MINUTES

ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS, S1
U.S. TAG FOR ISO/TC43 ACOUSTICS AND IEC/TC29 ELECTROACOUSTICS

Baltimore, Maryland

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2 May 1991
FOR THE

U.S. NAVAL RESEARCH LABORATORY

Grant N00014-90-J-2017 plus Modification No. P00001

between

the U.S. Naval Research Laboratory

and

the Acoustical Society of America

Submitted 2 August 1991 by:

Acoustical Society of America, Standards Secretariat
335 East 45th Street
New York, New York 10017-3483
2 August 1991

Director
Naval Research Laboratory
Attention: CODE 2627
Washington, DC 20375

Dear Sir:

RE: Grant N00014-90-J-2017 plus Modification No. P00001 between the Naval Research Laboratory and the Acoustical Society of America, in the sum of $22,000 ($12,000 plus $10,000), to support the Standards Program of the Acoustical Society, effective dates from 15 June 1990 to 14 June 1991

We are pleased to enclose one (1) copy of the Final Technical Report which comprises four reports on the activities of the four Accredited Standards Committees which work was supported by the Naval Research Laboratory under the above referenced Grant.

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

Sincerely,

Avril Brenig
Standards Manager

AB/li
Enclosures
cc: Beyer w/o enclosures
Eldred w/o enclosures
Embleton w/o enclosures
Schmid w/o enclosures
Mr. Michael Bowers
Administration Conference of the U.S.
2120 L. Street N.W.
Suite 500
Washington, DC 20037

Dear Mr. Bowers:

At the recent meeting of Accredited Standards Committee S12, Noise, held in San Diego, California on 29 November 1990, Dr. Alice Suter informed the Committee about the imminent review by the U.S. Administration Conference of the lack of a national noise abatement program. We understand that the input of societies, organizations and individuals is being sought in this process.

A resolution was therefore adopted by the majority of those present at the S12 meeting, and ratified by vote, which closed on 31 January 1991. The resolution is as follows:

that Accredited Standards Committee S12, and the U.S. Technical Advisory Group for ISO/TC 43/SCI on Noise, strongly support the need for review of the requirement for, approaches and implementation of a National Noise Abatement program, and offer their professional expertise to assist in the formulation of a national strategy to arrive at the desired goals. The Committees consider these efforts of particular importance in order to remain competitive in the international arena with respect to noise control technology and noise environmental quality.

In order to give you some background into the work of the Accredited Standards Committees for which the Acoustical Society holds the Secretariat (S1 on Acoustics, S2 on Mechanical Shock and Vibration, S3 on Bioacoustics, and S12 on Noise), we enclose a brochure describing the Standards Program of the Acoustical Society. Also enclosed is a Directory listing the participants in the Standards Program, and our most recent catalog of acoustical standards.
Mr. Bowers

7 February 1991

More information will be supplied to you as desired. We wish you success in your task and stand ready to assist in these endeavors.

Sincerely,

Avril Brenig
Standards Manager

cc: Eldred
Embleton
Johnson
Royster
Suter
von Gierke
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MINUTES
ACCREDITED STANDARDS COMMITTEE ON
ACOUSTICS, S1
U.S. TAG for ISO/TC 43 ACOUSTICS and IEC/TC 29 ELECTROACOUSTICS,
Baltimore, Maryland
2 May 1991

The meeting was called to order by Mr. G.S.K. Wong, Chair S1, at 3:00 PM, in the Lincoln Room, the Omni Inner Harbor Hotel, Baltimore, Maryland.

ORGANIZATIONAL MEMBERS PRESENT

Arrington, J.R. U.S. Army Primary Standards Lab.
Bohl, C.D. American Industrial Hygiene Association
Brenig, A. ASA Standards Manager
Embleton, T.F.W. ASACOS Vice Chair
McKinley, R. Vice Chair S1; U.S. Air Force
Nedzelitsky, V. National Institute of Standards and Technology (NIST)
Schomer, P. U.S. CERL
Wang, S. Air-Conditioning and Refrigeration Institute
Wong, G.S.K. Chair S1; ASA alternate representative S1
1. Approval of the Minutes of the San Diego, California meeting, held 29 November 1990 (S1/334).

Upon motion made and seconded, it was

VOTED to approve the Minutes of the S1 meeting
(S1/334) 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) S1/WG20 Ground impedance - G. Daigle, Chair

(ii) S1/Advisory-Advisory Planning Committee to S1 - R.L. McKinlay, Chair

c) A summary of activities is given in ATTACHMENT B.
3. **Standards approved by ANSI in 1990/1991 and published (or being published) by ASA**

**ANSI S12.30-1990** Guidelines for the Use of Sound Power Standards and for the Preparation of Noise Test Codes *(revision and redesignation of ANSI S1.30-1979)*

**ANSI S12.31-1990** Precision Methods for the Determination of Sound Power Levels of Broad-Band Noise in Reverberation Rooms *(revision and redesignation of ANSI S1.31-1980)*

**ANSI S12.32-1990** Precision Methods for the Determination of Sound Power Levels of Discrete-Frequency and Narrow-Band Noise Sources in Reverberation Rooms *(revision and redesignation of ANSI S1.32-1980)*

**ANSI S12.33-1990** Engineering Methods for the Determination of Sound Power Levels of Noise Sources in a special Reverberation Test Room *(revision and redesignation of ANSI S1.33-1982)*

**ANSI S12.35-1990** Precision Methods for the Determination of Sound Power Levels of Noise Sources in Anechoic and Hemi-Anechoic Rooms *(revision and redesignation of ANSI S1.35-1979)*

**ANSI S12.36-1990** Survey Methods for the Determination of Sound Power Levels of Noise Sources *(revision and redesignation of ANSI S1.36-1979)*

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

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

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

**NOTE:** 20% discount on list price is available to ASA individual and sustaining members for all standards published by ASA.
4. Organizational matters and reports on working groups, including reports on letter ballots and international matters

a) S1/Advisory - Advisory Planning Committee to S1 - R.L. McKinley, 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 the S Committees. Please see ATTACHMENT A for the scope of this new working group. Mr. McKinley said he planned to prepare a chart indicating the status of the various standards, and proposed actions, similar to the format being adopted in S3 and S12.

After discussion of some of the individual standards, it was agreed that ANSI S1.42-1986 Response of weighting networks for acoustical measurements should be recommended for reaffirmation. A ballot will therefore be issued in due course.

b) S1/WG1 - Standard Microphones and their Calibration - V. Nedzelnitsky, Chair

The working group met on 29 November 1991 to look at a final version of the proposed revision of ANSI S1.12-1967 Specifications for Laboratory Standard Microphones. Mr. Nedzelnitsky said that his working group would be meeting at ASA, following the S1 meeting.

A target date of Fall 1991 was planned for presentation of this proposed standard to S1 ballot. (See ATTACHMENT C for Mr. Nedzelnitsky's report.)

c) S1/WG2 - Attenuation of Sound in the Atmosphere - A.H. Marsh, Chair

Mr. Sutherland read Mr. Marsh's report at the meeting. Please see ATTACHMENT D for this report. A document is expected for ballot within one year (i.e. by May 1992).

d) S1/WG4 - Measurement of Sound Pressure Levels in Air - M. Nobile, Chair

Mr. Nobile submitted the following report for the meeting:

Working Group 4 met for a full afternoon on Tuesday, 30 April 1991 at the Omni Inner Harbor Hotel. We made good progress on our working draft, especially on classification of noise types. A written report will be submitted.
4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

d) S1/WG4 - Measurement of Sound Pressure Levels in Air - M. Nobile, Chair (continued)

It was agreed that Mr. Nobile should be asked for a draft of the proposed revision of ANSI S1.13-1971 (R 1986) Methods for the measurement of sound pressure levels since, under ANSI Procedures, action on this standard should actually have taken place by the Fall of 1990.

e) S1/WG5 - Band Filter Sets - L.W. Sepmeyer, Chair

Mr. Sepmeyer met with his working group on 26 November 1990 to discuss a proposed revision of ANSI S1.11-1986.

