



ACOUSTICAL · SOCIETY · OF · AMERICA

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STANDARDS SECRETARIAT

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S3/314

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**MINUTES**

ACCREDITED STANDARDS COMMITTEE ON  
BIOACOUSTICS, S3

U.S. TAG FOR ISO/TC43, ACOUSTICS,  
IEC/TC29 ELECTROACOUSTICS,  
AND  
ISO/TC108/SC4 HUMAN EXPOSURE TO MECHANICAL  
VIBRATION AND SHOCK

San Diego, California

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29 November 1990

91-07142



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## 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

Baltimore, Maryland

2 May 1991

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The meeting was called to order by Ms. L.A. Wilber, Chair S3, at 1:30 PM in the Lincoln Room, the Omni Inner Harbor Hotel, Baltimore, Maryland.

### ORGANIZATIONAL MEMBERS PRESENT

Bohl, C.D.	American Industrial Hygiene Association
Brenig, A.	ASA Standards Manager
Burnett, E.D.	National Institute of Standards and Technology (NIST)
Chandy, K.T.	Endevco Corporation
Kasten, D.	American Speech Hearing Language Association
Michael, L.A.	American Academy of Otolaryngology (alternate for R.J. Naunton)
Nixon, C.	U.S. Air Force
Toothman, E.H.	FINCRP
Wilber, L.A.	Chair S3; ASA representative S3

### INDIVIDUAL EXPERTS PRESENT

Eldred, K.M.	Chair ASACOS
Galloway, W.J.	Consultant
Johnson, D.L.	Chair S3/WG62
McKinley, R.	USAF; Vice Chair S1
Melnick, W.	Ohio State University
Young, R.W.	Consultant

**OTHERS PRESENT**

Arrington, J.R.	U.S. Primary Standards Lab.
Embleton, T.F.W.	Vice Chair ASACOS
Evans, D.J.	National Institute of Standards and Technology (NIST)
Grason, R.L.	Chair S3/WG35
Gross, E.E.	Associate Editor, STANDARDS NEWS, JASA
Luz, G.	U.S. Army Environmental Hygiene Agency, Maryland
Nedzelnitsky, V.	National Institute of Standards and Technology (NIST) (alternate for E.D. Burnett)
Royster, J.D.	Chair S12/WG12; Incoming Chair S3
Royster, L.H.	Vice Chair S12
Wong, G.S.K.	Chair S1

- 
1. Approval of the Minutes of the San Diego, California meeting, held on 29 November 1990 (S3/314).

Upon motion made and seconded, it was

**VOTED** to approve the Minutes of the S3 meeting (S3/314) held on 29 November 1990, as circulated.

2. Organization

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

b) New working groups:

(i) S3/Advisory-Advisory Planning Committee to S3 - J.L. Fletcher, Chair

(ii) S3/WG81 Assistive Listening Devices - R. Kasten, Chair

2. Organization (continued)

- c) New Organizational Member of S3 - ENDEVCO CORPORATION became an organizational member of S3, with K. Thomas Chandy as representative and Roger Volk as alternate.
- d) Personnel changes - None to date.
- e) Work in progress - for a summary, see ATTACHMENT B.

3. Standards approved by ANSI in 1990/1991 and published (or being published) by ASA

The following standards were approved by ANSI and published (or being published) by ASA:

ANSI S12.40-1990 Sound Level Descriptors for Determination of Compatible Land Use (revision and redesignation of ANSI S3.23-1980).

ANSI S3.41-1990 Audible Emergency Evacuation Signal

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

Professional Book Distributors (PBD)  
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Alpharetta, Georgia 30239

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

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a) S3/Advisory - Advisory Planning Committee to S3 - J.L. Fletcher, Chair

At the last meeting of the ASACOS Steering Committee and of the individual S Committees meeting, it was decided to form Advisory Planning Committees to each of the S Committees, to be chaired by the Vice Chair of each of the S Committees. Please see ATTACHMENT A for the scope of this working group.

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

Mr. Grason reported as follows for the last meeting:

The document IEC 645 Part 1, Pure Tone Audiometers has not yet been published in spite of a report on the voting being forwarded in February of 1987.

The document IEC 645, Part 2, Equipment for speech audiometry Document IEC/TC 29(Central Office)157 was voted upon. Votes were 16 positive, 2 negative (U.S. and U.K.). Draft was revised but did not incorporate U.S. technical documents. The Draft has been submitted to the Secretariat for publication.

The document IEC 645, Part 3, Specification of reference audiometric test signals of short duration, Document IEC/TC 29(Secretariat)192 has been circulated for comments. It is proposed that the revised document be recirculated to the National Committees for further comment. The international Working Group hopes to meet in April/May 1991.

A draft is being prepared for IEC 645, Part 4, Equipment for extended high frequency audiometry.

The document ISO/DIS 8253-2, Audiometric test methods was circulated under six months' rule for vote. The U.S. voted positively but submitted comments.

At the meeting, Mr. Grason reported that the working group met on 29 April 1991 (at the ASA meeting).

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

o Subgroup 1, V. Byers

Mr. Byers reported as follows prior to the meeting:

The Committee is deciding whether to revise the current draft or develop a new draft.

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

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

o Subgroup 2, J. Kreul

Mr. Kreul reported prior to the meeting as follows:

The approach to developing guidelines for speech-recognition testing was modified at our last national meeting of the Society. The attempt to standardize vocabulary based upon usage in current literature, proved unsuccessful and has been abandoned. The effort is being turned over to S3/WG73. An attempt will be made to define only those terms that are not documented in medical dictionaries or where obvious confusion exists.

The reports or guidelines for reporting speech-recognition test results and for standardizing test development are being combined into a single report. A rough draft will be forwarded to the group members this Spring. An additional report will be developed to indicate the relevant parameters and strengths and weaknesses of frequently used tests.

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

Ms. Kruger has reported as follows:

- Work proceeds on the revision of ANSI S3.7-1973. A second draft is under review and awaits input/editing from members.
- ANSI S3.25-1989 was completed and published.
- Coordination of efforts with IEC/TC 29/WG3.

At the meeting, it was reported that a draft of the revision of ANSI S3.7-1973 Method for Coupler Calibration of Earphones should be ready for ballot by the time of the next meeting (November 1991).



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

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

S3/WG39 (S2) met on Tuesday, 30 April 1991, at the ASA meeting.

Mr. von Gierke reported at the last meeting (at the S3 meeting) on the documents discussed at the working group meeting, including those on taxonomy, whole body vibration, and ship vibration (the latter document received a negative vote by the U.S.). The long-term revision of ISO 2631 was still under development. New research was now surfacing on hand-arm vibration and white finger disease and will be studied further.

As a result of a questionnaire circulated to the working group in July 1990 (reported in the last S2 Minutes (S2/210), a revised membership roster is expected to be prepared shortly.

Mr. von Gierke has previously reported on the recent issuance by NIOSH of a report on hand-arm vibration criteria, which: (1) does not focus appropriately on the existing ANSI and ISO standards in the area, (2) suddenly recommends a different weighting for hand-arm vibration which would affect all tool manufacturers without specific basis, and (3) did not have the benefit of the input of the relevant cognizant ANSI committees in this area. Mr. von Gierke said at the last meeting that he planned to send a letter of protest on this document to the Assistant Surgeon General of the United States.

Because of the development of standards which conflict or otherwise differ from American National Standards (consensus standards) in this area, Mr. von Gierke asked those involved in the American Conference of Governmental Industrial Hygienists (ACGIH), which is not a government body, to write urging this organization to join the Standards Committees and to participate in, and follow, the development of American National Standards.

ACGIH had issued criteria for some environmental agents which conflicted with the S3 standard on hand-arm vibration, and this fact led to a need to harmonize in the future.

Mr. Marc Weiss of the U.S., Naval Biodynamics Laboratory, New Orleans, Louisiana, has been officially appointed Convenor for ISO/TC 108/SC4/WG4 Human Impact Testing.

At the last meeting, Mr. H. von Gierke asked Mr. D.E. Wasserman to form an Ad Hoc Committee on Hand-Arm Vibration (see **ATTACHMENT C**). Please see **ATTACHMENT D** for Mr. Wasserman's reply to Mr. von Gierke.

The next meeting of ISO/TC 108/SC4, counterpart to S3/WG39, will take place from 1-4 October 1991, in Berlin, Germany.

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

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

Ms. Wilber said at the last meeting that she had contacted the working group chair to prepare the international standard in this area as a proposed ANSI Standard, and that a document was expected by the time of the next meeting. (See ATTACHMENT E for a report on this working group by Mr. S.F. Lybarger.)

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

Mr. Preves reported as follows prior to the meeting:

- The draft standard Testing Hearing Aids with a Broad-band Noise Signal is expected to be sent to the S3 Chair before the Spring 1991 meeting. (This draft standard has been received and is being prepared for S3 ballot (LB/S3.42/328).
- A telephone line simulator is being developed for use in round robin induction coil measures in situ of hearing aids with a telephone handset.
- Selected portions of ANSI S3.3-1960 (R 1990) are being included in the next revision of ANSI S3.22-1987.
- Speech quality is being correlated to distortion measures in cooperation with NIST, Boulder, Colorado, using expert system/pattern recognition.
- Several IEC documents were commented on for proposed modifications to IEC 118-0, -2, -7 and Publication 90.
- A subcommittee is investigating the possibility of measuring current drain of hearing-aids with a broad-band noise input signal.

At the meeting, Ms. Wilber indicated that another revision of ANSI S3.22-1987 Specification of Hearing Aid Characteristics was being prepared, and that it should be available for ballot by 1992.

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

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

Mr. Frank reported as follows prior to the meeting:

S3/WG56 has completed its revision of ANSI S3.1-1977, R-1986. Proposed ANSI Standard S3.1-199X Maximum Permissible Ambient Noise Levels for Audiometric Test Rooms, draft dated November 1990.

This proposed revision of ANSI S3.1-1977 (R 1986) was circulated to S3 (LB/S3.1/325) on 29 March 1991. The ballot is expected to close on 10 May 1991.

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. The next step will be to prepare the national version of this international standard.

Messrs. Johnson and Melnick have agreed to prepare the national version of ISO 1999:1990. The need for U.S. representation in this area has been underscored, particularly to attend the international meetings. It was decided at previous ASACOS meeting (21 May 1990), that this standard should be developed under S3, with an S3 designation.

Mr. Johnson also said that his draft standard, proposed ANSI S3.28-199X, now undergoing review of negative votes, relied on the tables in ISO 1999 and thought he should wait in the processing of this proposed standard until the issues on the national version of ISO 1999 could be clarified.

Mr. Johnson reported prior to the meeting as follows:

The ISO 1999 standard has been placed on a word processor and the majority of the special additions required to make ISO 1999 into an U.S. standard have been finished. The standard is expected to be ready for ballot immediately after the ASA Spring 1991 meeting.

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

Ms. Wilber reported that she had spoken with Mr. Levitt who had agreed to prepare the draft standard in this area for ballot in S3.

Mr. Levitt has indicated that a draft should be available for S3 ballot shortly.

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

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

Ms. Wilber said that this working group met in November 1990 at the Seattle, Washington meeting of ASHA. This was the first meeting of this working group, as reconstituted, which is preparing a revision of ANSI S3.39-1987.

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).

No comments have been received to date. A request for comments was therefore placed in Standard News but no comments ensued. It was previously voted, following discussion, to send Draft ANSI Standard S3.28-1986 to S3 ballot as a proposed American National Standard.

The ballot was circulated to S3 (LB/S3.28/310) on 29 June 1990. The ballot was closed on 16 August 1990, with results given in the last Minutes (S3/314). The negative comments are being addressed.

Mr. Johnson reported at the last meeting that he would wait in the processing of the negative votes and comments based on resolution, and coordination, with the proposed national standard in working group S3/WG58 (see page 8).

At the meeting, Mr. Johnson said that if 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 not to process this document, Draft ANSI S3.28-1986, further as a proposed ANSI standard. The reason for its existence was to fill a gap which would be taken up by the publication of the national counterpart to ISO 1999:1990.

m) S3/WG63 Audible Emergency Evacuation Signal - M. Whitcomb, Chair

Mr. Whitcomb reported prior to the meeting that since ANSI S3.41-1990 is about to be published, this working group should be disbanded.

Mr. Whitcomb was thanked (in absentia) for his work in generating both the national and international standards in this area. A ballot will now be sent to S3 to disband the working group.

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

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

With no activity or progress report on this working group, Ms. Wilber said previously that she would look into whether there should be a new chair, or discontinuation of work in this area.

Ms. Wilber also said at the last meeting that there is an IEC document (Technical Report) on this topic and that we should determine the activity in this area before deciding to disband the counterpart U.S. working group.

Discussion took place on what actions were needed for this working group. It was decided to explore a change in scope so as to retain the working group solely for response to international documents.

o) **S3/WG69 Auditory Trainers - (Vacant)**

With no progress in this area, as previously noted, Ms. Wilber said at the last meeting that she would try to find a replacement for the chair of this working group. Mr. Lilly had offered his assistance in this task.

It was previously agreed that the charge to a new chair should be to expand the scope, with a list of hearing devices, and to develop a clearer title for this working group. **Amplification Devices Not Worn Entirely on the Body** was suggested.

At the meeting, Mr. Kasten suggested that these activities could well fit in with the scope of his working group, S3/WG81, and this idea will be examined.

p) **S2/WG71 Artificial Mouths - R. McKinley, Chair**

At the meeting, Mr. McKinley reported on a meeting of the working group held on 30 April 1991 (the first meeting with a new chair). The working group will be circulating a plan to make some near field measurements. These measurements will be collected and a draft of everything, except for the measurements portion, will be prepared. A draft for S3 ballot is expected by May 1992.

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

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q) S2/WG72 Measurement of Auditory Evoked Potentials - R.A. Ruth, Chair

Mr. Ruth reported as follows prior to the meeting:

We have collected normative perceptual threshold data for two supra-aural earphones (TDH-39 and TDH-49) and one insert earphone (ER-3A). We are currently in the process of summarizing these data for use in the standard. Once this task is finished, we hope to produce a semi-final draft of the standard for comment and criticism.

r) S3/WG73 Bioacoustical Terminology - J. Guignard, Chair

An S1 and S12 terminology document (on acoustics and electroacoustics) was circulated to S3 (LB/S3/316) on 20 November 1990. The ballot closed on 2 January 1991 with results as given in ATTACHMENT F of these Minutes. The document was circulated for ballot to S1 and S12, and to S2 for information and comment. Chairs of the ASA Technical Committees, and all other interested parties, were also sent the terminology document for their information and comment.

Mr. Guignard has reported, as noted in ATTACHMENT G.

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

Mr. Buus previously reported that the working group hoped to complete a literature review within the next year and possibly start a draft of the standard at that time.

Ms. Wilber noted that she had not heard from Mr. Buus for some time.

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

Mr. Franks said at the last meeting that the working group was attempting to put all the material together and hoped to prepare a working draft (WD) by November 1991.

Ms. Royster said she would try to make contact with Mr. Franks during this ASA meeting.

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

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

Mr. Fletcher reported prior to the meeting as follows:

S3/WG77 met in San Diego, California. Plans were discussed to submit to Veterans Administration (VA) for funding necessary to do the calibration study proposed by Drs. Abel and Shaw but not funded by NINCDS. Lilly and Fausti will try to do the study in the VA. Members will nominate and secure extended frequency audiometers in wide use for test. Lilly and Fausti will conduct the study with results to be reviewed by S3/WG77 for purposes of formulating a calibration recommendation.

v) 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.

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

Mr. Pavlovic reported prior to the meeting that a draft of the proposed revision of ANSI S3.5-1969 is expected to be discussed at the Spring 1991 meeting.

Ms. Wilber said that a draft was expected to be prepared by the Fall 1991 meeting.

x) S2/WG80 Probe Tube Measurements of Hearing Aid Performance - H.C. Schweitzer, Chair

Mr. Schweitzer previously reported that the working group met in New Orleans before the American Academy of Audiology meeting in April 1990. He said that draft work was in progress and a first rough draft should be ready shortly.

Mr. Kasten reported at the last meeting that it should not be too long before drafts would be prepared, one for procedures, and the second for checking the equipment.

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

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y) S3/WG81 Assistive Listening Devices - R. Kasten, Chair; M. Wynne, Vice Chair

At the last meeting, it was decided that it was important to establish a working group in this area, having regard to the renewed interest and governmental regulations affecting this area. A Letter Ballot (LB/S3/318) was circulated to S3 on 1 February 1991. The ballot closed on 8 March 1991 with unanimous approval of the proposed new work item. The results are given in ATTACHMENT H. The scope of this new working group is listed in ATTACHMENT A.

At the meeting, Mr. Kasten indicated he had just received notification of the establishment of the working group and that eight (8) people had already volunteered to participate in the activities. He added that one or two meetings would probably take place before the Houston meeting (November 1991). FDA activity in this area was underscored and FDA representation will be sought for participation in the activities of this working group.

S3 LIAISON WORKING GROUPS

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

Mr. Nyborg could not be present at the S3 meeting but has been communicating on the recent activities of IEC/TC 87.

