program.

Such a partnership might be forged through a Memorandum of Understanding (MOU) between the Department of Commerce and, for example, the American National Standards Institute. Under such an arrangement, the Department's responsibilities would center on NIST's technical reviews, advice, and support, as it does now. The designated private sector organization would represent U.S. firms, either directly through their memberships or indirectly through the memberships of industrial associations to which they belong. Its responsibilities would include holding workshops and using other means to ensure that the interests of key firms and industrial sectors were represented; arranging formal participation by U.S. companies and their representatives in Standards Assistance Program activities; and funding the standards advisors assigned to U.S. embassies, e.g., through assessments of companies and associations.

Regarding financing, however, we observe that the division of financial responsibility between the federal government and the private sector is less important than ensuring that U.S. commercial interests are well represented and that U.S. industry takes an active part in the program. In short, the participation of U.S. business and its in-kind support is more important than

monetary contributions. Corporate participation in setting up and operating new standards assistance activities will help to focus them on subjects of greatest commercial importance, ensure that decisions made truly benefit U.S. companies, and generate contacts and build experience that will be valuable to U.S. exporters.

Finally, NIST proposes to ***establish a funding mechanism to ensure effective U.S. representation and to coordinate private sector and government participation in international standardization activities.*** Under this proposal, NIST would administer a block of congressionally appropriated funds to support the participation of individuals and organizations needed to represent the United States in international councils. As we see it, this program has two primary objectives: (1) to ensure that the U.S. is represented in those international councils where need and opportunity make participation crucial to our national economic interests, and (2) to ensure that our representatives to those councils are the highest caliber we can find.

NIST intends to satisfy those objectives in a formal, three-step review procedure. NIST would administer the selection and funding to ensure due process. One of NIST's primary responsibilities and, we think, major challenges, will be to select reviewers from NIST, industry, the standards community, and other entities in a way that treats diverse and potentially competing interests in a manner that is, and is perceived to be, fair. However, NIST already has experience on which it can draw in setting up the review process: its Advanced Technology Program already has a proposal review system that has had to address many of the same concerns. We recommend that NIST give the structure and operation of the review process considerable thought, because the success of this proposal may well depend on it.

As NIST outlined it to us, the review process would begin with submission of proposals from U.S. standards organizations to represent the nation in specific international standards councils. To ensure that knowledgeable, well-qualified people are selected, the delegates themselves would be chosen by technology advisory groups that are formed and operate under the auspices of the relevant standards organizations.

In the first review, technical experts familiar with international standards issues would evaluate proposals in terms of the need for U.S. participation and the importance of the technical issues to be addressed. The second review, conducted by trade and industry reviewers, would rank the proposals in importance based on economic and business criteria. In a final review, the evaluations from both the first and second reviews would be factored into a final ranking, and the top-ranked proposals would be funded.

The OTA report notes that foreign governments generally support, at least in part, the cost of participation in international standards development activities, while U.S. delegates pay their own way.[8] As a result, U.S. representation in international standards is often determined by who can afford to attend meetings; it should be determined by who is best qualified. Participation in certain crucial technology areas where a U.S. voice is essential may be particularly expensive. We believe that NIST's proposal is a reasonable solution to the pressing need for expert representation in key international standards councils.

Recommendations

NIST is effectively supporting and participating in the nation's international standards effort. We think that NIST also has opportunities to do more in the face of a clear national need. ***We recommend that the Department of Commerce support all four of NIST's international standards initiatives to:***

- ***establish a standards database***
- ***develop a standards information network***
- ***expand the Standards Assistance Program***
- ***fund participation by U.S. experts in key international standards activities***

In our opinion, NIST is ideally suited to manage the first two proposals. The institute has considerable experience in developing and disseminating databases, and its access to in-house computer systems and network expertise is unmatched elsewhere in the standards community.