The working group is currently awaiting the revision of IEC 225. Previously Mr. Wong, who chairs the international working group, IEC/TC 29/WG9, reported that the working group met at Newport Beach, and again in the Netherlands in May 1990, to finalize the proposed standard.

At the last meeting, following discussion, it was agreed that the national standard should be balloted without waiting for the international standard. Mr. Sepmeyer reported prior to the meeting that work was continuing on revising ANSI S1.11-1986.

See Item 9 b) page 14, for a report on the S1 response to the Air Movement and Control Association (AMCA) on their inquiries concerning ANSI S1.11-1986 Specification for octave-band and fractional-octave-band analog and digital filters.

f) S1/WG7 - Personal Dosimeters - J.J. Earshen, Chair

A revised draft of ANSI S1.25-199X Personal Noise Dosimeters was sent to S1 ballot on 15 December 1988 (LB/S1.25/302). The results of the ballot, closed on 23 January 1989, were given in the Minutes of May 1989 (S1/313). Negative comments on LB/S1.25/302, ANSI S1.25-199X Personal Noise Dosimeters, are still being resolved.

It was agreed that, following ballot of proposed ANSI S1.25-199X, the working group would proceed to develop another document which would attempt consistency with the international standard in this area.
4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

f) S1/WG7 - Personal Dosimeters - J.J. Earshen, Chair (continued)

At the last meeting, Mr. Wong reported that progress had been made on this proposed standard. A revised text had been submitted to the ASA Standards Secretariat by Mr. Earshen, and letters had been written to each of the commentors, requesting responses within two weeks of receipt of the revised document. Mr. Earshen has followed up on the responses.

A revised draft was forwarded to the ASA Standards Secretariat for transmission to a 30-day review. This document, together with all pertinent documentation, was sent to S1 (30-day review S1/349) on 12 April 1991 (see ATTACHMENT E). The 30-day review will close on 14 May 1991.

At the meeting, Mr. Nedzelnitsky, of the National Institute of Standards and Technology (NIST), said that he would reverse his negative vote, based on the revised text of proposed ANSI S1.25-199X, circulated with the 30-day review.

g) S1/WG8 - Acoustical and Electroacoustical Vocabulary - D.L. Johnson, Chair

At the last meeting, it was announced that a draft terminology standard had been prepared by Mr. Johnson, for S1 and S12, but also utilizing terms in psychoacoustics (S3). This document was circulated to S1 for ballot (LB/S1/339) on 20 November 1990. The ballot was closed on 22 February 1991 with results as given in ATTACHMENT F. The document was also circulated for ballot to S3 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.

At the meeting, Mr. Johnson indicated that he expected to be able to circulate a revised text for ballot prior to the next meeting.

h) S1/WG10 - Scales and Ratios for Plotting - R.W. Young, Chair

Proposed ANSI Standard S1.22-198X, Scales and Sizes for Plotting Frequency Characteristics and Polar Diagrams, was sent to S1 ballot (LB/S1.22/284) on 16 November 1987. The ballot closed on 28 December 1987 with results as given in previous Minutes.

There are two unresolved negative votes on this proposed standard (Johnson, Larson-Davis; and Schomer, U.S. Army Construction Engineering Research Laboratory), plus unresolved comments from Marsh, Individual Expert.
4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

h) S1/WG10 - Scales and Ratios for Plotting - R.W. Young, Chair (continued)

The negative comments were circulated to S1 on 23 October 1989 as part of the 30-day review (S1.22/322) conducted according to ANSI procedures. This 30-day review followed a special meeting on this proposed standard, held on Monday, 22 May 1989, in conjunction with the ASA meeting.

The 30-day review on proposed ANSI S1.22-198X, sent to voting members of S1 on 23 October 1989, with a closing date of 30 November 1989 for responses (an indication of any change in former vote by the members of S1) resulted in the reiteration of the negative position of Schomer (U.S. Department of the Army), Larson-Davis (L. Davis has replaced D. Johnson as representative), and a change to a negative vote by T. Embleton (ASA) who agreed with one of the points made by A. Marsh. Mr. Marsh indicated that, provided the changes he described in his letter of 23 February 1990 are included in the draft, he would remove his objections to the proposed American National Standard.

Mr. Embleton later changed his vote back to positive (on 22 February 1990).

There was an issue of copyright brought up by Mr. Young, which was being worked out between Mr. Young and Mr. Strasberg, on behalf of the Acoustical Society. Based on resolution of the copyright matter, processing of the standard would continue according to ANSI procedures.

At the last meeting, Mr. Young said that he objected to the need for anyone who wished to utilize a standard, in whole or in part, from having to seek such permission from the ASA Standards Secretariat. Mr. Wong noted that S1.22 had not gone forward because Mr. Young had raised the copyright issue, which had not yet been resolved (see Minutes S1/334) for a copy of Mr. Young's memorandum dated 16 November 1990, addressed to Mr. Strasberg, Secretary of the Society, on this subject).

Mr. Wong said at the last meeting that the standard would not be published unless the Acoustical Society held an unrestricted copyright. It was furthermore stated that unless this copyright issue could be resolved within six months (i.e., by the time of the next meeting), the working group would be recommended for dissolution and the standard would not proceed to publication. A ballot was sent to S1 to determine the opinion of S1 on the procedure to be adopted in this matter. The ballot was circulated to S1 (LB/S1/342) on 15 January 1991, and closed on 28 February 1991 with majority approval (see item 9 c) under Procedural Ballots on page 15 for the results of this ballot).
4. **Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)**

h) **S1/WG10 - Scales and Ratios for Plotting - R.W. Young, Chair (continued)**

At the meeting, the issuance of a letter and proposed agreement to Mr. Young, by Mr. Strasberg on 2 April 1991, was noted (and discussed in the ASACOS meeting). Mr. Young responded by memorandum dated 20 April 1991 (see ATTACHMENT G). Since the memorandum contained extraneous material relating to topics other than the standard in question, Mr. Young was asked to sign a statement basically containing Paragraph 2 only of his memorandum dated 20 April 1991. A letter was prepared at the ASA meeting by Mr. Strasberg, and was signed by Mr. Young prior to the S1 meeting.

At the S1 meeting, Mr. Young read the first three paragraphs of his memorandum dated 20 April 1991 and said that this was his position. He also said that there were some errors in the letter prepared by Mr. Strasberg that he (Mr. Young) had signed, notably that his address was incorrectly given in San Diego, whereas he had, in fact, signed the letter in Baltimore. Mr. Young was asked by Mr. Wong, Chair S1, whether he would now sign the same letter, with the corrections made according to his (Mr. Young's) statements at the S1 meeting.

Mr. Young said he would sign such a letter. Mr. Wong asked that Mr. Young communicate with Ms. Brenig at the end of the S1 meeting so that the necessary corrections could be made and conveyed to Mr. Strasberg. Mr. Strasberg could then draft another letter for Mr. Young's signature at the ASA meeting. Mr. Wong stressed that the letter in question could not be changed in substance but only insofar as minor editorial corrections were concerned.

Mr. Young said he agreed to this but reiterated his points of departure and contention with the copyright notice as utilized by ASA for the standards it publishes. It was pointed out that ASACOS had, on 29 April 1991, formed an ad hoc group to review this latter point. (Mr. Young was present at the ASACOS meeting.)

Mr. Wong said that, provided Mr. Young signed the editorially corrected letter with the contents as previously noted (basically Paragraph No. 2 of Mr. Young's memorandum of 20 April 1991), Mr. Wong would go ahead and authorize the processing for publication of proposed ANSI S1.22. Mr. Wong thanked Mr. Young for his extensive work to date and said he hoped that this matter could be resolved to the satisfaction of all concerned.