5. International Matters

General

Mr. von Gierke reported prior to the last meeting that there had been inadequate U.S. attendance and support at the recent ISO/TC 43 and ISO/TC 43/SC1 meetings in the Netherlands. Standards were being developed on an expedited basis in ISO and IEC due to increased activity in the European Community (CEN) to reach their targeted goals by 1992. The U.S. was at a disadvantage in the economic ability to be at all the meetings, and the change in ISO Procedures did not allow a country to continue as a Participating (P) Member without specific attendance at meetings and timely response on all documents circulated.

Several new working groups have been proposed in ISO/TC 43 and ISO/TC 43/SC1. See ATTACHMENT I for the report on the activities of TC 43 and TC 43/SC1 prepared by the Standards Secretariat).



5. International Matters (continued)

General (continued)

The new ISO/TC 43 and/or ISO/TC 43/SC1 work items (reported in the last S1 Minutes, (S1/334) are as follows:

- Revision of ISO 6081:1986
- Revision of ISO 4871:1984
- Revision of ISO 5129:1987
- Revision of ISO 7779:1988 Measurement of Airborne Noise emitted by Computer and Business Equipment
- Amendment to ISO 362:1981 and ISO 7188:1985 Specification regarding test track surfaces
- Noise Reduction - general guidelines regarding noise generation and noise reduction
- Noise Reduction - general requirements regarding reduction of noise in the workplace
- Methods for the determination of the acoustical performance of noise attenuating devices
- Methods and equipment for the measurement of real-ear characteristics of hearing aids (for IEC/TC 29 and ISO/TC 43 respectively)
- Insertion loss of noise barriers
- Measuring method for comparing traffic noise on different road surfaces

A memorandum requesting a review of the lists of ISO standards and comparison with their national (U.S.) counterparts, was received from ANSI, dated 7 June 1990. This memorandum was passed onto the U.S. TAG Chairs for the various ISO activities in which the U.S. TAG is responsible.

Responses were requested by the Standards Secretariat by 7 January 1991. A copy of the relevant correspondence is attached (ATTACHMENT J).

At the S12 meeting, Mr. von Gierke called attention to the need for the U.S. to become more involved with international standardization activities and especially to participate in the overseas meetings. This was crucial having regard to European bloc voting and the emphasis on regional (CEN and CENELEC) standards, often at the expense of international (ISO and IEC) standards development. He said that with government support for most of the European standardizing bodies, the U.S. was in a particularly difficult position to support its delegations overseas and that the recent inquiry, and support for, the U.S. voluntary system of standards development had not fully taken into account the very real problem of support for the activities and need to be physically present at the international working group, Subcommittee and Technical Committee meetings, held most often overseas.

There should be a way to keep apprised of the documentation flow and to be able to prepare U.S. responses better than in the past, in order for the U.S. to be able to influence decision making on standards development.

5. **International Matters (continued)**

**General (continued)**

Mr. von Gierke said he need to know:

- (1) representation by the U.S. at the next ISO/TC 43 meeting, to take place in Australia in December 1991. Those interested and able to attend should contact Mr. von Gierke.
- (2) that the international work will be considered parallel to the national efforts in the working groups.

Messrs. Crocker, Schomer and Young, present at the S12 meeting, indicated their willingness to attend the next ISO/TC 43 and ISO/TC 43/SC1 meetings.

**NOTE:** At the S3 meeting, Mr. Grason and Ms. Wilber also indicated their probable participation in the ISO/TC 43 meetings.

a) **International Electrotechnical Commission (IEC)**

o **IEC/TC 29 Electroacoustics - V. Nedzelnitsky, Technical Advisor**

- a) A list of documents submitted to the U.S. for vote and/or comment is given in **ATTACHMENT K**. Mr. Nedzelnitsky's report is also attached **ATTACHMENT L**. The next meeting of IEC/TC 29 will be held in Rotorua (New Zealand) from 25 to 29 November 1991.

o **Liaison with IEC/TC 87 Ultrasonics - P.D. Edmonds, U.S. Technical Advisor**

Mr. Wes Nyborg, ASA liaison representative to IEC/TC 87, will be submitting a report on his comments on liaison documents IEC/TC 87(Central Office)11 and 23. Mr. Nyborg has also submitted a report on IEC/TC87 activities (see **ATTACHMENT M**).

Mr. Nyborg asked, at the last meeting, for background information on the involvement of S3 in the ultrasonics standardization field and for what his role might be as ASA liaison to IEC/TC 87 Ultrasonics. The details of this history were discussed and were given in their specifics in previous S3 Minutes.

5. **International Matters (continued)**

a) **International Electrotechnical Commission (IEC) (continued)**

It was decided, following the last meeting, that it would be useful to establish a liaison working group in S3, with Mr. W. Nyborg as Chair, so that he will be able to report on the activities in ultrasonics and review any documents for S3 which may come under the S3 Committee's scope. A Letter Ballot (LB/S3/320) was therefore circulated to S3 on 1 February 1991. This ballot closed on 8 March 1991 with unanimous approval of the proposed liaison working group. The results are given in ATTACHMENT N.

b) **International Organization for Standardization (ISO)**

o **ISO/TC 43 Acoustics and ISO/TC 43/SC1 Noise - H.E. von Gierke, TAG Chair**

A report on the activities of ISO/TC 43 has been prepared by the Standards Secretariat (see ATTACHMENT I).

A report was given on the ISO/TC 43 meetings held in Rotterdam from 14 to 18 May 1990 in the previous S1 Minutes (S1/331) along with copies of the draft resolutions. The Draft Reports from this meeting are available from the ASA Standards Manager. The next meetings of ISO/TC 43 and ISO/TC 43/SC1 are expected to be held in December 1991 in Australia.

o **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 O.

The next meeting of ISO/TC 108/SC4 will be held from 1-4 October 1991, in Berlin, Germany.

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

- a) Eight (8) S3 standards were reaffirmed by ANSI in April 1990 as listed in the S3 Minutes (S3/309). The S3 standards will be closely reviewed to see which ones now require revision, in line with ANSI Procedures for the timely update of standards.
- b) 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.

7. **New International Standards Available From ANSI**

- o **ISO 140-3:1990** Amendment 1 to ISO 140-3:1978 - Acoustics - Measurement of sound insulation in buildings and of building elements - Part 3: Laboratory measurements of airborne sound insulation of building elements
- o **ISO 389:1991** - Acoustics - Standard reference zero for the calibration of pure-tone air conduction audiometers
- o **ISO 4869-1:1990** Acoustics - Hearing protectors - Part 1: Subjective method for the measurement of sound attenuation
- o **ISO 5136-1990** Acoustics - Determination of sound power radiated into a duct by fans - In-duct method

8. **Procedural Ballots**

- a) The request for organizational membership by **ENDEVCO CORPORATION** was submitted to S3 Letter Ballot (**LB/S3/319**) on 1 February 1991. The ballot closed on 8 March 1991 with unanimous approval for the new organizational member. The results are given in **ATTACHMENT P**. Mr. K.T. Chandy was welcomed at the S3 meeting.
- 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.**

A Letter Ballot (**LB/S3/317**) was circulated to S3 on 22 January 1991 on the proposed appointments for 1991/1992. The list of officers and individual experts is attached for information (see **ATTACHMENT Q**). The ballot closed on 5 March 1991 with majority approval of the list of officers and individual experts for 1991/1992. The results are given in **ATTACHMENT Q**.

8. **Procedural Ballots (continued)**

- c) At the last meeting of ASACOS held on Monday, 26 November 1990, it was decided that the Accredited Standards Committee Procedures should contain an additional section relating to the conciliation of negative votes and positions on documents sent for ballot. It was also considered appropriate to amend the wording of clause 8.6 of the Accredited Standards Committee Procedures in line with the changes which had occurred in the ANSI procedures, since they were approved by ANSI on 9 September 1987. A ballot was circulated to S3 (**LB/S3/321**) on 1 February 1991. The ballot closed on 15 March 1991 with majority approval of the proposed amendment to the Standards Committees Procedures. The results are given in **ATTACHMENT R**. Subsequent to the ballot, Mr. C.D. Bohl and Mr. R.H. Sachs reversed their negative votes, resulting in unanimous approval of the proposed amendments.

9. **Other Business**

- a) With respect to **ISO 266 Acoustics - Preferred Frequencies for Measurements**, Mr. Young has prepared an amended version of this standard which has now been submitted to the Secretariat of ISO/TC 43, on behalf of the U.S. Member Body, which had agreed to provide this amendment. This item comes under the work of ISO/TC 43/WG1 Threshold of Hearing.

Upon approval of this document, it is hoped to transform it into a national standard.

- b) **Project Initiation Notification System (PINS) forms requested by ANSI**

The Standards Secretariat provided ANSI, on 11 December 1989, with a current list of S3 projects for use under the new Project Initiation Notification System (PINS). These are expected to be tabulated in a computerized system eventually by ANSI.

10. **New Business**

- (a) At the S3 meeting, Mr. Galloway said that ASACOS had convened an ad hoc committee to revise the ASACOS Editorial Guidelines to make them consistent with the newly revised ANSI Style Manual. This ANSI Style Manual utilizes Part 3 of the ISO Directives and also recommends submission of draft standards in electronic format (using word perfect 5.1).
- (b) Additionally, it was stated that ASACOS had adopted a policy on metrication, endorsing that of ANSI, to use SI units in all new standards.

11. **Thanks to Outgoing Chair S3**

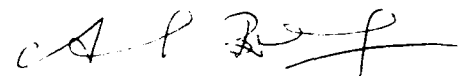
Appreciation for the outstanding efforts of Ms. Laura Wilber as S3 Chair was given at the meeting. It was noted that during her tenure, many S3 standards were developed and published. Ms. Julia Royster will become S3 Chair following this meeting.

12. **Future Meetings**

**The next meeting of S3 will be held on Thursday , 7 November 1991, in Houston, Texas, commencing at 3:00 PM.**

13. **Adjournment**

The meeting was adjourned at 2:30 P.M.



Avril Brenig  
Standards Manager



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ATTACHMENT A-1  
S3/327

## 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: **L.A. Wilber**  
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VICE CHAIR: **J.L. Fletcher**  
Department of Psychology  
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Acoustical Society of America  
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<u>WORKING GROUP</u>	<u>TITLE AND SCOPE</u>	<u>CHAIR</u>
(a) S3/Advisory	<p><b><u>S3 Advisory Planning Committee</u></b> - 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.</p> <p>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.</p>	<b><u>J.L. Fletcher</u></b>

<u>WORKING GROUP</u>	<u>TITLE AND SCOPE</u>	<u>CHAIR</u>
(b) S3/WG35	<b><u>Audiometers (counterpart to IEC/TC 29/WG10, ISO/TC 43/WG1 and ISO/TC 43/WG3)</u></b> - To review IEC and ISO documents concerning audiometers; preparation of a standard on pure-tone audiometry (S3.21).	<b><u>R.L. Grason</u></b>
(c) S3/WG36	<b><u>Speech Intelligibility</u></b> - 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.	<b><u>L. Marshall</u></b>
S3/WG36 (SG-1)	<b><u>Subgroup 1 - Speech Audiometry (Steady State Noise)</u></b> - Standardization of Speech Audiometry Procedures, especially speech reception thresholds for clinical use.	<b><u>V. Byers</u></b>
S3/WG36 (SG-2)	<b><u>Subgroup 2 - Speech Audiometry</u></b> - Standardization of speech and audiometry procedures; speech discrimination tests for clinical and diagnostic use.	<b><u>J. Kreul</u></b>
(d) S3/WG37	<b><u>Coupler Calibration of Earphones (counterpart to IEC/TC 29/WG3)</u></b> - 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><u>B. Kruger</u></b>
(e) S3/WG39 (S2)	<b><u>Human Exposure to Mechanical Vibration and Shock (counterpart to ISO/TC 108/SC4)</u></b> - 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.	<b><u>H.E. von Gierke</u></b>



<u>WORKING GROUP</u>	<u>TITLE AND SCOPE</u>	<u>CHAIR</u>
(f) S3/WG43	<b><u>Method for Calibration of Bone Conduction Vibrator</u></b> - (a) U.S. standards on audiometric bone vibration calibration; (b) review of related international standards.	<u>D. Dirks</u>
(g) S3/WG48	<b><u>Hearing Aids</u></b> - (a) all aspects of hearing aid measurement except couplers; (b) review of related international documents.	<u>D.A. Preves</u>
(h) S3/WG56	<b><u>Criteria for Background Noise for Audiometer Testing</u></b> - To establish maximum tolerable background noise levels during audiometric tests (revision of S3.1-1977 Criteria for Permissible Ambient Noise During Audiometer Testing).	<u>T. Frank</u>
(i) S3/WG58	<b><u>Hearing Conservation Criteria (counterpart to ISO/TC 43/WG1)</u></b> - To determine hearing conservation criteria.	<u>D.L. Johnson/ W. Melnick Co-chairs</u>
(j) S3/WG59	<b><u>Measurement of Speech Levels</u></b> - 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.	<u>H. Levitt</u>
(k) S3/WG60	<b><u>Measurement of Acoustic Impedance and Admittance of the Ear</u></b> - 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.	<u>D. Lilly</u>
(l) S3/WG62	<b><u>Impulse Noise with Respect to Hearing Hazard</u></b> - To develop criteria for predicting the changes in hearing due to human exposure to impulsive noise.	<u>D. Johnson</u>

<u>WORKING GROUP</u>	<u>TITLE AND SCOPE</u>	<u>CHAIR</u>
(m) S3/WG63	<u>Audible Emergency Evacuation Signal</u> - Define the characteristics of a standard audible emergency evacuation signal that shall be used for, and shall be limited to, situations requiring immediate and complete evacuation from a building because of an emergency (e.g. fire). When detected by the occupant of any building, the standard signal should indicate imminent danger and signify unambiguously that evacuation is necessary.	<u>M. Whitcomb</u>
(n) S3/WG67	<u>Manikins - (counterpart to IEC/TC 29/WG13)</u> - To prepare a standard describing a device that simulates a person for acoustic measurements. Monitor and coordinate with international standards.	<u>M. Burkhard</u>
(o) S3/WG69	<u>Auditory Trainers</u> - To prepare a national standard on hearing aid devices with components not entirely worn by the listener, to include independent components used in replacement of, or in conjunction with, personal wearable hearing aids; to review and comment on related national and international documents.	<u>(vacant)</u>
(p) S3/WG71	<u>Artificial Mouths</u> - To develop a standard specification for sound sources used as artificial mouths to measure the performance of microphones positioned close to the talker.	<u>R.L. McKinley</u>
(q) S3/WG72	<u>Measurement of Auditory Evoked Potentials</u> - To draft a standard dealing with the instrumentation and methods of calibration associated with the measurements of auditory evoked potentials.	<u>R.A. Ruth</u>
(r) S3/WG73	<u>Bioacoustical Terminology</u> - To prepare a draft standard on bioacoustical terminology to supersede ANSI S3.20-1973.	<u>J. Guignard</u>
(s) S3/WG75	<u>Auditory Masking</u> - 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.	<u>S. Buus</u>
(t) S3/WG76	<u>Computerized Audiometry</u> - Standardization of computer applications to audiometry, including automated psychophysical procedures.	<u>J. Franks</u>

<u>WORKING GROUP</u>	<u>TITLE AND SCOPE</u>	<u>CHAIR</u>
(u) S3/WG77	<u>High Frequency Audiometry</u> - 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.	<u>J. Fletcher</u>
(v) S3/WG78	<u>Thresholds</u> - To provide a liaison with ISO, IEC and other national working groups for standards dealing with auditory thresholds and procedures to measure these thresholds.	<u>W. Yost</u>
(w) S3/WG79	<u>Calculation of the Articulation Index</u> - To consider revision of the current standard on calculation of the articulation index: ANSI S3.5-1969 (R 1986).	<u>C.V. Pavlovic</u>
(x) S3/WG80	<u>Probe-tube Measurements of Hearing Aid Performance</u> - To develop standards for the determination of the real ear electroacoustic performance of hearing aids in situ.	<u>H.C. Schweitzer</u>
(y) S3/WG81	<u>Assistive Listening Devices</u> - 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 acoustic measurement.	<u>R. Kasten</u> <u>M. Wynne</u> , Vice Chair

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S3 LIAISON WORKING GROUPS

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

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
S3.1-1977 (R 1986)	Permissible Ambient Noise During Audiometric Testing, Criteria for (S3/WG54)	ES;RV	3	S	
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	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	

NS - NEW STD IN PROCESS	NR - NEEDS REVIEW	0-NONE	4-ANSI STANDARDS ACTION
RF - REAFFIRMATION IN PROC.	AP - ANSI APPROVED	1-FORMATIVE STAGE	5-OBJECTIONS BEING CONSIDERED
RV - REVISION IN PROCESS	OP - OUT OF PRINT	2-DRAFTING STANDARD	6-ANSI CONSIDERING APPROVAL
WD - WITHDRAWAL IN PROCESS	NA - NOT YET AVAIL.	3-VOTING ON PROPOSAL	
ES - ENVIRONMENTAL SOUND	UD - UP-TO-DATE		
SP - SUBMITTED PINS FORM			

METHOD

ACTIVITY

STATUS

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
S3.6-1989	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	S	Withdrawn; super- seded by S3.22-1982
S3.9	DESIGNATION OPEN			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	