The Standards Assistance Program has already demonstrated the economic value of timely input into the standards processes of other nations. We believe that extension of this program to other key trading partners such as Russia and Japan is a pro-active step to promote U.S. economic interests. The current public-private partnership between NIST and industry is a good model to continue. To ensure that this partnership works effectively, we recommend that the Department of Commerce seek an agreement with a nationally recognized standards or industrial organization that will pull together diverse industrial and standards community interests in the Standards Assistance Program. With such a partnership, NIST can expand the Standards Assistance Program and encourage cooperation within the nation's standards system at the same time.

We also like NIST's proposal for funding highly qualified U.S. participants in key international standards committees. A fund to plug critical holes in our representation with experts selected on the basis of merit can certainly strengthen the U.S. presence. NIST's standards expertise and its frequent role as a neutral third party make it an excellent choice to administer this program.

We recommend that NIST's proposals be funded in full. The proposals will cost several million dollars per year. At a time when economic security is replacing military security as the primary foreign policy issue, NIST's proposals to upgrade our effectiveness in international standards are small but significant contributions to our national goal of increased success in the world economy. In that broader context, we believe that the modest investment that NIST proposes has the potential for excellent returns in international commerce and increased cooperation in the U.S. standards community.

Summary

NIST has proposed four useful programs to increase U.S. effectiveness in international standards. While we believe that there is an underlying need for systemic change in our nation's approach to standards, it appears that such change will be difficult and long in coming. In the meantime, NIST's proposed programs can improve our international standards representation and help to bring order to the currently chaotic U.S. standards system. We encourage the Department of Commerce to back them and to provide the resources to carry them out.

References

1. U.S. Congress, Office of Technology Assessment, *Global Standards: Building Blocks for the Future*, TCT-512 (Washington, DC: U.S. Government Printing Office, March 1992), p. 9. Note: We recommend this report as an excellent source of information on international standards.

2. Ibid, p. 3. See especially footnote 1.

3. Ibid, pp. 21-35.

4. The Visiting Committee on Advanced Technology, 1992 Annual Report, January 1993, pp. 19-21.

5. U.S. Congress, op. cit., p. 28.

6. President William J. Clinton and Vice President Albert Gore, Jr., *Technology for America's Economic Growth, A New Direction to Build Economic Strength*, February 22, 1993, p. 20.

7. U.S. Congress, op. cit., p. 36.

8. U.S. Congress, op. cit., p. 81.

* *

The Visiting Committee on Advanced Technology of the National Institute of Standards and Technology was established by the Omnibus Trade and Competitiveness Act of 1988. The committee, in its role as principal private sector advisor to NIST, reviews and makes recommendations regarding the general policy, organization, budget, and programs of the institute.

THE VISITING COMMITTEE ON ADVANCED TECHNOLOGY
1993

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S3/371
ATTACHMENT L-1

ISO/TC 43 ACOUSTICS and ISO/TC 43/SC1 NOISE

U.S. TAG Chair: H.E. von Gierke
U.S. TAG Vice Chair: P.D. Schomer

Documents processed by the ASA Standards Secretariat from May 1993 through September 1993

The following documents were received for VOTE AND/OR COMMENT by the U.S. Member Body:

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
R. Lotz	S12	ISO/DIS 10302: Acoustics - Measurement for the measurement of airborne noise emitted by small air-moving devices.

announced to S12 (S12/270) on 27 April 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 30 July 1993, and from ANSI to ISO on 4 August 1993.

A. Konheim	S12	ISO/DIS 3095: Acoustics - Measurement of noise emitted by railbound vehicles.

announced to S12 (S12/267) on 16 March 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 16 June 1993, and from ANSI to ISO on 21 June 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
R.F. Schumacher	S12	ISO/DIS 6798: Acoustics - Test code for the measurement of airborne noise emitted by reciprocating internal combustion engines. Engineering method and survey method.

announced to S12 (S12/271) on 27 April 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 19 July 1993, and from ANSI to ISO on 23 July 1993.