If no such letter were forthcoming, however, then Mr. Wong said he would implement the decisions agreed to as a result of discussions at the last S1 meeting (ratified by letter ballot of S1) and disband the preparatory working group. The processing of S1.22 for approval as an ANSI standard would then be discontinued. Mr. Wong said that, in that case, he would most likely form a new working group and examine the existing international standard for its suitability as a proposed national standard.
4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

i) S1/WG11 - Phase Response of Transducers - V. Nedzelnitsky, Chair

Mr. Nedzelnitsky gave the following report at the last meeting:

The assessment of data on methods for determining the relative phase response of microphone systems has progressed to the point where it is hoped that a standard can be developed in a reasonable time. In particular, preliminary data from one National Laboratory on relative calibration in a three-port coupler were reported, and measurements at another laboratory on relative phase response in the free-field have begun.

Two laboratories have begun work on phase response of transducers; these are sufficiently encouraging to hope that we will be able to take the data and develop a standard on the phase response of microphones.

At the meeting, Mr. Nedzelnitsky said more time would be required in order to obtain the additional data needed. It was agreed that more time would be given to this working group to develop a first working draft.

j) S1/WG12 - Specification for and Calibration of Instruments to Measure Acoustic Intensity - G. Krishnappa, Chair

The working group last met on 30 April 1991 and reported that the final draft is expected to be ready for presentation to S1 by November 1991. Please see ATTACHMENT H for Mr. Krishnappa’s report.

k) S1/WG15 - Noise Canceling Microphones - R. McKinley, Chair

Mr. McKinley reported at the last meeting that it should be possible to prepare a draft standard for vote by May 1992.

l) S1/WG16 - FFT Acoustical Analyzers - R.J. Peppin, Chair

At the meeting, Mr. Nedzelnitsky reported that the working group met at the ASA meeting and that work on definitions was proceeding. Mr. Peppin submitted a report of this working group meeting (see ATTACHMENT I).

Mr. Peppin will be asked to provide a time framework for preparation of the first working draft.
4. Organizational matters and reports on working groups, including reports on letter ballots and international matters (continued)

m) **S1/WG17 - Sound Level Meters and Integrating Sound Level Meters - R.W. Krug, Chair**

Mr. Krug reported on the meeting of his working group on 1 May 1991 as follows:

S1/WG17 discussed specifications for exponential and integrating-averaging sound level meters. We will attempt to have a revised IEC 804 standard ready for the S1 Committee by the next meeting in Houston, Texas.

At the meeting, it was noted that ANSI S1.4-1983 Specification for sound level meters (plus amendment ANSI S1.4A-1985) needed revision in a timely fashion to meet ANSI procedural requirements. Messrs. Krug and Marsh will get together to discuss this further.

n) **S1/WG18 - Ultrasonic Sound Source for Leak Simulation - S.L. Morford, Chair**

A report of the initial working group meeting, held on 14 November 1990, was appended to the last Minutes (S1/334). The next meeting was to take place in March 1991. Mr. Morford has said there are no activities to report at this time.

Mr. Morford will be asked to prepare a Committee Draft (CD) within two years. Progress on this working group will be checked by the time of the next meeting.

o) **S1/WG19 - Insertion Loss of Windscreens - R. Peppin, Chair**

Mr. Arrington reported on the meeting of S1/WG19, held at the ASA meeting. Mr. Arrington said that the working group was in the definition phase and was much closer to deciding the direction to take. (Please see ATTACHMENT J for Mr. Peppin’s report.)

After discussion, it was decided to ask the chair of the working group whether new wording is required for the scope of this charge. Recommendations were made to include the words "including self noise" following the word "measurements" in the third line of the scope (see ATTACHMENT A).

p) **S1/WG20 - Ground Impedance - G. Daigle**

This is a new working group. Please see item 9 a) under Procedural Ballots on page 11 of these Minutes. The scope of the new working group is listed in ATTACHMENT A.
5. **Work items without working groups**

None to date.

6. **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 M for the report on the activities of TC 43 and TC 43/SC1 prepared by the Standards Secretariat).

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
- 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 K).
6. **International Matters (continued)**

   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 L. Mr. Nedzelnitsky's report is also attached ATTACHMENT C. The next meeting of IEC/TC 29 will be held in Rotorua (New Zealand) from 25 to 29 November 1991.

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

      o **ISO/TC 43 Acoustics and ISO/TC 43/SC 1 Noise - H.E. von Gierke, TAG Chair**

         a) A report has been prepared (see ATTACHMENT M).

         A report was given on the ISO/TC 43 meetings held in Rotterdam from 14 to 18 May 1990 in the previous Minutes (S1/331) along with copies of the draft resolutions. The Draft Reports from this meeting are available from the ASA Standards Secretariat. The next meeting of ISO/TC 43 and ISO/TC 43/SC 1 is expected to be held in December 1991 in Australia.

         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 international decision making on standards development.
6. **International Matters (continued)**

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

   o ISO/TC 43 Acoustics and ISO/TC 43/SC 1 Noise - H.E. von Gierke, TAG Chair (continued)

   a) (continued)

   Mr. von Gierke said he needed to know:

   (1) the 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.

7. **Review of Standards more than five years in existence**

   a) It has previously been reported that the U.S. Department of the Army wishes to adopt the revisions of standards ANSI S1.8-1989 and ANSI S1.10-1966 when they become available.

   b) 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 extension of time, except that no extension is granted beyond ten (10) years from the date of approval by ANSI.
7. **Review of Standards more than five years in existence (continued)**

   **b) continued**

   (i) A ballot for the reaffirmation and redesignation (under S12) of those S1 standards in the sound power series was sent to S1 (LB/S1/318) on 7 August 1989. The ballot was closed on 18 September 1989. The submittal to ANSI of this list of standards for proposed reaffirmation (and redesignation) for public comment in ANSI's STANDARD ACTION was made on 30 October 1989. The eight standards were sent to ANSI Board of Standards Review (BSR) on 26 June 1990 and were approved on 2 August 1990. Please see the listing in Section 3, page 3, for those S1 standards which have now been redesignated and published as S12 standards.

   (ii) The S1 standards will be closely reviewed to see which ones now require revision, in line with ANSI Procedures for the timely update of standards.

8. **New International Standards Available**


   c) ISO 4869-1:1990 Acoustics - Hearing protectors - Part 1: Subjective method for the measurement of sound attenuation

   d) ISO 5136-1990 Acoustics - Determination of sound power radiated into a duct by fans - In-duct method

9. **Procedural Ballots**

   a) A new working group, S1/WG20 Ground Impedance, was formed following approval by letter ballot (LB/S1/344), circulated to S1 on 1 February 1991. The ballot was closed on 8 March 1991 and the results of the ballot are given in ATTACHMENT N. The scope of this new working group is given in ATTACHMENT A.

   b) At the last meeting, Mr. Wong referred S1 to the letter from Mr. P.R. Saxon of the Air Movement and Control Association, Inc. (AMCA) (reported in S1 Minutes S1/334). Mr. Wong sought the opinion of S1 on the question posed concerning ANSI S1.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters. Further to ANSI procedures, the Standards Committees are asked to officially give interpretations when so required.
9. **Procedural Ballots (continued)**

b) continued

At the last meeting it was VOTED to send the proposed interpretation, as given in a draft letter from Mr. Wong, dated 1 November 1990 with amendments made at this S1 meeting (reported in the last Minutes S1/334).

Accordingly, a ballot was circulated to S1 (LB/S1/341) on 15 January 1991. The ballot closed on 28 February 1991 and the results of the ballot (unanimously approving the proposed response to AMCA by S1) are given in ATTACHMENT Q. The letter written to Mr. Saxon by Ms. Brenig on 1 March 1991, responding to his letter to Mr. Wong dated 23 October 1990 is shown in ATTACHMENT P.

Further to this letter, AMCA wrote again to ASA on 12 March and on 25 April 1991. Mr. Wong suggested a response, basically stating that it is up to the manufacturer to decide what standards his instruments should meet (see ATTACHMENT P for the correspondence).