<p>NS - NEW STD IN PROCESS RF - REAFFIRMATION IN PROC. RV - REVISION IN PROCESS WD - WITHDRAWAL IN PROCESS ES - ENVIRONMENTAL SOUND SP - SUBMITTED PINS FORM</p>	<p>NR - NEEDS REVIEW AP - ANSI APPROVED OP - OUT OF PRINT NA - NOT YET AVAIL. UD - UP-TO-DATE</p>	<p>0-NONE 1-FORMATIVE STAGE 2-DRAFTING STANDARD 3-VOTING ON PROPOSAL</p>	<p>4-ANSI STANDARDS ACTION 5-OBJECTIONS BEING CONSIDERED 6-ANSI CONSIDERING APPROVAL</p>	<p>C-ACCREDITED CANVASS O-ACCREDITED ORGANIZATION S-ACCREDITED STDS. COMMITTEE X-NOT INTENDED FOR ANSI</p>
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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	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)	RV	1	S	
S3.20-1973	Psychoacoustical Terminology (S3/WG73)	RV		S	
S3.21-1978 (R 1986)	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	

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			
SP - SUBMITTED PINS FORM				

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE 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	ACTIVITY	METHOD
NS - NEW STD IN PROCESS	NR - NEEDS REVIEW	C-ACCREDITED CANVASS
RF - REAFFIRMATION IN PROC.	AP - ANSI APPROVED	O-ACCREDITED ORGANIZATION
RV - REVISION IN PROCESS	OP - OUT OF PRINT	S-ACCREDITED STDS. COMMITTEE
WD - WITHDRAWAL IN PROCESS	NA - NOT YET AVAIL.	X-NOT INTENDED FOR ANSI
ES - ENVIRONMENTAL SOUND	UD - UP-TO-DATE	
SP - SUBMITTED PINS FORM		
	4-ANSI STANDARDS ACTION	
	5-OBJECTIONS BEING CONSIDERED	
	6-ANSI CONSIDERING APPROVAL	

STATUS REPORT

FIELD: STATUS: BIOACOUSTICS

COMMITTEE: S3

DESIGNATION/ EDITION	SUBJECT OR TITLE	STATUS	ACTIVITY	METHOD	COMMENTS OR EXPECTED DATE OF SUBMISSION TO ANSI
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S3.30	Determination of Occupational Noise Exposure and Estimation of Noise - Induced Hearing Impairment, Methods for the (counterpart to ISO 1999:1990) (S3/WG58)	NS;SP	2	S	
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S3.31	Determining the Threshold Level for Speech, Method for (S3/WG36/Subgroup 1)	NS;SP	2	S	
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S3.32-1982 (R 1990)	Mechanical Vibration and Shock Affecting Man- Vocabulary - ISO 5805-1981 (S3/WG39(S2))	UD		S	
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S3.34-1986	Guide for the Measurement and Evaluation of Human Exposure to Vibration Transmitted to the Hand (S3/WG39(S2))	UD		S	
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STATUS	ACTIVITY	METHOD
NS - NEW STD IN PROCESS	NR - NEEDS REVIEW	C-ACCREDITED CANVASS
RF - REAFFIRMATION IN PROC.	AP - ANSI APPROVED	O-ACCREDITED ORGANIZATION
RV - REVISION IN PROCESS	OP - OUT OF PRINT	S-ACCREDITED STDS. COMMITTEE
WD - WITHDRAWAL IN PROCESS	NA - NOT YET AVAIL.	X-NOT INTENDED FOR ANSI
ES - ENVIRONMENTAL SOUND	UD - UP-TO-DATE	
SP - SUBMITTED PINS FORM		
	0-NONE	
	1-FORMATIVE STAGE	4-ANSI STANDARDS ACTION
	2-DRAFTING STANDARD	5-OBJECTIONS BEING CONSIDERED
	3-VOTING ON PROPOSAL	6-ANSI CONSIDERING APPROVAL



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			
S3.36-1985 (R 1990)	Specification for a Manikin for Simulated in situ Airborne Acoustic Measurements (S3/WG67)	UD			
S3.37-1987	Preferred Earhook Nozzle Thread for Postauricular Hearing Aids (S3/WG48)	UD			
S3.39-1987	Specifications for Instruments to Measure Aural Acoustic Impedance and Admittance (Aural Acoustic Immittance) (S3/WG60)	UD	S		

STATUS	ACTIVITY	METHOD
NS - NEW STD IN PROCESS	NR - NEEDS REVIEW	C-ACCREDITED CANVASS
RF - REAFFIRMATION IN PROC.	AP - ANSI APPROVED	O-ACCREDITED ORGANIZATION
RV - REVISION IN PROCESS	OP - OUT OF PRINT	S-ACCREDITED STDS. COMMITTEE
WD - WITHDRAWAL IN PROCESS	NA - NOT YET AVAIL.	X-NOT INTENDED FOR ANSI
ES - ENVIRONMENTAL SOUND	UD - UP-TO-DATE	
SP - SUBMITTED PINS FORM		
	4-ANSI STANDARDS ACTION	
	5-OBJECTIONS BEING CONSIDERED	
	6-ANSI CONSIDERING APPROVAL	

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	Effects of Shock and Vibration on Man The (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		2	S	
S3.XX	Hearing Loss from Impulse/Impact Noise (S3/WG62)	ES	1	S	

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			
SP - SUBMITTED PINS FORM				

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	
S3.XX-199X	Occupational Noise Exposure (counterpart to ISO 1999:1990) (S3/WG58)	NS	1	S	

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			
SP - SUBMITTED PINS FORM				

ATTACHMENT B-9  
S3/327

STATUS REPORT

FIELD:                    STATUS:                    BIOACOUSTICS

COMMITTEE:                    S3

COMMENTS OR  
EXPECTED DATE  
OF SUBMISSION  
TO ANSI

DESIGNATION/  
EDITION

SUBJECT OR TITLE

STATUS

ACTIVITY

METHOD

S3.42-199X

Testing Hearing Aids with a Broad-Band Noise  
Signal (S3/WG48)

SP;NS

2

S3.XX

Assistive Listening Devices (S3/WG81)

SP;NS

1

STATUS

ACTIVITY

METHOD

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

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

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

D.E. WASSERMAN  
7910 MITCHELL FM. LN.  
CINCINNATI, OHIO 45242  
(513) 891-9084

To: Tony Brammer, Ph.D.  
Martin Cherniack, M.D.  
Hester Hursh, M.D.  
Peter Pelmeear, M.D.

December 6, 1990

Dear Colleagues,

Thanks to each of you for agreeing to become a member of this ANSI Ad Hoc Committee on Hand-Arm Vibration. As you know Dr. Henning Von Gierke, Chairman, of ANSI S3.39 has asked me at our San Diego meeting of last week to form this Ad Hoc Committee on Hand-Arm Vibration. Because this is an ANSI issue, we have limited this group to include those in North America who are knowledgeable in this area. Dr. VonGierke's stated purpose of this committee is to advise him as to the need or lack of need to modify the existing weighting curves used in ANSI S3.34 Hand-Arm Vibration Standard issued in 1986. We therefore have been asked to expeditiously seek out and gather any and all available (published, in press, and-with permission-unpublished) medical and epidemiologic data and studies which can help shed light on this important issue. As a first step, I am asking each of you to please send me at the above address and no later than March 15, 1991: a) A hard copy of each relevant study if available, b) Reference(s) to said studies as appropriate if hard copy is not available. c) Any other relevant data. Please do NOT send me a copy of the NIOSH standard as I already have a copy. I will also be gathering these data myself.

Second, after March 15, upon receiving these data from you and gathering studies myself, I will prepare and mail copies of these studies to each of you as well and myself. Third, I will ask each committee member to carefully review these documents seeking your written comments. Fourth, I will prepare a DRAFT written report to the Chairman based upon all our comments and recommendations and send the draft to each committee member for final comments and consensus. Upon receipt of the final comments, I will then prepare and distribute to each committee member a final report and send our recommendations to the Chairman. It may be necessary to issue both a majority and minority report to the Chairman if we cannot reach a consensus on our recommendations.

I am open to suggestions at any time during this process. Thank you in advance for your assistance and I look forward to receiving your references and/or papers on HAV weighting.

Sincerely,



cc H. VonGierke  
A. Brenig

ANSI Ad Hoc Committee on Hand-Arm Vibration

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Division of Physics  
Ottawa, Ontario, Canada K1A0R6  
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YALE University Medical School  
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---

Chairman, ANSI S3.39 Committee  
H.E. Von Gierke, Ph.D  
1325 Meadow Lane  
Yellow Springs, Ohio 45387  
phone: (513) 767-2181

ASA Standards Mgr.  
A. Brenig, Ph.D  
Acoustical Society of America  
335 E. 45th. Street  
New York, New York 10017  
phone: (212) 661-9404

D.B. WASSERMAN  
7910 MITCHELL FM. LN.  
CINTI., OHIO 45242  
9513) 891-9084

March 12, 1991

H. E. VONGIERKE  
1325 MEADOW LANE  
YELLOW SPRINGS, OHIO 45387

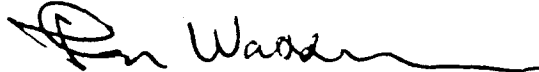
Dear Henning,

Persuant to our discussion at the last ASA meeting in San Diego I will be unable to attend the upcoming ASA Baltimore meeting since I have a prior contractual commitment to teach a course on human vibration in San Francisco on the same day as the S3.39 meeting. I expect to attend the following ASA meeting.

With reference to the ad hoc committee on hand-arm vibration I have assembled a committee consisting of P. Pelmar, M.D., Hester Hursh, M.D., Martin Cherniack, M.D., Tony Brammer, Ph.D. and myself. We are in the process of obtaining relevant papers on this issue of weighted vs. unweighted HAV curves. I had expected to send each committee member copies of said papers shortly, but Tony has requested that I not do so until he can send me his latest paper on this subject due sometime this month. Once this is received, I will next assemble and mail copies of same to the committee and yourself for review.

All the best.

Sincerely,



cc: ~~AS~~

## COMMITTEE CORRESPONDENCE

SAMUEL F. LYBARGER  
101 OAKWOOD ROAD  
MCMURRAY, PA. 15317

April 26, 1991

To: Laura A. Wilber, Chair S3  
cc Avril Brenig ✓

Subject: S3-43, Method for Calibration of Bone Conduction Vibrator

In a telephone conversation with Dr. Dirks (Chair S3-43) on April 24, 1991, he asked me to report on the status of a new draft on the Standard Reference Zero for the Calibration of Pure-tone Bone-conduction Audiometers.

He has received comments on a semi-final draft from WG members and is in the process of modifying that draft slightly to take the comments into account. Dr. Dirks estimates that a final draft for letter ballot should reach Avril Brenig within two months.

The draft to be submitted will have the same Reference Equivalent Threshold Force Levels as ISO Standard 7566. These RETFLs do not differ greatly from those of the present ANSI S3.26-1981 except at 250 Hz, where there is a 6 dB increase in RETFL. To obtain this increase, the input voltage to the bone vibrator would have to be doubled. This means increasing the harmonic distortion enough that widely used reliable bone vibrators barely meet the 5% or less harmonic distortion requirement when tested at the 20 dB hearing level as currently specified in S3.6. In a small percentage of bone vibrators, the 5% value may be slightly exceeded. The new draft will specify harmonic distortion testing at 250 Hz at a 15 dB hearing level, which will be slightly more rigid than presently required. At other frequencies, no change in hearing level for distortion tests will be made. The new draft will contain a table of allowable distortion levels parallel to that in S3.6-1989 for bone conduction.

If the new draft is approved by the letter ballot, a recommendation to modify S3.6-1989 by changing "20" to "15" at 250 Hz in Table 4 would be in order.

S. F. Lybarger





# ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE  
STANDARDS SECRETARIAT

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

AVRIL BRÉNIG, Dr. P. H.  
STANDARDS MANAGER

Telephone (212) 681-9404  
Telex 960983 AMINSTPHYS NYK  
Teletax (212) 949-0473

22 February 1991

TO: L. Wilber, Chair S3

Re: Letter Ballot LB/S3/316 sent to the Accredited  
Standards Committee S3 on 20 November 1990  
to be closed on 2 January 1991, deadline  
extended 23 January 1991

SUBJECT: Approval of proposed revision of ANSI S1.1-1960  
Acoustical Terminology, first draft, Acoustical  
and Electroacoustical Terminology, dated July 1990

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

CLASSIFICATION OF MEMBERS

AFFIRMATIVE VOTES	<u>11</u>	P - PRODUCER	<u>6</u>
NEGATIVE VOTES	<u>3</u>	C - CONSUMER	<u>8</u>
ABSTENTIONS	<u>2</u>	G - GOVERNMENT	<u>3</u>
NOT RETURNED	<u>7</u>	GI - GENERAL INTEREST	<u>6</u>
TOTAL	<u>23</u>	TOTAL	<u>23</u>

Continuation of results of letter ballot S3/316:

AFFIRMATIVE VOTES:

Atack, R.M.	U.S. Army Medical Corps.
Bennett, J.L.	Power Tool Institute, Inc.
Bovi, A.M.	Industrial Safety Equipment Association, Inc.
Campbell, R.	Audio Engineering Society, Inc.
Garinther, G.	U.S. Army Human Engineering Laboratory
Kasten, R.	American Speech-Language-Hearing Association
Naunton, R.F.	American Academy of Otolaryngology - Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc
Page, J.	U.S. Dept. of the Navy, BUREAU OF MEDICINE AND SURGERY
Patterson, J.H.	U.S. Army Aeromedical Res. Lab.
Zagzebski, J.	American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

Bohl, C.D.	American Industrial Hygiene Association
Teder, H.	Hearing Industries Association (HIA)
Yost, W.A.	Acoustical Society of America

ABSTENTIONS:

Hopmeier, W.F.S	National Hearing Aid Society
Toothman, E.H.	Fastener Industry Noise Control Research Program (FINCRP)

NOT RETURNED:

Addington, J.H.	Compressed Air and Gas Institute
Bareham, J.R.	Bruel & Kjaer Instruments, Inc.
Brownson, P.J.	American College of Occupational Medicine
Burnett, E.D.	National Institute of Standards and Technology
Kushler, B.	Exchange Carriers Standards Association
Nixon, C.	U.S. Dept. of the Air Force
Sachs, R.H.	AT&T

LATE RESPONSE:

Bennett, J.L.	Power Tool Institute, Inc.
Naunton, R.F.	American Academy of Otolaryngology - Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc.
Page, J.	U.S. Dept. of the Navy, BUREAU OF MEDICINE AND SURGERY

Continuation of results of letter ballot S3/316:

INDIVIDUAL EXPERTS:

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

Lybarger, S.F.  
Yost, W.

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

Johnson, D.L.  
Wasserman, D.E.

- 3) Comments and/or recommendations were received from 1 Individual Experts, as follows:

Barry, S.J.

OTHER

- 1) Additional comments were received from one non-voting member:

F. James Krewl  
S3-36(SG-2)Chair

General Comments

Avril Brenig  
Standards Manager

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



# ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE  
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AVRIL BRENIG, Dr. P. H.  
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Telefax (212) 949-0473

S3/327  
ATTACHMENT F-4

**IMMEDIATE RETURN REQUESTED**

LB/S3/316  
20 November 1990

## S3 BALLOT

Return to: Letter Ballot Dept.  
Due date: 2 January 1991

### LETTER BALLOT ACCREDITED STANDARDS COMMITTEE S3, BIOACOUSTICS

Topic: Approval of proposed revision of ANSI S1.1-1960 Acoustical Terminology, first draft, Acoustical and Electroacoustical Terminology, dated July 1990

Authorized by: L. Wilber, Chair S3  
K.M. Eldred, Chair ASACOS

Circulated by: A. Brenig, ASA Standards Manager

#### Reference Documents:

- ATTACHMENT A - Letter from D.L. Johnson, Chair S12, to A. Brenig, dated 4 September 1990
- ATTACHMENT B - Letter from D.L. Johnson, Chair S12, to S1, S3, and S12 Members, dated 4 September 1990
- DOC/ATTACHMENT C - First Draft, Acoustical and Electroacoustical Terminology, proposed ANSI S1.1-199X, dated July 1990 (proposed revision of ANSI S1.1-1960)

#### Background Information:

The standard on Acoustical Terminology, ANSI S1.1-1960, is obsolete and has been withdrawn by ANSI. A plan was established in the ASA Committee on Standards (ASACOS) to prepare the overall revision of ANSI S1.1-1960. This plan called for development of a main terminology standard, to include terms from the S1 and S12 Standards Committees, and to list those terms from the S3 and S2 Standards Committees which are common to all groups. Additionally, the plan is to list terms from other ASA Technical Committees, and these are included in the document.

LB/S3/316  
20 November 1990

It is planned that Standards Committee S3, Bioacoustics, will develop its own discrete terminology standard, basically a revision of ANSI S3.20-1973.

Standards Committee S2, Mechanical Shock and Vibration plans to convert ISO 2041-1990 Vibration and Shock - Vocabulary, into a proposed national (S2) standard.

A compilation of terms has been prepared and is represented by the document now being balloted in S1, S3 and S12 (ATTACHMENT C, above).