S.I. Roth	S12	ISO/DIS 11200: Acoustics - Noise emitted by machinery and equipment. Guidelines for the use of basic standards for the determination of emission sound pressure levels at the work station and at other specified positions.

announced to S12 (S12/272) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

S.I. Roth	S12	ISO/DIS 11201: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work stationand at other specified positions. Engineering method in an essential free field over a reflecting plane.

announced to S12 (S12/273) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 11202: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Survey method in situ.

announced to S12 (S12/274) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 11203: Acoustics - Noise emitted by machinery and equipment. Determination of emission sound pressure levels at the work station and at other specified positions.

announced to S12 (S12/275) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 11204: Acoustics - Noise emitted by machinery and equipment. Measurement of emission sound pressure levels at the work station and at other specified positions. Method requiring environmental corrections.

announced to S12 (S12/276) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARDS (DIS)
S.I. Roth	S12	ISO/DIS 12001: Acoustics - Noise emitted by machinery and equipment. Rules for the drafting and presentation of a noise test code.

announced to S12 (S12/277) on 30 April 1993. The U.S. position, NEGATIVE WITH COMMENTS, was submitted to ANSI on 16 July 1993, and from ANSI to ISO on 23 July 1993.

R.M. Guernsey	S12	ISO/DIS 11691: Acoustics - Measurements of insertion loss of ducted silencers without flow. Laboratory survey method.

announced to S12 (S12/266) on 16 March 1993. The U.S. position, ABSTENTION WITHOUT COMMENTS, was submitted to ANSI on 28 July 1993, and from ANSI to ISO on 30 July 1993.

P.C. Shang	S12	ISO/DIS 2923: Measurement of noise on board vessels.

announced to S12 (S12/282) on 30 June 1993. The U.S. position, ABSTENTION WITHOUT COMMENTS, was submitted to ANSI on 23 September 1993.

D. Nelson	S12	ISO/DIS 11957: Acoustics - Determination of sound insulation performance of cabins, Laboratory and in situ measurements.

announced to S12 (S12/283) on 26 July 1993. The U.S. position, AFFIRMATIVE WITH EDITORIAL COMMENTS, was submitted to ANSI on 3 September 1993.

DOCUMENTS CIRCULATED AD/HOC

DOCUMENT	TITLE	COORDINATOR(S)	U.S. TAG
ISO/DIS 9611.2	Acoustics - Characterization of sources of structure-borne sound with respect to the airborne sound radiation of connected structures - Measurement of velocity at the contact points of machinery when resiliently mounted	A. Kilcullen	S12

sent to A. Kilcullen on an ad hoc basis (S12 Ad-Hoc #2) on 7 June 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 14 July 1993, and from ANSI to ISO on 23 July 1993.

ISO/CD 11688-1	Acoustics - Recommended practice for the design of low-noise machinery and equipment. Part 1: Planning	S. Roth	S12

sent to S. Roth on an ad hoc basis (S12 Ad-Hoc #3) on 11 August 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 13 September 1993.

ISO/CD 11690-3	Acoustics - Recommended practice for the design of low-noise workplaces containing machinery. Part 3: Sound propagation and noise prediction in workrooms.	B. Brooks	S12

sent to B. Brooks on an ad hoc basis (S12 Ad-Hoc #4) on 12 August 1993. The U.S. position, AFFIRMATIVE WITH COMMENTS, was submitted to ANSI on 13 September 1993.

DOCUMENTS CIRCULATED AD/HOC
(continued)

DOCUMENT	TITLE	COORDINATOR(S)	U.S. TAG
ISO 6393:1985	Acoustics - Measurement of airborne noise emitted by earth-moving machinery - Method for determining compliance with limits for exterior noise - Stationery test condition.	L.A. Jennings	S12
ISO 6395:1988	Acoustics - Measurement of exterior noise emitted by earth-moving machinery - Dynamic test condition.	L.A. Jennings	S12

a) Both documents were sent to L.A. Jennings on an ad hoc basis (S12 Ad-Hoc #5 & #6) on 12 August. The U.S. position, AFFIRMATIVE, for the work effort was submitted to ANSI on 12 August 1993.

b) The U.S. position on the two documents, AFFIRMATIVE, was submitted to ANSI on 23 September 1993.