**NOTE** Following the S1 meeting, on 10 May 1991, the response given in ATTACHMENT Q, was submitted by the ASA Standards Secretariat to the Air Movement and Control Association.

c) As recommended at the last meeting of S1 (reported in the S1 Minutes (S1/334), a ballot was to be taken on the following recommendation. The ballot was circulated to S1 (LB/S1/342), on 15 January 1991 as noted below:

**Approval of recommendation to disband working group S1/WG10 Scales and Ratios for Plotting -** by the time of the next meeting (i.e. on Thursday, 2 May 1991) if no action is taken to resolve the problem concerning copyright of proposed ANSI Standard S1.22-199X Scales and Ratios for Plotting.

The ballot closed on 28 February 1991 with majority approval for the recommendation (the results are reported in ATTACHMENT R).

d) 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
9. **Procedural Ballots (continued)**

d) continued

Accordingly to S1 (LB/S1/343) on 1 February 1991. The ballot closed on 15 March 1991 with majority approval of the amendment to the Standards Committee Procedures. The results are given in ATTACHMENT S of these Minutes. (Subsequent to the ballot, C.D. Bohl, R. McKinley and R.J. Peppin reversed their negative votes resulting in unanimous approval of the proposed changes.)

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

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

A Letter Ballot was circulated (LB/S1/340) on 22 January 1991 on the proposed appointments for 1991/1992. The list of officers and individual experts are attached for information (see ATTACHMENT T). The ballot closed on 5 March 1991 with majority approval of the list of officers and individual experts for 1991/1992. The results of the ballot are given in ATTACHMENT T.

f) According to ANSI's Procedures, under which the Accredited Standards Committees operate, the addition or termination of members shall be subject to approval by vote of the committee after the application has been processed or the membership reviewed in accordance with the above-mentioned procedures.

Requests for membership on the standards committees for which the Acoustical Society has responsibility are processed within the ASA Committee on Standards (ASACOS), as the Secretariat for the Standards Committees, in concert with the Chairs of the respective Standards Committees. The recommendations are then subject to ratification by the individual Standards Committees.

No current request for membership has been received.
10. **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 1 December 1989, with a current list of S1 projects for use under the new Project Initiation Notification System (PINS). These are expected to eventually be tabulated in a computerized system eventually by ANSI.

11. **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 work perfect 5.1).

   Additionally, ASACOS had adopted a policy on **metrication**, endorsing that of ANSI, to use SI units in all new standards.

12. **Future Meetings**

    The next meeting of S1 will be held on Thursday, 7 November 1991, in Houston, Texas, commencing at 1:30 PM.

13. **Adjournment**

    The meeting was adjourned at 3:50 PM.

    [Signature]

    Avril Brenig
    Standards Manager
ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS - S1

SECRETARIAT: Acoustical Society of America

SCOPE: Standards, specifications, methods of measurement and test, and terminology in the field of physical acoustics including architectural acoustics, electroacoustics, sonics and ultrasonics, and underwater sound, but excluding those aspects which pertain to biological safety, tolerance and comfort.

CHAIR: G.S.K. Wong
Institute for National Measurement Standards
National Research Council
Montreal Road
Ottawa, ON K1A 0R6
Canada
(613) 993-6159

VICE CHAIR: R.L. McKinley
U.S. Air Force
Aerospace Medical Research Laboratory
Biological Acoustics Branch
AAMRL/BBA
Wright-Patterson AFB
OH 45433
(513) 255-4244

SECRETARY: A. Brenig
Standards Secretariat
Acoustical Society of America
335 East 45th Street
New York, NY 10017-3483
(212) 661-9404

WORKING GROUP TITLE AND SCOPE CHAIR

(a) S1/Advisory
S1 Advisory Planning Committee - Be cognizant of needs within the scope of the Committee, and organize those needs in accordance with priority, and other relevant factors, into a coherent three year plan for Committee activity. This three year plan for the preparation of standards should include those which need updating, having regard to the international work items and standards, and the need for timely review (reaffirmations, revisions, withdrawals, etc.) of all national standards, and the priority of new standards needs.

The plan of action should be developed with attention to (i) the overall Committee scope, (ii) its technological needs, (iii) the relation of national to international standardization, (iv) the rate of development of new standards, and (v) the timeliness of the preparation of revisions of standards.

R.L. McKinley
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<tr>
<th>WORKING GROUP</th>
<th>TITLE AND SCOPE</th>
<th>CHAIR</th>
</tr>
</thead>
<tbody>
<tr>
<td>(c) S1/WG2</td>
<td><strong>Attenuation of Sound in the Atmosphere</strong> - Preparation of standards describing recommended procedures to account for attenuation of sound waves propagating through the atmosphere.</td>
<td>A.H. Marsh</td>
</tr>
<tr>
<td>(e) S1/WG5</td>
<td><strong>Band Filter Sets</strong> - Review of international documents/standards</td>
<td>L.W. Sepmeyer</td>
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<tr>
<td>(f) S1/WG7</td>
<td><strong>Personal Dosimeters</strong> - Revision of S1.25-1978 Specifications for Personal Noise Dosimeters.</td>
<td>J. Earshen</td>
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<tr>
<td>(g) S1/WG8</td>
<td><strong>Acoustical and Electroacoustical Vocabulary</strong> - Revision of S1.1-1960 Acoustical Terminology, but excluding mechanical shock and vibration and psychoacoustical vocabulary.</td>
<td>D.L. Johnson</td>
</tr>
<tr>
<td>(h) S1/WG10</td>
<td><strong>Scales and Ratios for Plotting</strong> - To develop a standard, harmonized with IEC 263-1982, that specifies standard proportions for the scales used to plot frequency characteristics and polar diagrams.</td>
<td>R.W. Young</td>
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<tr>
<td>(i) S1/WG11</td>
<td><strong>Phase Response of Transducers</strong> - To develop an adequate base of quantitative experimental data, to assess the adequacy of existing knowledge and techniques, and to develop a standard specifying the calibration procedures to be used for electroacoustic transducers in air.</td>
<td>V. Nedzelnitsky</td>
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<tr>
<td>(j) S1/WG12</td>
<td><strong>Specifications for and Calibration of Instruments to Measure Acoustic Intensity</strong> - To develop a standard specifying the performance characteristics and calibration procedures of instruments to measure acoustic intensity at an arbitrary point in space.</td>
<td>G. Krishnappa</td>
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<tr>
<td>(k) S1/WG15</td>
<td><strong>Noise Canceling Microphones</strong> - Preparation of standards defining directional (noise discriminating) and noise canceling microphones and microphone systems and describing recommended procedures for measuring their performance in a noise field.</td>
<td>R.L. McKinley</td>
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<tr>
<td>WORKING GROUP</td>
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<tr>
<td>(I) S1/WG16</td>
<td><strong>FFT Acoustical Analyzers</strong> - to develop a specification standard that will apply to Fast Fourier Transform (FFT) analyzers</td>
<td>R.J. Pepin</td>
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<td>(m) S1/WG17</td>
<td><strong>Sound Level Meters and Integrating Sound Level Meters</strong> - to develop a standard for specifying exponential and integrating averaging sound level meters.</td>
<td>R.W. Krug</td>
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<td>(n) S1/WG18</td>
<td><strong>Ultrasonic Sound Source for Leak Simulation</strong> - to develop a standard method for producing a repeatable ultrasonic sound source for the calibration and testing of ultrasonic leak detectors.</td>
<td>S. Morford</td>
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<tr>
<td>(o) S1/WG19</td>
<td><strong>Insertion Loss of Windscreens</strong> - to develop a test method that characterizes windscreens so that users can know the effect of windscreens on measurements. Specifically to consider screens that fit commercial (1/2&quot; and 1/4&quot;) measuring microphones, commonly used for outdoor and indoor measurements in conditions with wind. Also, screens for intensity probes would be considered.</td>
<td>R.J. Pepin</td>
</tr>
<tr>
<td>(p) S1/WG20</td>
<td><strong>Ground Impedance</strong> -</td>
<td></td>
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<tr>
<td></td>
<td>i) <strong>Measurement of Ground Impedance</strong> - to develop a standard describing recommended procedures to characterize and the instrumentation to measure the acoustic properties of a wide variety of natural ground surfaces outdoors.</td>
<td>G. Daigle</td>
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<tr>
<td></td>
<td>ii) <strong>Attenuation of Sound due to the Ground</strong> - to develop a standard describing recommended procedures to account for the attenuation of sound propagating in the presence of the ground.</td>
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# STATUS REPORT