Mr. Daniel Johnson, former S1 Chair and now S12 Chair, has put together the present document, which is being submitted simultaneously, to Standards Committees S1, S3 and S12 for vote and comment. This document is also being circulated to Standards Committee S2, and to Chairs of the ASA Technical Committees, from which Committees all comments are welcomed.

GUIGNARD BIODYNAMICS  
824 Kent Avenue  
Metairie, LA 70001-4332

(504) 885-0563

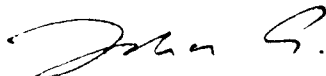
MEMO

From: John Guignard  
To: Dr Laura A Wilber, ANSI-S3 Chair  
c/o Omni Inner Harbor Hotel (ASA Meeting), 101 West Fayette St  
Baltimore, MD 21201

Date: 1991-04-27

Subj: Acoustical Society of America/ANSI meetings, Baltimore, Md  
30 April - 03 May 1991 - ANSI S3-73

1. Please accept (and express to our committee colleagues) my regrets that a conflict of conference dates and related commitments prevents my joining you in Baltimore for the Spring 1991 meeting. However, I have already planned to attend the next (Autumn 1991) ANSI S3 meeting in Houston, 04-08 November.
2. In the meantime, the status of work on the bioacoustic terminology is as follows. I have integrated all the material which I and, mainly, Sam Lybarger, had accumulated into a single draft. We have had difficulty in finding an audiologist to contribute to or at least review modern terminology in the clinical diagnostic field and related areas of audiology in which I am not myself current; but I hope soon to get help from a new reviewer in that specialty. In any event, I plan to submit the best draft we can come up with to you at the end of May. Hopefully we can then review it by correspondence and decide whether the list of terms is reasonably complete; and circulate it for committee review before the Houston meeting.
3. Best wishes for a productive and enjoyable meeting in Baltimore. (Acousticians with an ear for non-standard regional dialect, terminology and linguistics would do well to get hold of a copy of the locally circulated underground publication "BAWLAMER MADE EASY" before engaging in discourse with the indigenous population!)



John Guignard

cc: Samuel F Lybarger



# ACOUSTICAL SOCIETY OF AMERICA

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

28 March 1991

TO: L. Wilber, Chair S3

Re: Letter Ballot LB/S3/318 sent to the  
Organizational Members of Standards  
Committee S3 on 1 February 1991 and  
closed on 15 March 1991

---

SUBJECT: Approval of proposed new work item for S3  
ASSISTIVE LISTENING DEVICES

---

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

		<u>CLASSIFICATION OF MEMBERS</u>	
AFFIRMATIVE VOTES	<u>18</u>	P - PRODUCER	<u>5</u>
NEGATIVE VOTES	<u>0</u>	C - CONSUMER	<u>9</u>
ABSTENTIONS	<u>1</u>	G - GOVERNMENT	<u>2</u>
NOT RETURNED	<u>4</u>	GI - GENERAL INTEREST	<u>7</u>
TOTAL	<u>23</u>	TOTAL	<u>23</u>

Continuation of results of letter ballot S3/318:

AFFIRMATIVE VOTES:

Atack, R.M. Bohl, C.D.	U.S. Army Medical Corps. American Industrial Hygiene Association
Brown, M. (Alternate) Burnett, E.D.	Power Tool Institute, Inc.  National Institute of Standards and Technology
Campbell, R.H. Garinther, G. Kasten, R.	Audio Engineering Society, Inc. U.S. Army Human Engineering Laboratory American Speech-Language-Hearing Association
Michel, G.C. Naunton, R.F.	Bruel & Kjaer Instruments, Inc. American Academy of Otolaryngology Head and Neck Surgery
Naunton, R.F. Nixon, C. Page, J.	American Otological Society, Inc. U.S. Department of the Air Force U.S. Department of the Navy, Naval Medical Command
Patterson, J.H.	U.S. Army Aeromedical Research Laboratory
Sachs, R.H. Teder, H. Toothman, E.H.	AT&T Hearing Industries Association Fastener Industry Noise Control Research Program
Wilber, L.A. Zagzebski, J.	Acoustical Society of America American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

None

ABSTENTIONS:

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



Continuation of results of letter ballot S3/318:

NOT RETURNED:

Addington, J.H.  
Brownson, P.J.

Hopmeier, W.F.S.  
Kushler, B.

Compressed Air and Gas Institute  
American College of Occupational  
Medicine  
National Hearing Aid Society  
Exchange Carriers Standards  
Association

Avril Brenig  
Standards Manager

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



# ACOUSTICAL SOCIETY OF AMERICA

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**IMMEDIATE RETURN REQUESTED**

LB/S3/318  
1 February 1991

Return to: Letter Ballot Dept.  
Due date: 8 March 1991

**ADMINISTRATIVE LETTER BALLOT  
ACCREDITED STANDARDS COMMITTEE S3,  
BIOACOUSTICS**

Topic: Approval of proposed new work item for S3 on ASSISTIVE LISTENING  
DEVICES

Approved by: L. Wilber, Chair S3

Distributed by: A. Brenig, ASA Standards Manager

Reference Document(s):

ATTACHMENT A Letter from Howard E. Stone of SHHH to A. Brenig  
dated 24 August 1990

ATTACHMENT B Proposed scope for new work item on Assistive  
Listening Devices

Background Information:

Following receipt of letter from SHHH (see ATTACHMENT A), the matter was referred to S3 for action. At the S3 meeting held on Thursday, 29 November 1990, it was decided that it was important to establish a work item in this area, having regard to the renewed interest and governmental regulations affecting this area.

Accordingly, a scope has been prepared (see ATTACHMENT B), and the Chair of the S3 Committee, L.A. Wilber, recommends that the new work item be approved. If approved, the work item will come under new S3 working group S3/WG81, to be chaired by Roger Kasten.

LB/S3/318  
ATTACHMENT A



SELF HELP FOR HARD OF HEARING PEOPLE, INC.  
7800 WISCONSIN AVENUE  
BETHESDA, MARYLAND 20814  
(301) 657-2248 (V) 2249 (TTY)

August 24, 1990

A. Brenig  
Standards Manager  
Acoustical Society of America  
Standards Secretariat  
335 East 45th Street  
New York, New York 10017

Dear A. Brenig:

I am writing to you in my role as the Executive Director of Self Help for Hard of Hearing People, the only national consumer organization which represents hard of hearing people. A major goal of our organization is to ensure that hard of hearing persons are able to benefit from available technology, principally through the use of hearing aids and assistive devices. The recent passage of the Americans With Disabilities Act (ADA) has resulted in an acceleration of our efforts to facilitate the use of assistive devices since this recently enacted federal legislation requires that public places and the workplace be accessible to hard of hearing persons.

I am requesting that a working group be established to develop a standard for assistive listening devices. It will be important for the working group to move quickly towards the development of a document so that it can be used in the implementation of regulations for the Americans With Disabilities Act.

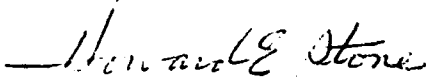
There is now an opportunity, through the use of assistive listening devices such as FM, infrared, and loop systems, to make the environment truly accessible to hard of hearing persons. I believe as well that the use of assistive listening devices, independent of the personal hearing aid, will increase markedly and may become the preferred means of communications access for some hard of hearing persons.

In my discussions with professionals and technical experts regarding these matters, the need to develop standards for assistive listening devices is repeatedly stated. They recognize too the value of having an organization like ours involved in the process. At present, there is much confusion about assistive

A. Brenig  
Standards Manager  
August 24, 1990  
Page 2

listening devices and many devices are sold without any information about technical performance. The development of a standard would result in better definition of these devices and improve the likelihood of their appropriate fitting and use. This effort is very important to hard of hearing consumers and hearing care professionals. Thank you for your attention to this matter. I will await word of your progress on this issue, and our involvement in it.

Sincerely,



Howard E. Stone, Sr.  
Executive Director  
mhg

cc: W. Melnick  
L. Wilber  
W. Yost

LB/S3/318  
ATTACHMENT B

Proposed Scope for Assistive Listening Devices

Proposed Scope: 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 acoustic measurement.

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

Documents processed by the ASA Standards Secretariat from October 1990 through April 1991

THE FOLLOWING DOCUMENTS WERE RECEIVED FOR VOTE AND/OR COMMENT  
BY THE U.S. MEMBER BODY:

**DRAFT INTERNATIONAL STANDARDS (DIS)**

TAG	DOCUMENT
S12	<p><b><u>ISO:5131:1982/DAM1</u></b> Acoustics - Tractors and machinery for agriculture and forestry - Measurement of noise at the operator's position - Survey method</p> <p>Announced to S12 (<u>S12/193</u>) on 11 September 1990, with S.I. Roth coordinating comments and recommendations for vote on this document. The U.S. submitted an <u>affirmative vote with comments</u>, to ANSI on 14 November 1990 (submitted for ASA Standards to ISO by telefax in March 1991 due to non-transmittal of the U.S. vote by ANSI in the interim).</p>
S12	<p><b><u>ISO/DIS 3743-1</u></b> Acoustics - Determination of sound power levels of noise sources - Engineering methods for small, movable sources in reverberant fields - <u>Part 1</u>: Comparison method in hard-walled test rooms</p> <p>Announced to S12 (<u>S12/196</u>) on 30 October 1990, with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. submitted an <u>affirmative vote with comments</u>, to ANSI on 6 February 1991, which was transmitted to ISO by ANSI on 11 February 1991.</p>
S12	<p><b><u>ISO/DIS 3744</u></b> Acoustics - Determination of sound power levels of noise sources - <u>Engineering method employing an enveloping measurement surface in an essentially free field over a reflecting plane</u></p> <p>Announced to S12 (<u>S12/195</u>) on 30 October 1990, with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. submitted a <u>negative vote with comments</u>, to ANSI on 6 February 1991, which was transmitted to ISO by ANSI on 11 February 1991.</p>

**ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)**

**Documents processed by the ASA Standards Secretariat from October 1990 through April 1991**

THE FOLLOWING DOCUMENTS WERE RECEIVED FOR VOTE and/or COMMENT  
BY THE U.S. MEMBER BODY:

**DRAFT INTERNATIONAL STANDARDS (DIS)**

TAG	DOCUMENT
S1	<p><b><u>ISO/DIS 9613-1</u></b> Acoustics - Attenuation of sound during propagation outdoors - <u>Part 1</u>: Method of calculation of the attenuation of sound by atmospheric absorption</p> <p>Announced to S1 (<u>S1/338</u>) on 6 November 1990, with A.H. Marsh coordinating comments and recommendations for vote on this document. The U.S. submitted an <u>affirmative vote with comments</u>, to ANSI on 11 March 1991, which was transmitted to ISO by ANSI on 14 March 1991.</p>

**COMMITTEE DRAFTS (CD)**

S12	<p><b><u>First ISO/CD 3746</u></b> for Acoustics - Determination of sound power levels of noise sources - Survey method employing an enveloping measurement surface</p> <p>Announced to S12 (<u>S12/200</u>) on 28 November 1990, with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. submitted an <u>affirmative vote with comments</u>, to ANSI on 6 February 1991, which was transmitted to ISO by ANSI on 11 February 1991.</p>
S1, S12	<p><b><u>ISO/CD 9613-2</u></b> Second CD: Acoustics - Attenuation of sound during propagation outdoors. <u>Part 2</u>: A general method of calculation</p> <p>Announced to S1 and S12 (<u>S1/346</u>) on 11 March 1991 with A.H. Marsh coordinating comments and recommendations for vote on this document. The U.S. submitted an <u>negative vote with comments</u>, to ANSI on 25 April 1991, which was transmitted to ISO by ANSI on 30 April 1991.</p>

ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)

Documents processed by the ASA Standards Secretariat from October 1990 through April 1991

TAG

DOCUMENT

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THE FOLLOWING DOCUMENTS WERE RECEIVED FOR COMMENT and/or VOTE BY THE U.S. MEMBER BODY AND ANNOUNCED AD HOC

AD HOC      ISO/CD 8253-3 Acoustics - Audiometric test methods/Part 3: Speech  
S3              audiometry

Announced Ad Hoc on 11 December 1990 with L.A. Wilber coordinating comments and recommendations for vote on this document. The U.S. submitted an affirmative vote to ANSI on 14 January 1991, which was transmitted to ISO by ANSI on 14 January 1991.

AD HOC      IEC/TC 26(China)4: Limit and determination of noise emitted by arc welding  
S12              power sources

Announced Ad Hoc on 27 December 1990 with D.L. Johnson coordinating comments and recommendations for vote on this document. The U.S. submitted a negative vote with comments to the U.S. Technical Advisor of IEC/TC 29 on 24 April 1991.

AD HOC      ISO/CD 11201 Acoustics - Noise emitted by machinery and equipment -  
S12              Engineering method for the measurement of emission sound pressure level at  
the work station

Announced Ad Hoc on 28 January 1991 with L. Luttrell coordinating comments and recommendations for vote on this document. The U.S. submitted a recommendation for an affirmative vote with comments, to ANSI on 13 February 1991.

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ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)

OTHER ACTIONS

o General

- (a) The Secretariat of ISO/TC 43, Denmark (Nielsen) sent a Report of Voting on ISO/DIS 9053 Acoustics - Materials for acoustical applications - Determination of airflow resistance circulated 17 November 1988 with a time limit for reply of 17 May 1989, on 15 November 1990. The decision of the chairman was to approve ISO/DIS 9053.
- (b) ISO/TC 43 and ISO/TC 43/SC1 will meet in Sydney, Australia from 5-12 December 1991.
- (c) At its meeting on 1990-05-18 in Rotterdam, ISO/TC 43 approved the following resolution:

Resolution 4

ISO/TC 43 supports the New Work Item Proposals given in documents N 811 and N 812 concerning methods and equipment for the measurement of real-ear characteristics of hearing aids, and asks the Secretariat to proceed towards approval of these proposals as work items of IEC/TC 29 "Electroacoustics" and ISO/TC 43 "Acoustics", respectively. If accepted, Mr. Elberling, Denmark, is appointed Project Leader, and the Secretariat is asked to establish a joint ISO/TC 43-IEC/TC 29 Working Group to deal with these items.

- (d) New work item for ISO/TC 43/SC1 - The U.S. requested that ISO/TC 43 establish a new Working Group charged with the task of revising ISO 5129:1987 Acoustics -Measurement of Noise Inside Aircraft. The U.S. offered to provide a Convenor for the new Working Group and to submit a draft of a document that could serve as the basis for the proposed revision to ISO 5129.

At the 14th Meeting of ISO/TC 43/SC1 Noise on 17 and 18 May 1990 in Rotterdam, Draft Resolution number 19 was adopted which states the following:

ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)

OTHER ACTIONS (continued)

o General (continued)

(d) New work item for ISO/TC 43/SC1 (continued)

Draft resolution Number 19: ISO/TC 43/SC1 supports the proposal given in document 43/1 N 683 "Revision of ISO 5129:1987 Acoustics - Type measurement of airplane interior sound pressure levels during cruise" and requests the Secretariat to carry out the formal voting procedure. If accepted, the Work Item is to be allocated to a new WG 37 (ISO/TC 43/SC1/WG37). The U.S. member body will appoint a Project Leader. The target date for the preparation of a first CD is 1991-12.

The U.S. registered an affirmative vote on the above Resolution, ISO/TC 43/SC1 N 714 on 12 November 1990.

The U.S. appointed Dr. John F. Wilby as U.S. expert and Mr. N.L. Haight as convenor to this newly established working group. This new work item was accepted with a target date of 1996-04 for a CD and 1998-04 for a DIS.

(e) New work item for ISO/TC 43/SC1 - The U.S. registered a positive vote on the recommendation to establish a new Working Group, ISO/TC 43/SC1/WG33, Measuring method for comparing traffic noise on different road surfaces, on 12 November 1990, ISO/TC 43/SC1 N 712.

On 27 February 1991, the U.S. appointed Mr. Greg Fleming as the main representative (replacing Mr. William Bowlby); Mr. James Chalupnick as alternate and Mr. Ed Rickley and Mr. Ken Polcak as corresponding members of this newly formed working group.

ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)

OTHER ACTIONS (continued)

o General (continued)

- (f) At its meeting in Rotterdam on 1990-05-17/18, the following resolution was taken:

Resolution 14

ISO/TC 43/SC1 requests the Secretariat to carry out the formal voting procedure for New Work Item proposal as given in document 43/1 N 679 "Amendment to ISO 362:1981 and ISO 7188:1985, Specification regarding test track surface", at the same time enclosing the proposal given in document 43/1 N 679 as a first Committee Draft for voting with a view to quick adoption of the suggested amendment to ISO 362 and ISO 7188.

Formal proposal for this new work item for ISO/TC 43/SC1 - To prepare amendments to ISO 362:1981 and ISO 7188:1985, Specification Regarding Test Track Surface was sent 05 April 1991.

- (g) At its meeting in Rotterdam on 1990-05-17/18, the following resolution was taken:

Resolution 12

ISO/TC 43/SC1 requests the Secretariat to carry out the formal voting procedure for New Work Item Proposal as given in documents 43/1 N 664, German proposal for revision of ISO 7779:1988 "Acoustics - Measurement of airborne noise emitted by computer and business equipment", and 43/1 N 680, Contributions by ECMA for amendments and improvements to ISO 7779:1988. If accepted, the Work Item is to be allocated to WG 23, the target date for preparation of a Committee Draft being 1992-01.