ISO/TC 43/SCI Draft Amendments: ISO 362:1981/DAM 2 ISO 7188:1985/DAM 1	These two documents were sent to R.F. Schumacher on an ad hoc basis (S12 Ad-Hoc #7) on 14 September 1993.	R.F. Schumacher	S12

OTHER ACTIONS:

- ISO/TC 43 AND
  ISO/TC 43/SC1 Noise-

1) U.S. respnse on questions regarding wo ISO standards -
ISO 9613-1: 1993 and ISO 9614-1: 1993

The U.S. responded to the questionnaires on the two ISO standards noted above, on 23 September 1993.

June 28, 1993 standard\oslo.rpt

**Report on ISO TC 43 and TC 43/SC1 Meeting in Oslo
30 May through 3 June 1993 and S12 Planning**

I. Meeting of TC 43/SC 1

1. **Resolutions and Plenary Materials.**

Resolutions passed by TC 43/SC 1 are included (N 893--inc. 1) with pen changes as indicated. Two new proposals for work items (N889 and N890, incs. 2 and 3) were approved for formal circulation to member bodies. Items from the package of materials used at the plenary meeting can be made to anyone who wants a particular item.

2. **US Participation.**

The US had by far the largest delegation at the meeting. This large US presence facilitated enhanced US input to the various working group meeting. In particular, US participation was very positive and substantial in the areas of vehicle noise (standard road surfaces and their measurement, barriers, and other issues), sirens, sound intensity, impulse noise measurement, and sound propagation. Reports from some of the working group meetings are included.

3. **Important Results**

a. The S12 Committee suggested that several of the proposed ISO Standards should be technical reports rather than standards. This position was accepted by TC43/SC 1. Many other counties had similar sentiments.

b. The US will provide the conveners for two new efforts. One will deal with motor vehicle noise. Dick Schumacher of GM will be the convener. The second, if approved, will deal with community noise assessment and Paul Schomer will be the convener.

c. The use of sound exposure has been retained as a general terms and will not be limited to worker exposure.

d. A Danish proposal to revise C-weighting was accepted for ballot as a new work item. The US must appose the effort since many present ANSI standards depend on the present C-weighting. Canada and New Zealand also vigorously appose this item. If approved, the US must find a strong individual to be a member of this working group.

4. US/Canadian Coordination

The US and Canada worked closely to support each other during the meeting. This enhanced the influence of both countries at the meeting. This coordination should be expanded.

5. S12 Actions

a. S12 continues to bear the largest burden with respect to ISO. Of the more than 60 documents underway, about 55 relate to S12. Therefore, for the foreseeable future, S12 planning must focus primarily on meeting the ISO challenge. The new S12 structure which divides into several technical areas is helping to meet this challenge.

b. The biggest future challenge is to develop methods to concurrently ballot documents for US and ISO. We need to find and expedite ways to adopt ISO Standards as ANSI (or other member body) Standards.

P.D. Schomer, Vice Chair
U.S. TAG for ISO/TC 43 and
ISO/TC 43/SC1

ISO/TC 108 MECHANICAL VIBRATION AND SHOCK
(and SUBCOMMITTEES SC1, SC2, SC3, and SC4)
(U.S. Technical Advisor, D. Muster for TC 108)

Documents processed by the ASA Standards Secretariat from May through September 1993:

The following documents were received for VOTE AND COMMENT by the U.S. Member Body:

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARD(S) (DIS)
P.H. Maedel	S2	ISO/DIS 10816-1: Mechanical Vibration - Evaluation of machine vibration by measurements on non-rotating parts. Part 1: General Guidelines

was announced to S2 (S2/252) on 3 June 1993. The U.S. position, AFFIRMATIVE WITH EDITORIAL COMMENTS, was submitted to ANSI on 23 August 1993.