**FIELD:** ACOUSTICS  
**COMMITTEE:** S1

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<td>Acoustical Terminology (including Mechanical Shock and Vibration) (S1/WG8)</td>
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<td>S1.2-1962 (R 1976)</td>
<td>Method for the Physical Measurement of Sound</td>
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<td>S1.4-1983</td>
<td>Sound Level Meters, Specifications for includes:</td>
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<td>S1-4A-1985</td>
<td>Amendment to ANSI S1.4-1983</td>
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<td>S1.6-1984 (R 1990)</td>
<td>Preferred Frequencies, Frequency Levels, and Band Numbers for Acoustical</td>
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<td>Measurements</td>
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**STATUS**
- NS - NEW STD IN PROCESS
- RF - REAFFIRMATION IN PROC.
- RV - REVISION IN PROCESS
- WD - WITHDRAWAL IN PROCESS
- ES - ENVIRONMENTAL SOUND
- SP - SUBMITTED PINS FORM

**ACTIVITY**
- NR - NEEDS REVIEW
- AP - ANSI APPROVED
- OP - OUT OF PRINT
- NA - NOT YET AVAIL.
- UD - UP-TO-DATE
- 0-NONE
- 1-FORMATIVE STAGE
- 2-DRAFTING STANDARD
- 3-VOTING ON PROPOSAL
- 4-ANSI STANDARDS ACTION
- 5-OBJECTIONS BEING CONSIDERED
- 6-ANSI CONSIDERING APPROVAL
- C-ACCREDITED CANVASS
- O-ACCREDITED ORG.
- S-ACCREDITED STDS. COMMITTEE
- X-NOT INTENDED FOR ANSI
# Status Report

**Field:** Acoustics

**Committee:** S1

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<td>Preferred Reference Quantities for Acoustical Levels</td>
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<td>S1.9</td>
<td>Designation Open</td>
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<td>S1.10-1966 (R 1986)</td>
<td>Calibration of Microphones, Method for the (revision of Z24.4 and Z24.11) (S1/WG1)</td>
<td>RV</td>
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<td>S1.11-1986</td>
<td>Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters (S1/WG5)</td>
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<td>S1.12-1967 (R 1986)</td>
<td>Laboratory Standard Microphones, Specification for (revision of Z24.8) (S1/WG1)</td>
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**Status:**
- NS - New Std In Process
- RF - Reaffirmation In Process
- RV - Revision In Process
- WD - Withdrawal In Process
- ES - Environmental Sound
- SP - Submitted Pins Form

**Activity:**
- NR - Needs Review
- AP - ANSI Approved
- OP - Out of Print
- NA - Not Yet Available
- UD - Up-to-Date

**Method:**
- C - Accredited Canvass
- O - Accredited Organization
- S - Accredited Stds. Committee
- X - Not Intended for ANSI
## Status Report

**Field:**

**STATUS:** ACOUSTICS

**COMMITTEE:** S1

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<td>Measurement of Sound Pressure Levels, Methods for (S1/WG4)</td>
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<td>Calibration of Underwater Electroacoustic Transducers (S1/WG9)</td>
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<td>ES - SUBMITTED PINS FORM</td>
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<td>SP - UP-TO-DATE</td>
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**STATUS:** ACoustics

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<td>S1.22</td>
<td>Scales and Ratios for Plotting (S1/WG10)</td>
<td>NA, SP</td>
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<td>Evaluation of Cleaning Performance of Ultrasonic Equipment</td>
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<td>S1.25-1978</td>
<td>Personal Noise Dosimeters, Specifications for (S1/WG7)</td>
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<td>Personal Noise Dosimeters, Specifications for (S1/WG7)</td>
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<td>Method for Calibration of the Absorption of Sound by the Atmosphere (S1/WG3)</td>
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<td>Specification for Acoustical Calibrators</td>
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**Status Definitions:**

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

**Activity Definitions:**

- 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
- 0-ACCREDITED ORGANIZATION
- S-ACCREDITED STDS. COMMITTEE
- X-NOT INTENDED FOR ANSI
## STATUS REPORT

**FIELD:** ACOUTICS

**COMMITTEE:** S1

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<td>Evaluation of Digital Instruments, Methods for</td>
<td>NS;NA</td>
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<td>S1.42-1986</td>
<td>Design Response for Weighting Networks for Acoustical Measurements (S1/WG13)</td>
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<td>Complete Integrating Sound Level Meter, Specification for (incorporating parts of S1.4-1983) (S1/WG3)</td>
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- 2-DRAFTING STANDARD
- 3-VOTING ON PROPOSAL
- 4-ANSI STANDARDS ACTION
- 5-OBJECTIONS BEING CONSIDERED
- 6-ANSI CONSIDERING APPROVAL

**METHOD**
- C-ACCREDITED CANVASS
- O-ACCREDITED ORGANIZATION
- S-ACCREDITED STDS. COMMITTEE
- X-NOT INTENDED FOR ANSI
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 Nedzelitsky, Sc.D.  
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).

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.


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.


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.


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
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.
To: V. Nedzelinitsky
From: Bob Krug
Subject: IEC/TC29

Date: March 19, 1991

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)

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 LA be called LAT to be consistent with IEC 801-02-16 as well as ANSI/ASME Y10.11-1984, Letter Symbols and abbreviations...Acoustics.
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

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:


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.
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".
11 April 1991

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


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 (Deltone)
John L. Fletcher (S3)
Roger Kasten (ASHA)
Ralph F. Naunton (National Institute on Deafness)
Jerry Popka
Carole M. Regin (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
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

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

encl.

cc:
A. V. Brenig
K. M. Eldred
R. W. Krug
L. A. Wilber
G. S. K. Wong
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 $10^{1.00}$ Hz and $10^{1.40}$ 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.
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.
To: V. Nedzelntsky
From: Bob Krug
Subject: IEC/TC21

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

Signed:

CIRRUS RESEARCH INC.
6618 WEST STATE STREET, SUITE 170
WAUWATOSA, WI 53213
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.
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. Proves, 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. Proves
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. Proves
L. A. Wilber
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 below 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 to 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 postauricuclar models). The USNC/IEC hopes that standardization of much smaller plugs will occur.
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,

[Signature]

David A. Preves, Ph.D
P.O. Box 59072
Minneapolis, MN 55459
(800) 328-6105
Report to the S1 Meeting from Working Group S1/WG2 - Attenuation of sound in the atmosphere

Working Group S1/WG2 did not meet during the Spring 1991 meeting of the Acoustical Society of America in Baltimore, Maryland.

Members of S1/WG2 participated in, and contributed comments to, the review of the proposed International Standard Method for calculating the attenuation of sound by atmospheric-absorption processes during propagation outdoors in Part 1 of ISO 9613. It is the intention of S1/WG2 to revise ANSI S1.26-1978 Method for the calculation of the absorption of sound by the atmosphere so that it contains the same requirements as the International Standard, with the important addition of an appendix recommending a practical method to estimate the atmospheric-absorption losses from measurements of one-third-octave-band sound pressure levels at a distant receiver location in conjunction with measurements of meteorological conditions along the sound-propagation path.

A.H. Marsh, Chair S1/WG2
Submitted 1 May 1991
TO: THE VOTING MEMBERS OF ACCREDITED STANDARDS COMMITTEE ON ACOUSTICS, S1

THIRTY (30) DAY REVIEW on the proposed revision of ANSI S1.25-1978 Specification for Personal Noise Dosimeters, draft dated February 1991

By letter ballot S1.25/302, a draft of the proposed revision of ANSI S1.25-1978 Specification for Personal Noise Dosimeters, draft dated April 1988, was circulated to S1 for vote on 7 December 1988. This ballot was closed on 23 January 1989. A positive vote, three negative votes (Michel, Bruel & Kjaer Instruments; Nedzelinitzky, National Institute of Standards and Technology; and Peppin, Scantek, Inc.), 1 abstention (AT&T Consumer Products), and 1 ballot not returned (Ozoq, US Army Aeromedical Research Laboratory).