Formal proposal for this new work item for ISO/TC 43/SC1 - Revision of ISO 7779:1988 was sent 05 April 1991.

- (h) New work item for ISO/TC 43/SC1 - Impulse Sound Propagation for Environmental Noise Assessment. ANSI Committee S12, Working Group 22 will have a draft of a similar document by November 1991. An ad hoc committee (military) with input from UK, FRG, US, Sweden, Norway and Denmark is developing a draft document during 1991 and early 1992.

**ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)**

**OTHER ACTIONS (continued)**

o **Confirmation of various ISO/TC 43 standards**

On 26 February 1991, a vote to confirm the following list of ISO/TC 43 standards was sent to ANSI:

- o ISO 3382:1975 Acoustics - Measurement of reverberation time in auditoria
- o ISO 4869:1981 Acoustics - Measurement of sound attenuation of hearing protectors - Subjective method
- o ISO 1680-1:1986 Acoustics - Test code for the measurement of airborne noise emitted by rotating electrical machinery - Part 1: Engineering method for free-field conditions over a reflecting plane
- o ISO 1680-2:1986 Acoustics - Test code for the measurement of airborne noise emitted by rotating electrical machinery - Part 2: Survey method
- o ISO 6081:1986 Acoustics - Noise emitted by machinery and equipment - Guidelines for the preparation of test codes of engineering grade requiring noise measurements at the operator's or bystander's position

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# ACOUSTICAL SOCIETY OF AMERICA

S3/327  
ATTACHMENT J-1

OFFICE OF THE  
STANDARDS SECRETARIAT

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

AVRIL BRENIG, Dr. P. H.  
STANDARDS MANAGER

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

7 December 1990

TO: U.S. TAG Chairs for ISO/TC 43, Acoustics, and Subcommittees,  
and ISO/TC 108 Mechanical Vibration and Shock, and  
Subcommittees, and ISO/TC 94/SC12 Hearing Protection  
(Messrs. Bartheld, Douglas, Maedel, Muster, Stadelbauer,  
von Gierke)

FROM: A. Brenig

re: Review of the application of ISO Standards - memorandum from  
ANSI

Please find attached memorandum, dated 20 June 1990, on which ANSI requests a reply. The date for the response has now passed, but the need for the collection of information and submittal to ANSI is still there.

Please therefore review the lists of standards which are appended to the memorandum and, if needed, ask the appropriate persons for their information on the matter of how closely the national and corresponding ISO standards agree or differ in their technical content. I am sending a copy of the memorandum, and its attachments, to the Chairs for the corresponding national Standards Committees.

We would like to be able to submit this information to ANSI by no later than 15 January 1991. Therefore, it would be appreciated if you could send the information to me by 7 January 1991.

Thank you for your help.

cc: Eldred  
Embleton  
Fletcher  
Hayek  
Johnson  
McKinley  
Royster  
Sterbyn  
Wilber  
Wong

Second Request



**American National  
Standards Institute** 1430 BROADWAY, NEW YORK, NEW YORK 10018

TEL. 212.642.4900

FAX. 212.398.0023

Cable: Standards, New York  
International Telex: 42 42 96 ANSI UI

GARY W. KUSHNIER, Vice President, Standards Technology

June 20, 1990

TO: Administrators, U.S. Technical Advisory Groups for ISO/TCs and SCs

FROM: Gary W. Kushnier, Vice President, Standards Technology

SUBJECT: Application of ISO Standards

More and more frequently ANSI is being asked to indicate the degree of equivalence or relatedness of US national standards with the corresponding ISO standards. This is particularly true in light of the European Community's efforts to harmonize its standards by 1992 and to use international standards to do the job if they exist. The results of a related survey conducted by both ISO and IEC in mid-1989 were inconclusive because accurate statistics on the subject do not exist. It is known however, that many ISO standards are technically "based on" US standards and similarly, that many ISO standards have been incorporated in whole or in part in domestic standards. The purpose of this letter is to enlist your support in obtaining more accurate data on this question.

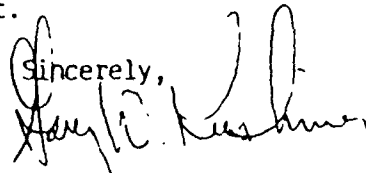
Enclosed are lists of ISO standards by TC that are applicable to each U.S. Technical Advisory Group. Also on this list are draft International Standards, (DIS) and draft proposals/committee drafts. Please ignore the draft proposals/committee drafts listings. It would be appreciated if you would indicate next to each ISO standard/draft the designation of any U.S. national standard, trade or professional association standard or other public standard (eg: MIL standard). Please mark each designation with (I), (E), (P), or (R) to indicate which of the following definitions most closely describes the relationship.

- (I) IDENTICAL to the corresponding International Standard (facsimile or authentic translation with identical content and presentation).
- (E) Technically EQUIVALENT to the corresponding International Standard (in the sense that what is acceptable to one standard is acceptable to the other and vice-versa).
- (P) PARTLY EQUIVALENT to the corresponding International Standard (part of the standard is technically equivalent).
- (R) RELATED but not equivalent to the corresponding International Standard.

Would you please return the enclosed sheets to me by July 31, 1990 with the requested information. If none of the international standards in your area correspond in any way to a national standard, please let me know.

Thank you for your cooperation. If you have any questions, please feel free to contact your usual ANSI technical staff contact.

Sincerely,



Gary W. Kushnier  
Vice President  
Standards Technology

GWK/90530

Encls.

cc w/o encls: Chairmen, U.S. TAGs for ISO/TCs/SCs

S3/314

**IEC/TC 29 ELECTROACOUSTICS**

Documents processed by the ASA Standards Secretariat from October 1990 through April 1991

THE FOLLOWING DOCUMENTS WERE RECEIVED BY THE U.S. MEMBER BODY FOR VOTE and/or COMMENT:

**CENTRAL OFFICE DOCUMENTS**

TAG

DOCUMENT

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S1, S3  
S12      **IEC/TC 29(Central Office)162** Specifications for personal sound exposure meters. This document was prepared by IEC/TC 29/WG4: Sound level meters, and is based on Document IEC/TC 29(Secretariat)194

Announced to S1, S3 and S12 (S1/335) on 5 October 1990 with R.W. Krug coordinating comments and recommendations for vote on this document. Comments plus a U.S. abstention were submitted to USNC for IEC by the Technical Advisor on 20 March 1991.

S3      **IEC/TC 29(Central Office)163 E** Supplement to IEC Publication 118-2:1983 Hearing aids with automatic gain control circuits

Announced to S3 on 1 April 1991 (S3/326) with D.A. Preves coordinating comments and recommendations for vote on this document.

**SECRETARIAT DOCUMENTS**

S1, S3  
S12      **IEC/TC 29(Secretariat)199** Amendment to IEC 651:1979, Sound level meters. This document covers Work Item 16.1.1 of the IEC/TC 29 Program of Work - Revision of IEC 651:1979 to remove ambiguities and clarify technical requirements. It has been prepared by IEC/TC 29/WG4: Sound level meters and was circulated as a first Committee Draft for comments.

Announced to S1, S3 and S12 (S1/336) on 5 October 1990, with R.W. Krug coordinating comments on this document. Comments were submitted to USNC for IEC by the Technical Advisor on 21 December 1990.

S1, S3  
S12      **IEC/TC 29(Secretariat)200** Amendment to IEC 804:1985, Sound level meters. This document covers Work Item 16.2.3 of the IEC/TC 29 Program of Work - Revision of IEC 804:1985 to remove ambiguities and clarify technical requirements. It has been prepared by IEC/TC 29/WG4: Sound level meters and was circulated as a first Committee Draft for comments.

Announced to S1, S3 and S12 (S1/337) on 5 October 1990, with R.W. Krug coordinating comments on this document. Comments were submitted to USNC for IEC by the Technical Advisor on 21 December 1990.



S3/314

**IEC/TC 29 ELECTROACOUSTICS (continued)**Documents processed by the ASA Standards Secretariat from October 1990 through March 1991

THE FOLLOWING DOCUMENTS WERE RECEIVED BY THE U.S. MEMBER BODY FOR VOTE and/or COMMENT:

**SECRETARIAT DOCUMENTS (continued)**

TAG	DOCUMENT
S3	<p><b><u>IEC/TC 29(Secretariat)210</u></b> Draft - Second CD: IEC/CD 645-3: Methods for the specification of acoustic test signals of short duration for audiometric and neuro- otological purposes</p> <p>Announced to S3 (<u>S3/342</u>) on <u>8 March 1991</u> with R.L. Grason coordinating comments and recommendations for vote on this document. Comments were submitted to USNC for IEC by the Technical Advisor on 12 April 1991.</p>
S3	<p><b><u>IEC/TC 29(Secretariat)208</u></b>- First CD: Amendment to Publication 118-7 Hearing Aids. Part 7: Measurements of the performance characteristics of hearing aids for quality inspection for delivery purposes</p> <p><b><u>IEC/TC 29(Secretariat)209</u></b> First CD: Amendment to Publication 119-0 Hearing Aids. Measurement of electroacoustical characteristics</p> <p><b><u>IEC/TC 29(Secretariat)211</u></b> First CD: Amendment to Publication 90:1973. Dimensions of plugs for hearing aids</p> <p>Announced to S3 (<u>S3/323</u>) on <u>8 March 1991</u> with D.A. Preves coordinating comments on these documents. Comments were submitted to USNC for IEC by the Technical Advisor on 11 April 1991.</p>
S1, S12	<p><b><u>IEC/TC 29(Secretariat) 212</u></b> Second CD: Instruments for the measurement of sound intensity</p> <p>Announced to S1 and S12 (<u>S1/348</u>) on <u>5 April 1991</u> with J. Tichy coordinating comments on this document. Comments were submitted to USNC for IEC by the Technical Advisor on 10 May 1991.</p>
S1, S12	<p><b><u>IEC/TC 29(Secretariat) 213</u></b> First CD: Electroacoustics - Instruments for measurement of aircraft noise - Performance requirements for systems to measure one-third-octave-band sound pressure levels in aircraft noise certification</p> <p>Announced to S1 and S12 (<u>S1/350</u>) on <u>30 April 1991</u> with J.C. McCann coordinating comments on this document.</p>

S3/314

**IEC/TC 29 ELECTROACOUSTICS (continued)**Documents processed by the ASA Standards Secretariat from October 1990 through March 1991

THE FOLLOWING DOCUMENTS WERE RECEIVED BY THE U.S. MEMBER BODY FOR VOTE and/or COMMENT:

**SECRETARIAT DOCUMENTS (continued)**

TAG

DOCUMENT

S1, S3 S12	<u>IEC/TC 29(Secretariat) 214</u> Second draft CD: Random-incidence and diffuse field calibration of sound level meters
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Announced to S1, S3 and S12 (S1/351) on 30 April 1991 with V. Nedzelnitsky coordinating comments on this document.

**OTHER ACTIONS**

1. New work items proposed for ISO/TC 43 and IEC/TC 29 - ISO/TC 43 voted to support the new work item proposals concerning methods and equipment for the measurement of real-ear characteristics of hearing aids, and asked the Secretariat to proceed toward approval of these proposals as work items of IEC/TC 29 Electroacoustics and ISO/TC 43 Acoustics respectively. If approved, Mr. Erbling, Denmark, will be Project Leader and a joint working group will be established.
2. Recommendations for two expert members to IEC/TC 29 working groups were made on 23 November 1990. Dr. Gregory P. Widin was recommended to serve on IEC/TC 29/WG16, Digitally programmable hearing aid systems; and Mr. Donald W. Boston to serve on IEC/TC 29/WG15, Electroacoustical measuring equipment for aircraft noise certification.
3. At its meeting on 1990-05-18 in Rotterdam, ISO/TC 43 approved the following resolution:

**Resolution 4**

ISO/TC 43 supports the New Work Item Proposals given in documents N 811 and N 812 concerning methods and equipment for the measurement of real-ear characteristics of hearing aids, and asks the Secretariat to proceed towards approval of these proposals as work items of IEC/TC 29 "Electroacoustics" and ISO/TC 43 "Acoustics", respectively. If accepted, Mr. Eiberling, Denmark, is appointed Project Leader, and the Secretariat is asked to establish a joint ISO/TC 43-IEC/TC 29 Working Group to deal with these items.



NIST

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

COMMITTEE CORRESPONDENCE

Building 233 (Sound), Room A147

April 23, 1991

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  
(November 23, 1990) report of the Technical Advisor

1. Several Working Groups (WGs) of TC 29 are meeting in the U.K. in the first week of June, 1991. They are meeting by themselves, without specific announcement to the National Committees by the Secretariat of TC 29, and without accompanying plenary sessions of TC 29. Consequently, no formal action by the Technical Advisor or USNC/IEC organizing a U.S.A. Delegation (to a meeting of TC 29) is appropriate or necessary for these WG meetings. Expert Members should have received notification of their WG meetings directly from their WG Convenors/Project Leaders, and should contact them directly for specific information.

2. Administrative Circular No. 264/90 officially announced (as noted in my previous report) that the next meeting of TC 29 will be held in Rotorua, New Zealand from November 25-29, 1991. Presumably, most of its WGs also will meet at that time, but no listing of individual WGs that will meet has been received yet. Expert Members should receive notification of their WG meetings directly from their WG Convenors/Project Leaders, and may contact them directly for specific information. When the USNC/IEC receives details of the TC 29 sessions, the USNC/IEC accreditation of members of the U.S.A. Delegation to these sessions, at the recommendation of the Technical Advisor, will proceed.

3. The following documents were received and/or processed for ballot:

29(Central Office)162 Specifications for personal sound exposure meters.

This document (announced in my last report) resulted in a recommended abstention, with comments (copy attached, along with copies of my letter of transmittal to the USNC/IEC, and the letter to me from R. W. Krug, who coordinated the comments).

Document 29(Central Office)163 Supplement to IEC Publication 118-2 (1983) Hearing aids with automatic gain control circuit.

This document is received for ballot for approval as a DIS. It is based on Document 29(Secretariat)190. At my request, D. W. Preves is coordinating the recommendations for ballot.

Document 29(Secretariat)210: Second CD: IEC/CD 645-3: Methods for the specification of acoustic test signals of short duration for audiometric and neuro-otological purposes.

This document was received for ballot for approval for circulation as a DIS. At my request, R. L. Grason coordinated the comments. Copies of the recommended USNC/IEC affirmative ballot with comments, as well as my letter of transmittal and R. L. Grason's summary of respondents, are attached. Additional comments and a recommendation for a negative ballot from S. Joseph Barry, an Individual Expert on ASA Standards Committee S3, Bioacoustics, were received by R. Grason on April 18, 1991, and by me on April 19, 1991, too late for inclusion in the recommended USNC/IEC position. These comments are related to some of the comments that were included in the USNC/IEC position. The Barry comments will be brought up for discussion, if possible, at the next meeting of the IEC WG from which this document originated, and will be considered, if applicable, in formulating the USNC/IEC position on the next ballot.

Document 29(Secretariat)212 Second CD: Instruments for the measurement of sound intensity.

This document was received for ballot for approval for circulation as a DIS. It is a revision of the first CD, 29(Secretariat)193. At my request, J. Tichy is coordinating the comments.

Document 29(Secretariat)214 Second CD: Random-incidence and diffuse-field calibration of sound level meters.

This document was received for ballot for approval for circulation as a DIS. It is a revision of the first CD, 29(Secretariat)191. I will coordinate the comments.

4. The following documents were received and/or processed for comment:

29(Secretariat)199 Amendment to IEC 651:1979, Sound level meters.

29(Secretariat)200 Amendment to IEC 804:1985, Integrating-averaging sound level meters.

At my request, R. W. Krug coordinated comments on both of these documents. Copies of the recommended USNC/IEC comments, my letter of transmittal, and R. W. Krug's summary of respondents are attached.

29(Secretariat)208: First CD: Amendment to Publication 118-7 Hearing aids. Part 7: Measurements of the performance characteristics of hearing aids for quality inspection for delivery purposes.

29(Secretariat)209: First CD: Amendment to Publication 118-0 Hearing aids. Measurement of electroacoustical characteristics.

29(Secretariat)211: First CD: Amendment to Publication 90:1973, Dimensions of plugs for hearing aids.

At my request, D. A. Preves coordinated comments on these documents. Copies of the recommended USNC/IEC comments, my letter of transmittal, and the summary of respondents are attached.

29(Secretariat)213 First CD: Electroacoustics - Instruments for measurement of aircraft noise - Performance requirements for systems to measure one-third-octave-band sound pressure levels in aircraft noise certification.

In accord with the letters contained in my report dated June 29, 1990, I have requested that comments be coordinated by John C. McCann, Chairman, SAE A-21 Noise Measurement and Analysis Subcommittee, which has already in its meetings considered the progress of this IEC document as it left the IEC TC 29/WG 15 to become a TC 29 Secretariat document. He is expected to have the support of D. W. Boston and A. H. Marsh, our Expert Members on the TC 29/WG 15.

cc:

R. C. Geiseman  
J. C. McCann  
C. T. Zegers

Attachments.