D.G. Stadelbauer	S2	ISO/DIS 1940-2 - Mechanical vibration - Balance quality requirements of rigid rotors - Part 2: Balance errors

was announced to S2 (S2/255) on 12 July 1993. The U.S. position, AFFIRMATIVE WITHOUT COMMENTS, was sent to ANSI on 23 September 1993.

Technical Coordinator	TAG	DRAFT INTERNATIONAL STANDARD(S) (DIS)
P.H. Maedel	S2	ISO/DIS 8528-8 - Reciprocating internal combustion engine driven alternating current generating sets - Part 8: Requirements and tests for low-power generating sets ISO/DIS 8528-9 - and Reciprocating internal combustion engine driven alternating current generating sets - Part 9: Measurement and evaluation of mechanical vibrations

were announced to S2 (S2/256) on 12 July 1993.

OTHER ACTIONS

At the ISO/TC 108 meeting held in London, U.K. (22 March to 2 April 1993), it was decided to confirm the following ISO Standards:

- ISO 8042: 1988 — Shock and Vibration Measurements - characteristics to be specified for seismic pick-ups
- ISO 6070: 1981 — Auxiliary tables for vibration generators. Methods of describing equipment characteristics.
- ISO 2954: 1975 — Mechanical vibration of rotating and reciprocating machinery. Requirements for instruments for measuring vibration.
- ISO 2372: 1974 — Mechanical vibration of machines with operating speeds from 10 to 200 rev/s. Basis for specifying evaluation standards - Amendment 1-1983.

S3/371
ATTACHMENT O-1

ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

AVRIL BRENIG, Dr. P H
STANDARDS MANAGER

335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404
Telex 960983 AMINSTPHYS NYK
Telefax (212) 949-0473

17 September 1993

TO: J.D. Royster, Chair S3

Re: Letter Ballot LB/S3/370 sent to the Accredited Standards Committee S3 on 23 July 1993, and closed on 10 September 1993

SUBJECT: Approval of proposal for new work item on SOUND-FIELD AUDIOMETRY

Enclosed please find tally of the above letter ballot, showing results as follows:

		CLASSIFICATION OF MEMBERS	
AFFIRMATIVE VOTES	16	P - PRODUCER	3
NEGATIVE VOTES	0	C - CONSUMER	8
ABSTENTIONS	1	G - GOVERNMENT	4
NOT RETURNED	5	GI - GENERAL INTEREST	7
TOTAL	22	TOTAL	22

Continuation of results of letter ballot S3/370:

AFFIRMATIVE VOTES:

Atack, R.M.	U.S. Army Medical Corps.
Brown, M. (Alternate)	Power Tool Institute, Inc.
Burkard, R.F.	American Speech-Language-Hearing Association
Frank, T.	Acoustical Society of America
Garinther, G.	U.S. Army Human Engineering Laboratory
Hopmeier, W.F.S.	National Hearing Aid Society
Michael, L.A. (Alternate)	American Academy of Otolaryngology Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc.
Nixon, C.	U.S. Dept. of the Air Force
Page, J.	U.S. Dept. of the Navy, BUREAU OF MEDICINE AND SURGERY
Patterson, J.H.	U.S. Army Aeromedical Res. Lab.
Rogin, C.	Hearing Industries Association (HIA)
Sachs, R.H.	AT&T.
Schonthal, R.H.	Bruel & Kjaer Instruments, Inc.
Toothman, E.H.	Fastener Industry Noise Control Research Program (FINCRP)
Zagzebski, J.	American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

NONE

ABSTENTIONS:

Bovi, A.M.	Industrial Safety Equipment Association, Inc.

Continuation of results of letter ballot S3/370:

NOT RETURNED:

Addington, J.H.	Compressed Air and Gas Institute
Bohl, C.D.	American Industrial Hygiene Association
Brownson, P.J.	American College of Occcupational Medicine
Burnett, E.D.	National Institute of Standards and Technology
Campell, R.	Audio Engineering Society, Inc.