A negative position, with comments, was also received from Young, Individual Expert on S1.

Changes were made to the text of the proposed standard in order to satisfy the comments which had been received. The revised text was sent to those with comments (draft dated August 1990), and Mr. Michel changed his vote to affirmative by letter dated 5 December 1990.

Letters were sent on 18 November 1990 to Messrs. Nedzelinitzky and Peppin, responding to their comments, enclosing the August 1990 draft, and stating what specific changes had been made to the document. No reply has been received from either Mr. Nedzelinitzky or Mr. Peppin to date.

Mr. Young's initial comments were dated 14 January 1989 (in response to the letter ballot); Mr. Young also attached a copy of a memorandum dated 13 April 1987 as part of his comments. Most of these comments were addressed in the revised document, dated August 1990. This
document (August 1990, plus corrections of November 1990) was essentially a preview of the February 1991 draft which is attached to this 30-day review circulation. Mr. Young submitted further comments (which are attached) dated 8 December 1990, in his response to the letter from Mr. Earshen dated 18 November 1990. Mr. Earshen responded to these additional comments by letter of 18 February 1991, making further changes to the text. The comments received from Mr. Young (see his memorandum dated 8 December 1990) are considered to be additional to his earlier comments which were satisfied by the revised text dated August 1990.

Another memorandum, dated 28 February 1991, was sent to Mr. John Earshen, and Mr. Earshen responded to Mr. Young by letter dated 11 March 1991. Both of these communications are included in this 30-day review, for your information.

Accordingly, the revised text, dated February 1991, is now enclosed for your review. Outstanding negative votes still remain, from Messrs. Nedzelnitsky and Peppin, and there is an outstanding negative position from Mr. Young, who has not responded to the 18 February 1991 letter from Mr. Earshen (to date). All of these comments are enclosed, together with related correspondence, for your review.

The materials which are enclosed with this 30-day review are as follows:

<table>
<thead>
<tr>
<th>ATTACHMENT</th>
<th>CORRESPONDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Letter from J.J. Earshen to R. W. Young, dated 11 March 1991</td>
</tr>
<tr>
<td>B</td>
<td>Memorandum from R.W. Young to J.J. Earshen dated 28 February 1991</td>
</tr>
<tr>
<td>C</td>
<td>Letter from G.S.K. Wong to A. Brenig dated 28 February 1991</td>
</tr>
<tr>
<td>D</td>
<td>Letter from J.J. Earshen to A. Brenig dated 18 February 1991</td>
</tr>
<tr>
<td>E</td>
<td>Letter from J.J. Earshen to R. W. Young dated 18 February 1991</td>
</tr>
<tr>
<td>F</td>
<td>Memorandum from R.W. Young to J.J. Earshen dated 8 December 1990</td>
</tr>
<tr>
<td>G</td>
<td>Letter from G.C. Michel to J.J. Earshen dated 5 December 1990</td>
</tr>
<tr>
<td>H</td>
<td>Letter from J.J. Earshen to R.W. Young dated 23 November 1990</td>
</tr>
<tr>
<td>I</td>
<td>Letter from J.J. Earshen to R. W. Young dated 18 November 1990</td>
</tr>
<tr>
<td>J</td>
<td>Letter from J.J. Earshen to V. Nedzelnitsky dated 18 November 1990</td>
</tr>
</tbody>
</table>
The materials which are enclosed with this 30-day review are as follows: (Cont.)

**ATTACHMENT** | **CORRESPONDENCE**
--- | ---
K | Letter from J.J. Earshen to R.J. Peppin dated 18 November 1990
L | Letter from G.S.K. Wong to A. Brenig dated 27 August 1990

**COMMENTS**

M | Comments of V. Nedzelnitsky dated 14 January 1989
N | Comments of R.J. Peppin dated 19 December 1988
O | Comments of R.W Young dated 14 January 1989 (including memorandum from R.W. Young dated 13 April 1987)

**DOCUMENT**


Accordingly, you now have an opportunity to change your original vote in line with the comments which are still outstanding. If we do not hear from you by 14 May 1991, we will assume that you wish your previous vote to stand. We then plan to submit proposed ANSI S1.25-199X Specification for Personal Noise Dosimeters, draft dated February 1991, to ANSI for formal approval.

The Chair of S1, Acoustics, Mr. G.S.K. Wong, and the chair of the preparatory working group, Mr. J.J. Earshen, both recommend approval of the proposed standard. It is considered that every effort has been made, over a long period of time, to meet all objections and comments on the proposed standard, and that consensus has been reached in Accredited Standards Committee S1.

Avril Brenig  
Standards Manager
22 February 1991

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/339 sent to the Organizational Members of Standards Committee S1 on 20 November 1990 to be closed on 2 January 1991, deadline extended to 23 January 1991


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

<table>
<thead>
<tr>
<th>CLASSIFICATION OF MEMBERS</th>
<th>AFFIRMATIVE VOTES</th>
<th>NEGATIVE VOTES</th>
<th>ABSTENTIONS</th>
<th>NOT RETURNED</th>
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<tbody>
<tr>
<td>P - PRODUCER</td>
<td>7</td>
<td>4</td>
<td>0</td>
<td>8</td>
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<td>C - CONSUMER</td>
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<tr>
<td>GI - GENERAL INTEREST</td>
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</tbody>
</table>

TOTAL 19

TOTAL 19
Continuation of results of letter ballot S1/339:

AFFIRMATIVE VOTES:

Davis, L.
Embleton, T.
Fung, T.
Luttrell, L.F.
Schomer, P.D.
Sepmeyer, L.W.
Wang, S.

Larson-Davis Laboratories
Acoustical Society of America
U.S. Army Communication Electronics Command
Computer & Business Equipment Manufacturers Association
U.S. Army Construction Engineering Research Laboratory
Audio Engineering Society, Inc.
Air-Conditioning & Refrigeration Institute

NEGATIVE VOTES:

Arrington, J.
Bohl, C.D.
Michel, G.C.
(Walker, B.E.
(alternate)

U.S. Army Primary Standards Laboratory
American Industrial Hygiene Association
Bruel & Kjaer Instruments, Inc.
National Council of Acoustical Consultants

ABSTENTIONS:

None

NOT RETURNED:

Kalb, J.
Kushler, B.
Linderoth, R.T.
McKinley, R.
Mozo, B.
Nedzelitsky, V.
Peppin, R.J.
Whitesell, S.R.

U.S. Army Human Engineering Laboratory
Exchange Carriers Standards Association
Sonotronics, Inc.
U.S. Department of the Air Force (USAF)
U.S. Army Aeromedical Research Laboratory
National Institute of Standards and Technology
Scantek, Inc.
AT&T
Continuation of results of letter ballot S1/339:

INDIVIDUAL EXPERTS:

1) Individual Experts stating they will participate in the review of this document:
   - Ehrlich, S.L.
   - Gross, E.E. Jr.
   - Maling, G.C., Jr.
   - Thornton, W.R.

2) Individual Experts stating they will not participate in the review of the document:
   - Johnson, D.L.

3) Comments and/or recommendations were received from 3 Individual Experts as follows:
   - Ehrlich, S.L.
   - Gross, E.E. Jr.
   - Maling, G.C., Jr.

OTHER

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

   John J. Earshen  
   (C-S1/WG7, M-S12-WG15)  

   General Comments

   Avril Brenig  
   Standards Manager

cc: Vice Chair, Standards Committee  
    Chair and Vice Chair, ASACOS
S1 BALLOT

Return to: Letter Ballot Department
Due date: 2 January 1991

LETTER BALLOT

ACCREDITED STANDARDS COMMITTEE S1,
ACOUSTICS


Authorized by: G.S.K. Wong, Chair S1
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 the development of a main terminology standard, to include terms from 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.
Copyright Memorandum 20 April 1991

From: Robert W. Young, 1696 Los Altos Road, San Diego, CA 92109; tel (619) 273-8732

To: K.M. Eldred, ASA Standards Director


Subj: Copyright notice for Scales and Sizes... S1.22 and others

1. This is to confirm the understanding expressed in Murray Strasberg’s letter to me of 2 April 1991, that I want to insure that I and others can legally quote portions of a standard copyrighted by the Acoustical Society of America, without first obtaining approval of the Society for so quoting.