COMMITTEE CORRESPONDENCE

Building 233 (Sound), Room A147

March 20, 1991

To: Robert C. Geiseman, Manager, USNC/IEC Electronics Group 4  
Charles T. Zegers, Secretary, USNC/IEC

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

Subject: Recommended USNC/IEC ballot and comments (enclosed) on  
IEC Document 29(Central Office)162: Specifications for  
personal sound exposure meters

At my request, comments on this document were coordinated by Robert W. Krug, Chairman of the ANSI-accredited ASA WG on sound level meters. His summaries of the respondents are attached.

The recommended USNC/IEC position is abstention, because this document does not include the 4-dB and 5-dB exchange rates that sound exposure meters (dosimeters) must be capable of using if they are to be applicable to regulatory requirements currently in effect in the U.S.A. There is considerable support in the U.S.A. for the 3-dB exchange rate that is the basis of ISO 1999, the most widely-recognized international standard on hearing damage-risk criteria. However, the Revised Draft Statement, dated January 24, 1990, of the NIH Consensus Development Conference on Noise and Hearing Loss held in Bethesda, MD on January 22-24, 1990, stated that, with regard to exchange rates, "There is no consensus concerning a single rule to be used for all purposes in the United States. There is some disagreement." Consequently, although there is much that is technically good and useful in the subject IEC document, and while the U.S.A. voted in favor of ISO 1999 and would, therefore, be inconsistent in rejecting IEC 29(Central Office)162 because it contains the 3-dB exchange rate, document 29(Central Office)162 is not pertinent to some major U.S. needs established in current regulations, and the USNC/IEC should not vote in its favor. Lacking a clear U.S. consensus, abstention is the proper position, especially because S1.25-199x Specification for Personal Noise Dosimeters [Revision of ANSI S1.25-1978] provides for all pertinent exchange rates, has been balloted with a good chance of resolving sufficient negative ballots to become an ANSI standard, and, as such, appears to be the best proposed standard soon likely to be available for meeting U.S. needs.

The comment of Dr. R. W. Young, regarding the letter symbols to be used for time-average sound levels, has not been incorporated in the recommended USNC/IEC comments, because current ANSI standards are themselves not entirely consistent in this regard. In the absence of a clear consensus, it seems best to consider this issue in the next meeting of the ANSI working group on sound level meters, and in the ongoing revision of ANSI S1.1-1960, for which the first draft, dated July 1990, of ANSI S1.1-199x Acoustical and Electroacoustical Terminology, has recently been balloted.

encl.

cc:

with all encl.:

A. V. Brenig

without all encl.:

K. M. Eldred

D. L. Johnson

R. W. Krug

A. H. Marsh

L. A. Wilber

G. S. K. Wong

R. W. Young

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Original: English

29(U.S.A.)  
March 1990

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 29: ELECTROACOUSTICS

Comments of U.S. National Committee on  
Document 29(Central Office)162  
Specifications for personal sound exposure meters

The U.S. National Committee abstains for reasons given in the first general comment. It does request additional comments be considered and incorporated into the document.

General Comments

The personal sound exposure meter of the design described in the Draft International Standard does not meet all the current requirements for a personal sound exposure meter in the U. S. A. Regulatory practices in the U. S. A. (as well as other countries) mandate use of instruments employing 4 and 5 dB exchange rates, with exponential averaging.

Short duration random impulses/impacts may not be measured properly. The USNC recommends changing the design goal to integrate all sound of duration 250 microseconds or longer and changing the recommended test to insure instrument compliance.

Technical Comments

Foreword 4. (b)  
Change 1-ms to 0.25-ms.

9.4  
Change 1-ms to 0.25-ms, 4 cycles to 1 cycle and  
999 ms to 249.75 ms as required.

9.5  
Change 1-ms to 0.25-ms as required.

B4  
Change 1-ms to 0.25-ms as required.



-----  
FAX #:- 301/869-3536 Date:- March 19, 1991  
To:- V. Nedzelnitsky Company:- NIST  
From:- Bob Krug Cirrus Research Inc.  
Subject:- IEC/TC29 Page:- 1 of 3  
-----

Vic:

To follow are amended comments on,

IEC/29(Central Office)162.

Spelling corrections have been included.

Corrections to 9.4 have been included.

My comment on the placement of Po has been deleted.

After review IEC 801-02-16 as well as ANSI/ASME Y10.11-1984, relative to Robert Young's comments and have been unable to come up with a strong enough reason to include them in the U. S. A. comments.

Please use, mark up and FAX back or give me a call.

Bob 

Signed:-

-----  
CIRRUS RESEARCH INC.  
6818 WEST STATE STREET, SUITE 170  
WAUWATOSA, WI 53213  
-----

PHONE (414) 258-0717  
FAX (414) 258-0896

Background on the Comments of USA Member Body on IEC/TC 29  
(Central Office)162

There were 3 affirmative votes with comments from:

Daniel L Johnson S-12

Concerned that the random impulses/impacts could still not be measured. He recommends changing the design goal to integrate all sound of duration 250 microseconds or longer and changing the recommended test to insure instrument compliance.

Alan Marsh

Recommends approval if technical and editorial comments are considered for incorporation in the standard.

John J. Earshen

Was concerned that 3 dB doubling is not regulatory practice in the U. S. A.

There were 5 affirmative votes without comments from:

David J. Venditti DTRC  
Raymond J Callahan PTI  
Donald E. Wasserman  
Robert N. Kasten ASHA  
Larry Davis Larson Davis

There were 2 negative votes with comments from:

Edwin H. Toothman FINCRP  
Carl D Bohl AIHA

Both stated that there is no current requirement in the U. S. A. for a personal sound exposure meter of the design described in the Draft International Standard.

There was 1 comment without vote from:

Robert W. Young

Insisted  $L_{Aeq,T}$  be called  $L_{AT}$  to be consistent with IEC 801-02-16 as well as ANSI/ASME Y10.11-1984, Letter Symbols and abbreviations...Acoustics.



**NIST**

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

COMMITTEE CORRESPONDENCE

Building 233 (Sound), Room A147

April 12, 1991

To: Robert C. Geiseman, Manager, USNC/IEC Electronics Group 4  
Charles T. Zegers, Secretary, USNC/IEC

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

*V. Nedzelnitsky*

Subject: Recommended USNC/IEC affirmative vote and comments  
(enclosed) on IEC Document 29(Secretariat)210: Second  
CD: IEC/CD 645-3: Methods for the specification of  
acoustic test signals of short duration for audiometric  
and neuro-otological purposes

At my request, comments on these documents were coordinated by Rufus L. Grason, an Expert Member of the IEC WG in which this document originated. His summary of the respondents is attached.

I received the coordinated comments this afternoon, and the recommended USNC/IEC comments accompany this transmittal to you via FAX. They are due to be received by Mr. L. E. Nielsen, the Secretary of TC 29, with copy to the Central Office, by April 15, 1991.

encl.

cc:

A. V. Brenig  
R. L. Grason  
L. A. Wilber

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 29: ELECTROACOUSTICS

Comments of the U. S. National Committee on  
Document 29 (Secretariat) 210:  
Draft - IEC 645 Audiometers  
Part 3: Methods for the Specification of  
Acoustic Test Signals of Short Duration  
for Audiometric and Neuro-Otological Purposes  
-----

The U.S. votes affirmative on the above document, with the following comments:

Technical Comments

Page 3 Section 5.1 Duration of signal - It is unclear why 20 dB down from peak level of the signal was chosen as the measure of duration.

Page 3 Section 5.4 The term "brief tone" has been used in the literature to describe tones short enough to be affected by temporal integration. The definition for brief tone in the proposed standard is more restrictive, and would not include durations clearly considered to correspond to brief tones in the literature. For example, in Reference 1, the reference duration for brief tone audiometry in Table 19.1 is 20 milliseconds between half power points. This would correspond to greater than 20 milliseconds between the 10% points, and so would not meet the definition of brief tone in the standard. It is suggested that the definition of brief tone cover the range up to at least 100 milliseconds. A particular duration in the continuum can still be designated as in par. 5.5.

References:

Wright, H.N. Brief Tone Audiometry. Chapter 19 in Katz, J. ed. Handbook of Clinical Audiology. Baltimore: Williams & Wilkins, 1978: 218 - 232.

Pedersen, C.B. Brief Tone Audiometry. Scand Audiol 1976; 5:27-33.

Olsen, W.D. Brief Tone Audiometry: A Review. Ear and Hearing 1987; 8:135-185.

Page 4 Section 5.9 The frequency of the calibration tone is not specified. It is suggested that a fixed frequency (e.g. 1 KHz) be stated or a sentence be added stating that the frequency of the tone should not be within a resonance peak of the transducer.

Page 5 Section 7

The use of frequency domain components such as the IEC couplers 126, 303, 318, and 711 in the measurement and calibration of time domain events opens the door for possible errors, especially when using very wide band devices, such as oscilloscopes, to interpret the results. Good transient response to a step or square wave function requires the band limiting of either the drive or measurement signal in a controlled way. The couplers referenced above all have different frequency response and transient response behavior, and also behave differently under different drive configurations from a test transducer(s). Specifications should be included to limit and define the frequency response of the signal source that is used to perform the calibration and/or test in order to insure that the system retains good transient response for the coupler to be used. Other components of the measurement system could also affect the transient response. These include microphones, drive transducers, and measurement amplifiers/filters.

Editorial Comments

Page 6 Section 8.

Last Sentence. The bone conduction vibratory force should be expressed as a level (dB re reference vibratory force) rather than directly in vibratory force. This is in keeping with current practice.

Page 6 Section 9

Third Line - The word "population" should be replaced with the word "sample".

S3/327  
ATTACHMENT L-12

Rufus L. Grason  
P.O. Box 219  
Lincoln, MA 01773

11 April 1991

Victor Nedzelnitsky, Ph.D.  
National Institute of Standards and Technology  
Bldg. 233, Rm A149  
Gaithersburg, MD 20899-0001

Re: IEC/TC 29 - Draft - IEC 645 Audiometers - Part 3: Methods  
for the Specification of Acoustic Test Signals of Short  
Duration for Audiometric and Neuro-Otological Purposes

Dear Victor:

Enclosed you will find a compilation of the comments which I  
received on the above document (IEC 645 Part 3). I received  
votes and/or comments from the following persons:

Richard Brander (Belton)  
John L. Fletcher (S3)  
Roger Kasten (ASHA)  
Ralph F. Naunton (National Institute on Deafness)  
Jerry Popeka  
Carole M. Rogin (HIA)  
William A. Yost (S3)

The document was sent with the header sheet asking persons to  
vote on it and some did so, however others just sent comments.  
There was one negative vote.

The comments are found on the two pages which follow.

Sincerely,



Rufus L. Grason

cc: Avril Brenig, Standards Manager  
Laura Ann Wilber, Standards Committee S3 Chair



COMMITTEE CORRESPONDENCE

Building 233 (Sound), Room A147

December 21, 1990

To: Robert C. Geiseman, Manager, USNC/IEC Electronics Group 4  
Charles T. Zegers, Secretary, USNC/IEC

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

*V. Nedzelnitsky*

Subject: Recommended USNC/IEC comments (enclosed) on  
IEC Documents:

29(Secretariat)199: Amendment to IEC 651: 1979 Sound  
level meters

29(Secretariat)200: Amendment to IEC 804: 1985  
Integrating-averaging sound level meters

At my request, comments on these documents were coordinated by Robert W. Krug, Chairman of the ANSI-accredited ASA WG on sound level meters. His summaries of the respondents are attached. Although the documents were not received for ballot, most respondents indicated their position on a ballot, because the announcement form sent out by the ASA Standards Secretariat is a generic form. The generally favorable nature of the comments is not unexpected, because the subject Amendments do improve IEC 651 and IEC 804. However, even if all our comments are accepted, these amendments would comprise, by virtue of their scope, only limited revisions of these documents, and fundamental problems that had led to negative USNC/IEC positions on IEC 651 and IEC 804 would remain.

I discussed the coordinated comments yesterday with R. W. Krug via telephone, and the recommended USNC/IEC comments accompany this transmittal to you via FAX. They are due to be received by Leif Nielsen, the Secretary of TC 29, with copy to the Central Office, by December 31, 1990.

encl.

cc:

A. V. Brenig  
K. M. Eldred  
R. W. Krug  
L. A. Wilber  
G. S. K. Wong

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29(U.S.A.)  
December 1990

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 29: ELECTROACOUSTICS

Comments of U.S. National Committee on  
Document 29(Secretariat)199  
Amendment to IEC 651:1979, Sound level meters  
First Committee Draft circulated for comments

Technical Comments

Page 3 Note 2  
Change Sound level to Exponential-time-averaged sound level.  
This standard also includes I and Peak sound level.

Page 5 Note 7  
This change redefines the frequency weighting curves. This is  
beyond the mandate for this amendment. Recommend the  
following wording for 6.2.

The C-weighting is ideally at half power or 3 dB down relative  
to the response at 1 kHz at a frequency of  $10^{1,50}$  Hz and  $10^{1,00}$   
Hz. The attenuation rates approach 12 dB per octave at both  
low and high frequencies. Practical realization of the C-  
weighting characteristics specified in table IV is achieved  
with two isolated single pole high pass filters 3 dB down at  
20,6 Hz and two isolated single pole low pass filters 3 dB  
down at 12,2 kHz.

Practical realization of the B-weighting characteristics  
specified in Table IV is achieved by adding an isolated single  
pole high pass filter at 158,5 Hz to the C-weighting  
characteristics and adjusting the gain for 0 dB at 1 kHz.

Practical realization of the A-weighting characteristics  
specified in table IV is achieved by adding two isolated  
single pole high pass filters at 107,7 Hz and 737,9 Hz to the  
C-weighting characteristics and adjusting the gain for 0 dB at  
1 kHz.

Appendix D contains the equations used to derive Table IV.

Page 33 of 651 Subclause 8.4  
Use English spelling of Oersted.

Page 35 of 651 Subclause 9.3.3  
Since note 9 deleted subclause 6.6, subclause 9.3.3 must be  
deleted.



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29(U.S.A.)  
December 1990

INTERNATIONAL ELECTROTECHNICAL COMMISSION

TECHNICAL COMMITTEE No. 29: ELECTROACOUSTICS

Comments of U.S. National Committee on  
Document 29(Secretariat)200  
Amendment to IEC 804:1985, Integrating-averaging sound level meters  
First Committee Draft circulated for comments

Technical Comments

Page 4 Note 7,  
Page 7 Note 11,  
Page 9 Note 15,  
Page 9 Note 16, and  
Page 10 Note 21

Do not delete the pulse range test. The time averaging test  
of 9.3.2 is not sufficient to insure accurate measurement of  
short duration signals.

-----  
FAX #- 301/869-3536 Date:- December 21, 1990  
To:- V. Nedzelnitsky Company:- NIST  
From:- Bob Krug Cirrus Research Inc.  
Subject:- IEC/TC29 Page:- 1 of 3  
-----

Vic:  
To follow are amended comments on,  
IEC/29(Secretariat)199.  
IEC/29(Secretariat)200.

Bob *Bob Krug*

Signed:-

-----  
CIRRUS RESEARCH INC. PHONE (414) 258-0717  
6818 WEST STATE STREET, SUITE 170 FAX (414) 258-0896  
WAUWATOSA, WI 53213  
-----

Page 2

Background on the Comments of USA Member Body on IEC/TC 29  
(Secretariat)199.

There were 5 affirmative votes without comments from:

Daniel L Johnson	S-12
David J. Venditti	DTRC
Raymon J Callahan	PTI
Donald E. Wasserman	
Robert N. Kasten	ASHA

There were 2 comments without vote from:

Richard Peppin See enclosure.

I will send a reply to Richard Peppin.  
Many of his comments were very good but could not be included  
in a limited revision.  
I did not agree with his reading of note 11.

Robert Krug See page 5 note 7 above.

Page 2

Background on the Comments of USA Member Body on IEC/TC 29  
(Secretariat)200.

There were 4 affirmative votes without comments from:

David J. Venditti	DTRC
Raymon J Callahan	PTI
Donald E. Wasserman	
Robert N. Kasten	ASHA

There were 2 negative votes with comments from:

Daniel L Johnson	S-12
Larry Davis	Larson Davis

Both were opposed to deleting the pulse range test.

There was 1 comment without vote from:

Richard Peppin See enclosure.  
I will send a reply to Richard Peppin.  
Many of his comments were very good but could not be included  
in a limited revision.



**NIST**

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

COMMITTEE CORRESPONDENCE

Building 233 (Sound), Room A147

April 11, 1991

To: Robert C. Geiseman, Manager, USNC/IEC Electronics Group 4  
Charles T. Zegers, Secretary, USNC/IEC

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

Subject: Recommended USNC/IEC comments (enclosed) on  
IEC Documents:

29(Secretariat)208: First CD: Amendment to Publication  
118-7 Hearing Aids. Part 7: Measurements of the  
performance characteristics of hearing aids for quality  
inspection for delivery purposes

29(Secretariat)209: First CD: Amendment to Publication  
118-0 Hearing Aids. Measurement of electroacoustical  
characteristics

29(Secretariat)211: First CD: Amendment to Publication  
90: 1973 Dimensions of plugs for hearing aids

At my request, comments on these documents were coordinated by David A. Preves, Ph.D., Chairman of the ANSI-accredited ASA WG on hearing aids. His summaries of the respondents are attached. Although the documents were not received for ballot, most respondents indicated their position on a ballot, because the announcement form sent out by the ASA Standards Secretariat is a generic form.