LATE RESPONSE:

NONE

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS

Continuation of results of letter ballot S3.7/352:

LATE RESPONSE:

Atack, R.M.	U.S. Army Medical Corps.
Nixon, C.	U.S. Dept. of the Air Force
Sachs, R.H.	AT&T

INDIVIDUAL EXPERTS:

1) Individual Experts stating they will participate in the review of the document:

   Flecher, J.L.
   Johnson, D.
   Wasserman, D.E.
   Yost, W.

2) Individual Experts stating they will not participate in the review of the document:

   Kryter,K.D.

3) Comments and/or recommendations were not received from Individual Experts, as follows:

   None

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS
Chair, Working Group

S3/371
ATTACHMENT 0-5

ACOUSTICAL · SOCIETY · OF · AMERICA

OFFICE OF THE
STANDARDS SECRETARIAT

AVRIL BRENIG, Dr. P. H.
STANDARDS MANAGER

335 EAST 45TH STREET, NEW YORK, NEW YORK 10017-3483

Telephone (212) 661-9404
Telex: 960883 AMINSTPHYS NYK
Telefax (212) 949-0473

IMMEDIATE RETURN REQUESTED

LB/S3/370
23 July 1993

Return to: Letter Ballot Department
Due date: 10 September 1993

ADMINISTRATIVE LETTER BALLOT
ACCREDITED STANDARDS COMMITTEE
ON BIOACOUSTICS, S3

FOR ACTION

Topic: Approval of proposal for new work item on SOUND-FIELD AUDIOMETRY

Approved for circulation by: Meeting of Accredited Standards Committee S3 held on [illegible] May 1993 (S3/368) in Ottawa, Canada

Distributed by: [illegible]renig, ASA Standards Manager

Reference Document(s):

ATTACHMENT A — Letter from J.D. Royster, Chair S3, dated 19 May 1993

ATTACHMENT B — Proposed title and scope of New Work Item with memorandum from T. Frank, Vice Chair S3, dated 29 April 1993

Background Information:

At the meeting of S3 held on 20 May 1993 in Ottawa, Canada, a proposal for a new work item on Sound-Field Audiometry was discussed. The scope of the proposed new work item is given in ATTACHMENT B.

The chair of S3, J.D. Royster, the Vice Chair of S3, T. Frank, and the chair of the proposed new working group, all recommend approval of the new work item for S3. If approved, the work item will be assigned to new working group S3/WG 83, with T. Letowski as Chair.

S3/371
ATTACHMENT O-6

ATTACHMENT A

S3 COMMITTEE CORRESPONDENCE
Julia D. Royster, Ph.D.
Chair, Accredited Standards Committee S3, Bioacoustics
4706 Connell Drive, Raleigh, NC 27612

May 19, 1993

Avril Brenig, Dr.P.H.
Standards Manager
Acoustical Society of America
335 East 45th Street
New York, NY 10017-3483

Dear Dr. Brenig:

I have attached a letter from Tom Frank, Vice-Chair of S3, concerning a proposal for a new working group on sound field audiometry. His letter includes a suggested scope statement. The rationale for the proposed new work effort is as follows:

a. as documented in a recent journal article ["Status of sound field audiometry among audiologists in the United States" by G.D. Rochlin, Journal of the American Academy of Audiology 4:59-68 (1993)] clinical practitioners are following a variety of different procedures for sound field audiometry, so standardization is needed, and

b. defined values for thresholds of normal hearing as measured in a sound field are needed as input for future revisions of existing standards S3.1 and S3.6.

A chair has volunteered (see Frank's letter) to head a new working group on this topic, and John Franks has expressed interest in serving on the working group, if established.

Please prepare a ballot for voting members of S3 proposing the establishment of a new working group concerning sound field audiometry.

Thanks for your assistance.

Sincerely,

Julia D. Royster

Julia D. Royster

cc: Tom Frank