2. To expedite immediate publication of S1.22, Scales and Sizes for Plotting Frequency Characteristics and Polar Diagrams, I hereby consent to use of whatever copyright notice is customary at the time of submission to the American National Standards Institute.

3. I would, however, prefer a statement which is now being used by the ASME and IEEE: “No part of this document may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.” Yet in view of the long-established custom of “fair use” that allows, without specific permission, duplication and quotation of maybe as much as 10% of a copyright document, I recommend a better wording: “This Standard may not be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the Acoustical Society of America.”

4. I hereby propose for discussion by ASACOS on 29 April 1991 a wording even less restrictive. In my opinion, the teacher of a class having acoustical connotations should be allowed to make for his class last-minute extracts of an acoustical standard, without asking the American Institute of Physics for permission to do so, and without the nuisance of paying a fee to the Copyright Clearance Center, Salem, MA 01970.

5. On the chance that ASACOS fails, as it has in the past, to consider adequately such freedom of copying without previous permission, I hereby request a time for discussion of this subject in the agenda of the Executive Council. I would then also question the appropriateness of publication by the Acoustical Society of America of standards over which the Society has little control of technical content. I want to urge that the Acoustical Society of America be the technical sponsor of acoustical standards, in much the way that ASME and IEEE approve standards in their fields. The action required is that Standards Committees S1, S2, S3, S12 now Accredited by ANSI be reorganized to Accredited Organization Committees responsible to the Acoustical Society of America, and that technical approval again be delegated to ASACOS.

6. I shall be available Sunday evening, 28 April 1991, and all day Monday except the time of ASACOS. I am committed to the Batchelder session on Friday.

7. Murray referred to S1.22 by the title assigned to the Working Group S1-10. The correct title is "Scales and Sizes...."
Dear Bob:

We have had two discussions of your concerns regarding an ASA copyright on the proposed ANSI Standard S1.22, Scales and ratios for plotting frequency characteristics and polar diagrams since we received your response of 16 November 1990 to my letter dated 6 July 1990. The first was on 26 November 1990 after the ASACOS discussion of the subject, as reported in the ASACOS Minutes for that day, and the second was over the telephone earlier today. As I now understand it, your objection is not to ASA obtaining a copyright on the proposed standard, but rather a desire to insure that you and others can quote portions of the standard in written or published discussions of it without obtaining ASA approval.

In today's conversation you indicated that because of your desire to expedite publication of this standard, you are now willing to send a letter to the ASA Standards Director informing him that you do not object to ASA publication of this standard with the same notice of ASA copyright as now appears in the other standards published by ASA.

To expedite the matter even further, I am enclosing a revised version of the agreement which was enclosed with my previous letter. There are two revisions: (1) the title of the standard has been changed to conform with its present title; and (2) the phrase "quote from said document" has been added to the Stipulation to indicate that your right to quote from the standard will not be restricted. It would simplify matters if you sign and return this version to the ASACOS Secretariat. But provide your own version of an agreement if you prefer.

I understand that you intend to request that the entire subject of copyrights of standards and restrictions on public use be placed on the agenda for the next ASACOS meeting. In this regard, Bob, please note that the recent copyright notices in standards published by both ASME and IEEE contain the statement, "No part of this document may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher."

Yours sincerely,

M. Strasberg

cc: A. Powell
    K. Eldred
    G. Wong
    A. Brenig
AGREEMENT

WHEREAS I, Robert W. Young, the undersigned, have participated in the development of a document entitled

American National Standards Institute Standard S1.22,
Scales and ratios for plotting frequency characteristics and polar diagrams,

hereinafter called the "document," and am the originator and author of material constituting a portion of said document;

WHEREAS I desire that said document be published and distributed by the Acoustical Society of America, hereinafter called the "Society," therefor

KNOW ALL MEN BY THESE PRESENTS that I do hereby indicate my approval of the publication and distribution of said document by said Society, and that I, for good and valuable consideration, will make no objection nor cause any impediment to be imposed to the publication, distribution, or sale of said document by said Society or its assigns, worldwide and for all time, or to the registration of copyright to said document by said Society, subject to the following

STIPULATION:

I reserve the right to quote from said document, or to copy that portion of said document originated by me for my own use or for reprinting in a compilation or publication of my own works, with the understanding that reprinted material shall include a notice indicating that the material is a portion of said document which is copyrighted by said Society.

IN WITNESS WHEREOF, this AGREEMENT has been duly executed

this ______________ day of ______________, 1991.

__________________________
Robert W. Young
Report on Meeting of S1/WG12-Instruments to Measure sound Intensity

The meeting held on 30 April 1991, was attended by 20 members and visitors. The ANSI position on the IEC draft for adaptation as IEC Secretariat draft was discussed and consensus reached.

The ANSI fourth working draft is under preparation by the S1/WG12 Chair. This draft is expected to be ready for distribution to the members of the working group in another eight to ten weeks. After obtaining comments from the members on the draft, the revised version will be submitted to S1 Committee for balloting. It is hoped by the next ASA meeting the revised draft should be ready for submission to S1 Committee.

G. Krishnappa, S1/WG12 Chair
2 May 1991
Report on Meeting of S1/WG 16-FFT-Analyzer

The working group met April 30, 1991 to discuss progress, or lack thereof, to date. We seemed to agree that the problems were due to limited time available to participants and the lack of a demand for prompt development by potential users.

As a result, we decided to expect to take some time with this standard, to work at a slower but achievable pace, and slowly accomplish some work. We (those present) reduced a list of about 200 terms to about 30 terms for which we expect to have definitions within about a month. We will add more terms until we have a set of complete definitions, thus eventually completing our tasks for the preliminary phase of this work.

R. Peppin, S1/WG 16 Chair
2 May 1991
We have a set of procedures developed, not in standard form, that will be made into a first draft by our next meeting. The draft will consist of two test procedures for determining insertion loss of windscreens; both initially will be for still air and standard conditions: 1) diffuse field (reverberant room), 2) free field (anechoic room). We will have a working group draft by next meeting.

R. Peppin, S1/WG19, Chair
2 May 1991
7 December 1990


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
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,

Garth C. Kushnier
Vice President
Standards Technology

GWK/90530

Encls.

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

<table>
<thead>
<tr>
<th>TAG</th>
<th>DOCUMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1, S3</td>
<td><strong>IEC/TC 29(Central Office)162</strong> 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.</td>
</tr>
<tr>
<td>S3</td>
<td><strong>IEC/TC 29(Central Office)163 E</strong> 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.</td>
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**SECRETARIAT DOCUMENTS**

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<tr>
<td>S1, S3</td>
<td><strong>IEC/TC 29(Secretariat)199</strong> 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.</td>
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<tr>
<td>S1, S3</td>
<td><strong>IEC/TC 29(Secretariat)200</strong> 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.</td>
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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)