I discussed the coordinated comments yesterday with Dr. Preves via telephone and thanked him for coordinating the comments on these documents on relatively short notice. The recommended USNC/IEC comments accompany this transmittal to you via FAX. They are due to be received by Mr. L. E. Nielsen, the Secretary of TC 29, with copy to the Central Office, by April 15, 1991.

encl.

cc:

A. V. Brenig  
D. A. Preves  
L. A. Wilber

TECHNICAL COMMITTEE NO.29 ELECTROACOUSTICS

The U. S. National Committee submits its comments on the following documents.

29(Sec.)208 First CD: Amendment to Publication 118-7 Hearing Aids. Part 7: Measurements of the Performance Characteristics of Hearing Aids for Quality Inspection for Delivery Purposes.

29(Sec.)209 First CD: Amendment to Publication 118-0 Hearing Aids. Measurement of Electroacoustical Characteristics.

29(Sec.)211 First CD: Amendment to Publication 90:1973 Dimensions of Plugs for Hearing Aids.

The USNC/IEC opposes 29(Sec.)208 and 29(Sec.)209, and expresses its views on 29(Sec.)211 with the following comments:

General

The USNC/IEC has substantially the same general comments to 29(Sec.)208 and 29(Sec.)209 as for the Questionnaire 29(Sec.)186 that was circulated in 1989.

Technical Comments

On 29(Sec.)208 and 29(Sec.)209:

The proposal to use 4/5 of the full-on gain as the reference test gain can be argued to be logical on the basis that most users do not set their gain control full-on. However, this comment relates to hearing aids with adequate reserve gain. For hearing aids with low gain, this may not be the case.

The 4/5 provision for setting the gain control would virtually always be taken advantage of when the full-on gain is less than 15 dB OSPL90 because it would often show lower harmonic distortion and probably lower battery current on Class B and Class D hearing aids. Distortion is often dependent on how far the output level is below the saturation level. For fair comparison, distortion measurements should be made at a level consistently related to the rated power of the instruments. Hearing aids with low distortion at high output levels should score better than those that begin distorting well below the saturation level.

The proposal leaves a considerable gap between hearing aids whose full-on gain just exceeds (OSPL90 minus 15) dB as compared with hearing aids whose full-on gain is just below that value. The latter would suddenly acquire considerable advantage, possibly 5 or 10 dB in gain control setback. Thus, there would be a discontinuity in setback amount at the (OSPL90 minus 15) dB gain level.

Some of these hearing aids that would be set to full-on in accordance with current 118-0 or 118-7 recommendations would fall under the category of a "special purpose" hearing aid. If the procedure outlined in ANSI S3.22-1987 is used for these hearing aids, this should preclude testing at full-on gain setting. If a change is made to IEC 118-0, 118-7, it should be for "special purpose" aids.

On 29(Sec.)211:

Both the two- and three-pin polarized plugs are large for current hearing aid sizes (even postauricular models). The USNC/IEC hopes that standardization of much smaller plugs will occur.

David A. Preves, Ph.D  
P.O. Box 59072  
Minneapolis, MN 55459  
(800) 328-6105

ANSI S3-48 Correspondence

4-9-91

Victor Nedzelitsky, Ph.D.  
National Institute of Standards and Technology  
Bldg. 233 (Sound), Room A147  
Gaithersburg, MD 20899

re: IEC TC29(Sec)208, 209, 211: First CD - Amendment to Publication 118-0 and 118-7  
Amendment to Publication 90

Dear Vic:

The Standards Secretariat put a date of April 5 for comments reaching me on the above referenced documents, This was considerably later than the date we talked about. Enclosed are comments and votes received on the 3 above referenced documents. The Standards Secretariat provided only 1 letter ballot for all three documents so these votes have been lumped together. This grouping may have presented a problem for persons commenting because although 29(Sec)208 and 209 are essentially the same proposal, Pub. 90 is quite different. Nevertheless, here are the results:

Number voting negative: 3

Number voting positive: 4

Number abstaining: 1

Comments were received only from several S3-48 working group members: S. Lybarger, R. Brander, E. Carlson and D. Preves. Most of the comments were positive for 29(Sec)211 and negative for 29(Sec)208 and 209. Several persons that voted positive were ambivalent because in the United States they would not be directly affected by these changes.

Although the number of positive votes exceeds the number of negative votes, since there were strong comments against 29(Sec)208 and 209, I am recommending splitting the vote as on the attached.

Yours sincerely,



Post-It™ brand fax transmittal memo 7671		# of pages: 2	
To	Vic Nedzelitsky	From	David Preves
Co.	NIST	Co.	Argosy
Dept.	Acoustics	Phone #	612-942-9232
Fax #	301-417-0514	Fax #	612-942-0503

# The University of Vermont

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

12 March 1991

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

Dear Dr. Brenig:

This is to inform you that I attended a meeting of the USTAG for IEC/TC87 chaired by P.D. Edmonds on 25 February 1991 (in Atlanta GA, in conjunction with an annual convention of the AIUM). Among other items discussed was the document 87(Central Office)11 Draft International Standard on "Requirements for Declaration of Acoustic Output of Medical Ultrasonic Diagnostic Equipment".

Today I received a ballot on this document and am returning it to Drs. Edmonds and Reid with a vote recommending approval. This was done in response to a request to "record your Best Available Opinion (BAO) of the view espoused by the organization you represent on the USTAG for IEC/87". Of course, my vote is not the result of an opinion survey over the entire ASA membership! In the future, perhaps it will be possible to find a way to learn the views of those ASA members who are knowledgeable in this area. For this occasion, the time available being limited, I have proceeded on my own judgment of what should be in the document. It might be explained that I have seen previous drafts of this standard, have made comments, and believe the authors have made a reasonable response to them.

Sincerely yours,



Wesley L. Nyborg  
Professor (Emeritus)



# 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

4 April 1991

TO: L. Wilber, Chair S3

Re: Letter Ballot LB/S3/320 sent to the  
Organizational Members of Standards  
Committee S3 on 1 February 1991 and  
closed on 15 March 1991

SUBJECT: Approval of proposed new liaison working group within S3  
to give information and advise on those documents and  
activities in IEC/TC 87 Ultrasonics, which come under the S3  
scope

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

		<u>CLASSIFICATION OF MEMBERS</u>	
AFFIRMATIVE VOTES	<u>17</u>	P - PRODUCER	<u>5</u>
NEGATIVE VOTES	<u>0</u>	C - CONSUMER	<u>9</u>
ABSTENTIONS	<u>2</u>	G - GOVERNMENT	<u>2</u>
NOT RETURNED	<u>4</u>	GI - GENERAL INTEREST	<u>7</u>
TOTAL	<u>23</u>	TOTAL	<u>23</u>



Continuation of results of letter ballot S3/320:

AFFIRMATIVE VOTES:

Atack, R.M.	U.S. Army Medical Corps.
Bennett, J.L.	Power Tool Institute, Inc.
Bohl, C.D.	American Industrial Hygiene Association
Bovi, A.M.	Industrial Safety Equipment Association, Inc.
Burnett, E.D.	National Institute of Standards and Technology
Garinther, G.	U.S. Army Human Engineering Laboratory
Kasten, R.	American Speech-Language-Hearing Association
Naunton, R.F.	American Academy of Otolaryngology Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc.
Nixon, C.	U.S. Department of the Air Force
Page, J.	U.S. Department of the Navy, Naval BUREAU OF MEDICINE AND SURGERY
Patterson, J.H.	U.S. Army Aeromedical Research Laboratory
Rogin, C. (Alternate)	Hearing Industries Association
Sachs, R.H.	AT&T
Toothman, E.H.	Fastener Industry Noise Control Research Program
Wilber, L.A.	Acoustical Society of America
Zagzebski, J.	American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

None

ABSTENTIONS:

Campbell, R.H.	Audio Engineering Society, Inc.
Michel, G.C.	Bruel & Kjaer Instruments, Inc.

Continuation of results of letter ballot S3/320:

NOT RETURNED:

Addington, J.H.  
Brownson, P.J.

Compressed Air and Gas Institute  
American College of Occupational  
Medicine

Hopmeier, W.F.S.  
Kushler, B.

National Hearing Aid Society  
Exchange Carriers Standards  
Association

LATE RESPONSE:

Atack, R.M.  
Bennett, J.L.

U.S. Army Medical Corps.  
Power Tool Institute, Inc.

Avril Brenig  
Standards Manager

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



# 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

## IMMEDIATE RETURN REQUESTED

LB/S3/320  
1 February 1991

Return to: Letter Ballot Department  
Due date: 8 March 1991

ADMINISTRATIVE LETTER BALLOT  
ACCREDITED STANDARDS COMMITTEE  
ON BIOACOUSTICS, S3

Topic: Approval of proposed new liaison working group within S3  
to give information and advise on those documents and activities  
in IEC/TC 87 Ultrasonics, which come under the S3 scope

Authorized by: L. Wilber, Chair S3

Distributed by: A. Brenig, ASA Standards Manager

Reference Document: None

### Background Information:

At the S3 meeting held on 29 November 1990, Mr. W. Nyborg, who is the ASA liaison representative (on ASACOS) to IEC/TC 87 Ultrasonics, was also given the task of reporting to S3, Bioacoustics, in an advisory capacity, on any matters in IEC/TC 87 Ultrasonics which relate to the scope of S3, Bioacoustics.

In order to perform this task, a liaison advisory group is proposed to be set up in S3, with Mr. Nyborg as Chair. The working group will not develop standards, but act only as liaison for information on documents or activities emanating from IEC/TC 87 Ultrasonics where these relate to S3. The liaison working group, if approved, will be designated as S3-L/WG 1, and be entitled "S3 TAG liaison to IEC/TC 87 Ultrasonics".

S3 is being asked whether there is interest in forming this liaison working group.

**ISO/TC 108 MECHANICAL VIBRATION AND SHOCK  
(and SUBCOMMITTEES SC1, SC2, SC3 and SC4)**

Documents processed by the ASA Standards Secretariat from October 1990 through May 1991

THE FOLLOWING DOCUMENTS WERE RECEIVED FOR VOTE AND/OP COMMENT BY THE U.S. MEMBER BODY:

**DRAFT INTERNATIONAL STANDARDS (DIS)**

TAG DOCUMENT

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Document(s) received for VOTE and COMMENT by the U.S. Member Body:

S2 ISO/DIS 7626-5 Vibration and shock - Experimental determination of mechanical mobility - Part 5: Measurements using impact excitation with an exciter which is not attached to the structure

Announced to S2 (S2/221) on 26 March 1991 with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. position which was negative with comments, was submitted to ANSI on 21 May 1991 and transmitted to ISO by ANSI on 23 May 1991.

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**COMMITTEE DRAFTS (CD)**

S2 ISO/CD 10055 Second ISO/CD 10 055 - Mechanical vibration - Standard for vibration testing of shipboard equipment and machinery components

Announced to S2 (S2/211) on 1 November 1990 with A. Kilcullen coordinating comments and recommendations for vote on this document. The U.S. position which was affirmative with comments, was submitted to ANSI on 12 December 1990 and transmitted to ISO by ANSI on 17 December 1990.

S2, S3 ISO/CD 6954 Mechanical vibration - Evaluation of multifrequency mechanical vibration in the living and working area on ships and floating structures

Announced to S2 and S3 (S2/212) on 1 November 1990 with A. Kilcullen coordinating comments and recommendations for vote on this document. The U.S. position which was negative with comments, was submitted to ANSI on 12 December 1990 and transmitted to ISO by ANSI on 17 December 1990.

**ISO/TC 108 MECHANICAL VIBRATION AND SHOCK  
(and SUBCOMMITTEES SC1, SC2, SC3 and SC4)**

Documents processed by the ASA Standards Secretariat from October 1990 through May 1991 (continued)

THE FOLLOWING DOCUMENTS WERE RECEIVED FOR VOTE AND/OR COMMENT BY THE U.S. MEMBER BODY:

**COMMITTEE DRAFTS (CD) (continued)**

TAG	DOCUMENT
S2	<p><u>ISO/CD 10815</u> Mechanical vibration - Methods for measurement of vibrations generated internally in railway tunnels</p> <p>Announced to S2 (<u>S2/220</u>) on 15 March 1991 with M.R. Serbyn coordinating comments and recommendations for vote on this document.</p>
S2	<p><u>ISO/CD 10816-2</u> First CD on Mechanical vibration measurements on non-rotating parts and evaluation Part 2: <i>Guidelines for large land-based steam turbine-generator sets in excess of 50 MW</i></p> <p>Announced to S2 (<u>S2/223</u>) on 8 April 1991 with P.H. Maedel coordinating comments and recommendations for vote on this document. The U.S. position which was <u>affirmative without comments</u>, was submitted to ANSI on 30 May 1991.</p>

**LIAISON DOCUMENTS**

TAG	DOCUMENT
S2	<p><u>Liaison Document No. N 1 - ISO/TC 118/SC31/WG3 N 88</u> - Minutes from the meeting of ISO/TC 188/SC3/WG3 Vibrations in handheld tools, 4-5 October 1990 at Inrs, Nancy, France</p>

**ISO/TC 108 MECHANICAL VIBRATION AND SHOCK  
(and SUBCOMMITTEES SC1, SC2, SC3 and SC4)**

**Other Actions:**

1. Review of Various ISO/TC 108 Standards:

ISO 7626-1:1986 Vibration and shock - Experimental determination of mechanical mobility - Part 1: Basic definitions and transducers

ISO 7919-1:1986 Mechanical vibration of non-reciprocating machines - Measurements of rotating shafts and evaluation - Part 1: General guidelines

ISO 8002:1986 Mechanical vibrations - Land vehicles - Methods for reporting measured data

ISO 5349:1986 Mechanical vibration - Guidelines for the measurement and the assessment of human exposure to hand-transmitted vibration

This list of standards has been submitted to the respective Technical Advisors for each technical area. Responses were due to ISO by 28 February 1991.

2. On 18 January 1991, redrawn, original figures for ISO 10112 Damping Materials - Graphical Presentation of the Complex Module were submitted to ISO in order to publish this ISO Standard.

3. New Work Items:

a) Proposal for ISO/TC 108 - A proposal from the U.K. was submitted to DIN, Secretariat for ISO/TC 108/SC4 (28 June 1990, N 197) on the Safety aspects of experiments in which people are exposed to mechanical vibration and shock. The U.S. Technical Advisory Group for ISO/TC 108/SC4 represented by working group S3/WG39 (S2) has voted in favor of this new work item proposed for ISO/TC 108/SC4. This vote was submitted to ANSI on 28 February 1991.

b) Proposal for ISO/TC 108 - A proposal was submitted to DIN, Secretariat for ISO/TC 108/SC4 (13 February 1991, N 198) on the Measurement and Interpretation of Vibrotactile Perception Thresholds. The U.S. Technical Advisory Group for ISO/TC 108/SC4 represented by working group S3/WG39 (S2) has voted in favor of this new work item proposed for ISO/TC 108/SC4. This vote was submitted to ANSI on 28 February 1991.

**ISO/TC 108 MECHANICAL VIBRATION AND SHOCK  
(and SUBCOMMITTEES SC1, SC2, SC3 and SC4)**

Other Actions: (continued)

3. New Work Items: (continued)

- c) Proposal for ISO/TC 108 - A proposal was received from DIN, Secretariat for ISO/TC 108/SC4 via ANSI on 15 March 1991. This proposal states the following: ISO/CD 6954 Mechanical vibration - Evaluation of multifrequency mechanical vibration in the living and working area on ships and floating structures - had been circulated to ISO/TC 108/SC2 and ISO/TC 108/SC4. In light of the negative comments received, the SC2/SC4 Secretariat will pass comments to the ISO/TC 108 Secretariat with the recommendation that ISO/TC 108 take the document under its jurisdiction and form a new ISO/TC 108 Working Group to handle this document.

4. New Working Group(s):

- a) A new working group on Vibration Condition Monitoring - ISO/TC 108/WG17 has been established with Mr. Douglas Muster appointed Project Leader for this working group. The first meeting of ISO/TC 108/WG17 was held on 14 March 1991, in Houston, Texas, following a meeting on standardization and condition monitoring, Standardization and Condition Monitoring Workshop (SCMW-91), which took place from 11 to 13 March 1991, also in Houston, Texas.
- b) A new working group on Modal Analysis - ISO/TC 108/WG18 has been established with Mr. Douglas Muster appointed Project Leader for this working group. The first meeting of ISO/TC 108/WG18 will be held on Monday, 10 June 1991, at the British Standards Institution Conference Centre, Hampden House, London, United Kingdom. The meeting was initially scheduled to take place in conjunction with the International Modal Analysis Conference which was to take place from 14-18 April 1991 in Florence, Italy, but which was canceled.

5. New Steering Committee established - A new ISO/TC 108 Steering Committee on Emerging Technological Needs was established with Mr. Douglas Muster as Project Leader.

6. New ISO/TC 108 Steering Committee established - A new ISO/TC 108 Steering Committee for Vibration Generating Systems (SCVG) was established to assist the Secretariat of ISO/TC 108 in organizing and monitoring the ongoing and future work in this area.

**ISO/TC 108 MECHANICAL VIBRATION AND SHOCK  
(and SUBCOMMITTEES SC1, SC2, SC3 and SC4)**

Other Actions: (continued)

7. A new Technical Committee under CEN - CEN/TC 231 - Vibration, was officially established in March 1990. The Secretariat of this committee has been allocated to the German Standards organization, DIN, and its first meeting was held from 1 to 3 October 1990, in Nancy, France. Reports of this initial meeting are available from the Standards Secretariat.

8. Liaison between IEC/SC50A and ISO/TC 108/WG4 - For the IEC/SC50A meeting held on 29 and 30 October 1990 in Osaka, Japan. ISO/TC 108 submitted two resolutions on which it requested action to be taken by IEC/SC50A. (See previous S2 Minutes, S2/210 for details.)

A report from Mr. G.B. Robinson, Secretary to IEC/SC 50A, on the actions taken at the IEC/SC50A meeting based on the request of ISO/TC108 (at the Milan meeting in April 1990) is attached (see ATTACHMENT U).

9. Eighteenth Plenary meeting of ISO/TC 108, together with Subcommittees 1 and 2 and respective working groups, to take place in Kobe, Japan, from 4 to 13 September 1991

Announcement of this meeting together with registration materials and a Draft Program (ISO/TC 108 N 534) were circulated to P and O Members of ISO/TC 108 (including the U.S. TAG) on 15 November 1990.





# 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  
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Telefax (212) 949-0473

28 March 1991

TO: L. Wilber, Chair S3

Re: Letter Ballot LB/S3/319 sent to the  
Organizational Members of Standards  
Committee S3 on 1 February 1991 and  
closed on 15 March 1991

SUBJECT: Approval of proposed new organizational member of S3,  
ENDEVCO CORPORATION

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

<u>CLASSIFICATION OF MEMBERS</u>			
AFFIRMATIVE VOTES	<u>18</u>	P - PRODUCER	<u>5</u>
NEGATIVE VOTES	<u>0</u>	C - CONSUMER	<u>9</u>
ABSTENTIONS	<u>1</u>	G - GOVERNMENT	<u>2</u>
NOT RETURNED	<u>4</u>	GI - GENERAL INTEREST	<u>7</u>
TOTAL	<u>23</u>	TOTAL	<u>23</u>

Continuation of results of letter ballot S3/319:

AFFIRMATIVE VOTES:

Bennett, J.L.	Power Tool Institute, Inc.
Bohl, C.D.	American Industrial Hygiene Association
Bovi, A.M.	Industrial Safety Equipment Association, Inc.
Burnett, E.D.	National Institute of Standards and Technology
Campbell, R.H.	Audio Engineering Society, Inc.
Garinther, G.	U.S. Army Human Engineering Laboratory
Kasten, R.	American Speech-Language-Hearing Association
Michel, G.C.	Bruel & Kjaer Instruments, Inc.
Naunton, R.F.	American Academy of Otolaryngology Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc.
Nixon, C.	U.S. Department of the Air Force
Page, J.	U.S. Department of the Navy, Naval Medical Command
Patterson, J.H.	U.S. Army Aeromedical Research Laboratory
Rogin, C. (Alternate)	Hearing Industries Association
Sachs, R.H.	AT&T
Toothman, E.H.	Fastener Industry Noise Control Research Program
Wilber, L.A.	Acoustical Society of America
Zagzebski, J.	American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

None

ABSTENTIONS:

Atack, R.M.	U.S. Army Medical Corps.
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Continuation of results of letter ballot S3/319:

NOT RETURNED:

Addington, J.H.  
Brownson, P.J.

Compressed Air and Gas Institute  
American College of Occupational  
Medicine

Hopmeier, W.F.S.  
Kushler, B.

National Hearing Aid Society  
Exchange Carriers Standards  
Association

LATE RESPONSE:

Bennett, J.L.

Power Tool Institute, Inc.

Avril Brenig  
Standards Manager

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



# ACOUSTICAL SOCIETY OF AMERICA

S3/327  
ATTACHMENT P-4

OFFICE OF THE  
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**IMMEDIATE RETURN REQUESTED**

LB/S3/319  
1 February 1991

Return to: Letter Ballot Department  
Due date: 8 March 1991

ADMINISTRATIVE LETTER BALLOT  
ACCREDITED STANDARDS COMMITTEE  
ON BIOACOUSTICS, S3

Topic: Approval of new organizational member of S3, ENDEVCO CORPORATION

Authorized by: L. Wilber, Chair S3

Distributed by: A. Brenig, ASA Standards Manager

Reference Documents:

ATTACHMENT A Letter from K.T. Chandy, Endevco Corporation, to  
A. Brenig, dated 10 December 1990

Background Information:

According to ANSI procedures, applications of all organizational members are submitted to the individual Standards Committee(s) for approval.

We are therefore enclosing the application received from K.T. Chandy requesting organizational membership for ENDEVCO CORPORATION on Accredited Standards Committees S3 (Bioacoustics) and S2 (Mechanical Shock and Vibration).

The Chairs of S3 and S2 recommend approval of the application of ENDEVCO for organizational membership on these Committees.

**Allied-Signal Aerospace Company**

Endevco Corporation  
30700 Rancho Viejo Road  
San Juan Capistrano CA 92675  
(714) 493-8181



10 December 1990

Dr. Avril Brenig  
Standards Manager  
ASA Standards Secretariat  
335 East 45th Street  
New York, N.Y. 10017-3483

Subject: **S-2 and S-3 Committees**

Dear Dr. Brenig,

I thank you for inviting me to sit in on the recent S-2 Committee meeting at the ASA conference at San Diego. Endevco would certainly like to participate in the S-2 (Shock and Vibration) and S-3 (Bio-acoustics) standards committees of the Acoustic Society of America in 1991.

I will be the primary representative from Endevco and Roger Volk, Technical Services Manager whom you met during your visit to our facility will be the alternate. All correspondence regarding these committees may be addressed to both of us at our San Juan Capistrano address.

I recognize that Endevco's membership has to be voted on by the committees. I hope there will be no difficulty in this matter.

I look forward to hearing from you.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Chandy'.

K. Thomas Chandy

cc. P. Conrad  
M. Gross  
A. Karolys  
D. McMahon  
R. Volk  
R. Whittier



# ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE  
STANDARDS SECRETARIAT

AVRIL BRENIG, Dr. P. H.  
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Telefax (212) 949-0473

21 March 1991

TO: L. Wilber, Chair S3

Re: Letter Ballot LB/S3/317 sent to the  
Organizational Members of Standards  
Committee S3 on 22 January 1991 and  
closed on 5 March 1991

SUBJECT: Approval of Officers and Individual Experts  
of S3 for 1991/1992

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

		<u>CLASSIFICATION OF MEMBERS</u>	
AFFIRMATIVE VOTES	<u>18</u>	P - PRODUCER	<u>4</u>
NEGATIVE VOTES	<u>0</u>	C - CONSUMER	<u>9</u>
ABSTENTIONS	<u>0</u>	G - GOVERNMENT	<u>2</u>
NOT RETURNED	<u>5</u>	GI - GENERAL INTEREST	<u>8</u>
TOTAL	<u>23</u>	TOTAL	<u>23</u>

Continuation of results of letter ballot S3/317:

AFFIRMATIVE VOTES:

Atack, R.M.	U.S. Army Medical Corps.
Bennett, J.L.	Power Tool Institute, Inc.
Bohl, C.D.	American Industrial Hygiene Association
Bovi, A.M.	Industrial Safety Equipment Association, Inc.
Burnett, E.D.	National Institute of Standards and Technology
Campbell, R.H.	Audio Engineering Society, Inc.
Garinther, G.	U.S. Army Human Engineering Laboratory
Kasten, R.	American Speech-Language-Hearing Association
Michel, G.C.	Bruel & Kjaer Instruments, Inc.
Naunton, R.F.	American Academy of Otolaryngology Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc.
Nixon, C.	U.S. Department of the Air Force
Page, J.	U.S. Department of the Navy, Naval Medical Command
Sachs, R.H.	AT&T
Teder, H.	Hearing Industries Association
Toothman, E.H.	Fastener Industry Noise Control Research Program
Wilber, L.A.	Acoustical Society of America
Zagzebski, J.	American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

None

ABSTENTIONS:

None

Continuation of results of letter ballot S3/317:

NOT RETURNED:

Addington, J.H.	Compressed Air and Gas Institute
Brownson, P.J.	American College of Occupational Medicine
Hopmeier, W.F.S.	National Hearing Aid Society
Kushler, B.	Exchange Carriers Standards Association
Patterson, J.H.	U.S. Army Aeromedical Research Laboratory

Avril Brenig  
Standards Manager

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





# ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE  
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**IMMEDIATE RETURN REQUESTED**

LB/S3/317  
22 January 1991

Return to: Letter Ballot Department  
Due date: 5 March 1991

ADMINISTRATIVE LETTER BALLOT  
ACCREDITED STANDARDS COMMITTEE  
ON BIOACOUSTICS, S3

Topic: Approval of Officers and Individual Experts of S3 for 1991/1992.

Approved for circulation by: L. A. Wilber, Chair S3

Distributed by: A. Brenig, Standards Manager

Reference Document: ATTACHMENT A - Lists Officers and Individual  
Experts for S3

Background Information:

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 concert with the Chairs of the respective Standards Committees.

A change in S3 Officers is proposed for 1991/1992. The list of Officers and Individual Experts is attached for your consideration for confirmation. The ASA representatives to S3 for 1991/1992 are listed for your information.

ATTACHMENT A

S3 ACCREDITED STANDARDS COMMITTEE ON BIOACOUSTICS

S3 Appointments

<u>Position</u>	<u>Individual</u>	<u>Term</u>
Chairman	J. D. Royster	1991-1994
Vice Chairman	J. L. Fletcher	1991-1992
ASA Representative	J. D. Royster	1991-1992
Alt. ASA Representative	J. L. Fletcher	1991-1992
<u>Individual Experts :</u>		1991-1992
	S. J. Barry	"
	R. W. Benson	"
	K. M. Eldred	"
	R. S. Gales	"
	W. J. Galloway	"
	R. M. Guernsey	"
	J. C. Cuignard	"
	D. L. Johnson	"
	K. D. Kryter	"
	H. Levitt	"
	S. F. Lybarger	"
	R. L. McKinley	"
	W. Melnick	"
	H. E. von Gierke	"
	D. F. Wasserman	"
	L. A. Wilber	"
	W. Yost	"
	R. W. Young	"



# ACOUSTICAL SOCIETY OF AMERICA

OFFICE OF THE  
STANDARDS SECRETARIAT

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Telefax (212) 949-0473

29 March 1991

TO: L. Wilber, Chair S3

Re: Letter Ballot LB/S3/321 sent to the  
Organizational Members of Standards  
Committee S3 on 1 February 1991 and  
closed on 15 March 1991

SUBJECT: Approval of changes to the current Accredited Standards  
Committee Procedures, adopted by the four S Committees,  
and approved by ANSI on 26 April 1988

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

<u>CLASSIFICATION OF MEMBERS</u>			
AFFIRMATIVE VOTES	<u>17</u>	P - PRODUCER	<u>5</u>
NEGATIVE VOTES	<u>2</u>	C - CONSUMER	<u>9</u>
ABSTENTIONS	<u>0</u>	G - GOVERNMENT	<u>2</u>
NOT RETURNED	<u>4</u>	GI - GENERAL INTEREST	<u>7</u>
TOTAL	<u>23</u>	TOTAL	<u>23</u>

Continuation of results of letter ballot S3/321:

AFFIRMATIVE VOTES:

Atack, R.M.	U.S. Army Medical Corps.
Bennett, J.L.	Power Tool Institute, Inc.
Bovi, A.M.	Industrial Safety Equipment Association, Inc.
Burnett, E.D.	National Institute of Standards and Technology
Campbell, R.H.	Audio Engineering Society, Inc.
Garinther, G.	U.S. Army Human Engineering Laboratory
Kasten, R.	American Speech-Language-Hearing Association
Michel, G.C.	Bruel & Kjaer Instruments, Inc.
Naunton, R.F.	American Academy of Otolaryngology Head and Neck Surgery
Naunton, R.F.	American Otological Society, Inc.
Nixon, C.	U.S. Department of the Air Force
Page, J.	U.S. Department of the Navy, Naval Medical Command
Patterson, J.H.	U.S. Army Aeromedical Research Laboratory
Teder, H.	Hearing Industries Association
Toothman, E.H.	Fastener Industry Noise Control Research Program
Wilber, L.A.	Acoustical Society of America
Zagzebski, J.	American Institute of Ultrasound in Medicine

NEGATIVE VOTES:

Bohl, C.D.	American Industrial Hygiene Association
Sachs, R.H.	AT&T

ABSTENTIONS:

None

Continuation of results of letter ballot S3/321:

NOT RETURNED:

Addington, J.H.  
Brownson, P.J.

Compressed Air and Gas Institute  
American College of Occupational  
Medicine

Hopmeier, W.F.S.  
Kushler, B.

National Hearing Aid Society  
Exchange Carriers Standards  
Association

LATE RESPONSE:

Bennett, J.L.

Power Tool Institute, Inc.

Avril Brenig  
Standards Manager

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



# ACOUSTICAL SOCIETY OF AMERICA

S3/327  
ATTACHMENT R-4

OFFICE OF THE  
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## IMMEDIATE RETURN REQUESTED

LB/S3/321  
1 February 1991

Return to: Letter Ballot Department  
Due date: 15 March 1991

### ADMINISTRATIVE LETTER BALLOT ACCREDITED STANDARDS COMMITTEE BIOACOUSTICS, S3

Topic: Approval of changes to the current Accredited Standards Committee Procedures, adopted by the four S Committees, and approved by ANSI on 26 April 1988

Authorized by: L.A. Wilber, Chair S3

Distributed by: A. Brenig, ASA Standards Manager

Reference Document:

ATTACHMENT A - Proposed wording to be included in the Accredited Standards Committee Procedures relating to the conciliation of negative votes and positions

ATTACHMENT B - Proposed change in wording for section 8.6 of the Accredited Standards Committee Procedures (listing current wording and proposed change in wording)

Background Information:

At the ASA Committee on Standards (ASACOS) meeting held on Monday, 26 November 1990, in San Diego, California, it was decided that the Accredited Standards Committee Procedures should contain an additional section relating to the conciliation of negative votes and positions on documents sent for ballot. It was also considered appropriate to amend the wording of clause 8.6 of the Accredited Standards Committee Procedures in line with the changes which had occurred in the ANSI procedures, since they were approved by ANSI on 9 September 1987.

Ms. L.A. Wilber, Chair S3, recommends approval of the changes, noted in ATTACHMENTS A and B, to the Accredited Standards Committee Procedures.

ATTACHMENT A

Proposed Amendment (Addition) to the Accredited Standards Committee  
Procedures

RESPONSES TO CONCILIATION EFFORTS FOR THOSE WITH  
NEGATIVE COMMENTS

Where responses to attempt reconciliation are sent to an individual with a negative vote or position, a fifteen (15) day period is given for the individual to respond. If no reply is received within fifteen (15) days, then the outstanding comments are circulated to thirty (30)-day review by the Committee, with a statement to the effect that no reply was received by the given deadline.

ATTACHMENT B

EXCERPT FROM ACCREDITED STANDARDS COMMITTEE PROCEDURES

Current wording of Clause 8.6

8.6 Disposition of Views and Objections.

When the balloting has been closed, the secretary shall forward the ballot tally to the Chair of the committee and/or, if appropriate, of the subgroup. The Committee Chair shall determine whether the expressed views and objections shall be considered by correspondence or at a meeting.

Prompt consideration shall be given to the expressed views and objections of all participants, including those commenting on the listing in Standards Action. A concerted effort to resolve all expressed objections shall be made, and each objector shall be advised of the disposition of the objection and the reasons therefor.

Substantive changes required to resolve objections, and unresolved objections, shall be reported to the committee members in order to afford all members an opportunity to respond to them or to reaffirm or change their votes within thirty (30) days.

Proposed Change in Wording of Clause 8.6

8.6 Consideration of Views and Objections.

When the balloting has been closed, the secretary shall forward the ballot tally to the Chair of the committee and/or, if appropriate, of the subgroup. The Committee Chair shall determine whether the expressed views and objections shall be considered by correspondence or at a meeting.

Prompt consideration shall be given to the written views and objections of all participants, including those commenting on the listing in Standards Action. A concerted effort to resolve all expressed objections shall be made, and each objector shall be advised of the disposition of the objection and the reasons therefor.

Unresolved objections and any substantive changes made in a proposed American National Standard shall be reported to the consensus developing group in order to afford all members an opportunity to respond, reaffirm, or change their votes within thirty (30) days.

When this process is completed in accordance with the written procedures of the standards developer, subsequent comments may be held for the next revision.

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