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<td>S3</td>
<td>IEC/TC 29(Secretariat)210 Draft - Second CD: IEC/CD 645-3: Methods for the specification of acoustic test signals of short duration for audiometric and neuro-otological purposes</td>
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<tr>
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<td>Announced to S3 (S3/342) on 8 March 1991 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.</td>
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<tr>
<td>S3</td>
<td>IEC/TC 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</td>
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<td>IEC/TC 29(Secretariat)209 First CD: Amendment to Publication 119-0 Hearing Aids. Measurement of electroacoustical characteristics</td>
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<td>IEC/TC 29(Secretariat)211 First CD: Amendment to Publication 90:1973. Dimensions of plugs for hearing aids</td>
</tr>
<tr>
<td></td>
<td>Announced to S3 (S3/323) on 8 March 1991 with D.A. Preves coordinating comments on these documents. Comments were submitted to USNC for IEC by the Technical Advisor on 11 April 1991.</td>
</tr>
<tr>
<td>S1, S12</td>
<td>IEC/TC 29(Secretariat) 212 Second CD: Instruments for the measurement of sound intensity</td>
</tr>
<tr>
<td></td>
<td>Announced to S1 and S12 (S1/348) on 5 April 1991 with J. Tichy coordinating comments on this document. Comments were submitted to USNC for IEC by the Technical Advisor on 10 May 1991.</td>
</tr>
<tr>
<td>S1, S12</td>
<td>IEC/TC 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</td>
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<td></td>
<td>Announced to S1 and S12 (S1/350) on 30 April 1991 with J.C. McCann coordinating comments on this document.</td>
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</table>
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)

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<tr>
<td>S1, S3</td>
<td>IEC/TC 29(Secretariat) 214 Second draft CD: Random-incidence and diffuse field calibration of sound level meters</td>
</tr>
<tr>
<td>S12</td>
<td>IEC/TC 29(Secretariat) 214 Second draft CD: Random-incidence and diffuse field calibration of sound level meters</td>
</tr>
</tbody>
</table>

Announced to S1, S3 and S12 (S1/351) on 30 April 1991 with V. Nedzelmintsy 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.
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)

<table>
<thead>
<tr>
<th>TAG</th>
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<tbody>
<tr>
<td>S12</td>
<td>ISO:5131:1982/DAM1 Acoustics - Tractors and machinery for agriculture and forestry - Measurement of noise at the operator’s position - Survey method</td>
</tr>
</tbody>
</table>

Announced to S12 (S12/193) on 11 September 1990, with S.I. Roth coordinating comments and recommendations for vote on this document. The U.S. submitted an affirmative vote with comments, 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).

| S12 | ISO/DIS 3743-1 Acoustics - Determination of sound power levels of noise sources - Engineering methods for small, movable sources in reverberant fields - Part 1: Comparison method in hard-walled test rooms |

Announced to S12 (S12/196) on 30 October 1990, with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. submitted an affirmative vote with comments, to ANSI on 6 February 1991, which was transmitted to ISO by ANSI on 11 February 1991.

| S12 | ISO/DIS 3744 Acoustics - Determination of sound power levels of noise sources - Engineering method employing an enveloping measurement surface in an essentially free field over a reflecting plane |

Announced to S12 (S12/195) on 30 October 1990, with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. submitted a negative vote with comments, to ANSI on 6 February 1991, which was transmitted to ISO by ANSI on 11 February 1991.
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)

<table>
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<tbody>
<tr>
<td>S1</td>
<td>ISO/DIS 9613-1 Acoustics - Attenuation of sound during propagation outdoors - Part 1: Method of calculation of the attenuation of sound by atmospheric absorption</td>
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</table>

Announced to S1 (S1/338) on 6 November 1990, with A.H. Marsh coordinating comments and recommendations for vote on this document. The U.S. submitted an affirmative vote with comments, to ANSI on 11 March 1991, which was transmitted to ISO by ANSI on 14 March 1991.

COMMITTEE DRAFTS (CD)

| S12 | First ISO/CD 3746 for Acoustics - Determination of sound power levels of noise sources - Survey method employing an enveloping measurement surface |

Announced to S12 (S12/200) on 28 November 1990, with P.K. Baade coordinating comments and recommendations for vote on this document. The U.S. submitted an affirmative vote with comments, to ANSI on 6 February 1991, which was transmitted to ISO by ANSI on 11 February 1991.


Announced to S1 and S12 (S1/346) on 11 March 1991 with A.H. Marsh coordinating comments and recommendations for vote on this document. The U.S. submitted an negative vote with comments, to ANSI on 25 April 1991, which was transmitted to ISO by ANSI on 30 April 1991.
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

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 audiometry
S3 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 power sources

AD HOC ISO/CD 11201 Acoustics - Noise emitted by machinery and equipment - Engineering method for the measurement of emission sound pressure level at the work station
ISO/TC 43 ACOUSTICS - and - ISO/TC 43/SC1 NOISE (continued)

OTHER ACTIONS

General


(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:
OTHER ACTIONS (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.


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.
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.


(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.

OTHER ACTIONS (continued)

- 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:


- 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

- ISO 1680-2:1986 Acoustics - Test code for the measurement of airborne noise emitted by rotating electrical machinery - Part 2: Survey method

- 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
27 March 1991

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/344 sent to the Organizational Members of Standards Committee S1 on 1 February 1991 to be closed on 15 March 1991

SUBJECT: Approval of proposed new work item for S1 on ground impedance

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

<table>
<thead>
<tr>
<th>Classification of Members</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>P - Producer</td>
<td>6</td>
</tr>
<tr>
<td>C - Consumer</td>
<td>3</td>
</tr>
<tr>
<td>G - Government</td>
<td>6</td>
</tr>
<tr>
<td>GI - General Interest</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>
Continuation of results of letter ballot S1/344:

**AFFIRMATIVE VOTES:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrington, J.</td>
<td>U.S. Army Primary Standards Laboratory</td>
</tr>
<tr>
<td>Bohl, C.D.</td>
<td>American Industrial Hygiene Association</td>
</tr>
<tr>
<td>Davis, L.</td>
<td>Larson-Davis Laboratories</td>
</tr>
<tr>
<td>Embleton, T.</td>
<td>Acoustical Society of America</td>
</tr>
<tr>
<td>Fung, T.</td>
<td>U.S. Army Communication Electronics Command</td>
</tr>
<tr>
<td>Garinther, G.</td>
<td>U.S. Army Human Engineering Laboratory</td>
</tr>
<tr>
<td>(alternate)</td>
<td></td>
</tr>
<tr>
<td>Mayer, G.C.</td>
<td>AT&amp;T</td>
</tr>
<tr>
<td>McKinley, R.</td>
<td>U.S. Department of the Air Force (USAF)</td>
</tr>
<tr>
<td>Michel, G.C.</td>
<td>Bruel &amp; Kjaer Instruments, Inc.</td>
</tr>
<tr>
<td>(alternate)</td>
<td></td>
</tr>
<tr>
<td>Nedzelnitsky, V.</td>
<td>National Institute of Standards and Technology</td>
</tr>
<tr>
<td>Patterson, J.H.</td>
<td>U.S. Army Aeromedical Research Laboratory</td>
</tr>
<tr>
<td>(alternate)</td>
<td></td>
</tr>
<tr>
<td>Peppin, R.J.</td>
<td>Scantek, Inc.</td>
</tr>
<tr>
<td>Schomer, P.D.</td>
<td>U.S. Army Construction Engineering Research Laboratory</td>
</tr>
<tr>
<td>Sepmeyer, L.W.</td>
<td>Audio Engineering Society, Inc.</td>
</tr>
<tr>
<td>Walker, B.E.</td>
<td>National Council of Acoustical Consultants</td>
</tr>
<tr>
<td>Wang, S.</td>
<td>Air-Conditioning &amp; Refrigeration Institute</td>
</tr>
</tbody>
</table>

**NEGATIVE VOTES:**

None

**ABSTENTIONS:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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</thead>
<tbody>
<tr>
<td>Luttrell, L.F.</td>
<td>Computer &amp; Business Equipment Manufacturers Association</td>
</tr>
</tbody>
</table>
Continuation of results of letter ballot S1/344:

NOT RETURNED:

Kushler, B. Exchange Carriers Standards Association
Linderoth, R.T. Sonetronics, Inc.

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS
Return to: Letter Ballot Department
Due date: 5 March 1991

ADMINISTRATIVE LETTER BALLOT
ACCREDITED STANDARDS COMMITTEE
ON ACOUSTICS, SI

Topic: Approval of proposed new work item for SI on ground impedance

Authorized by: G.S.K. Wong, Chair SI

Distributed by: A. Brenig, ASA Standards Manager

Reference Document:
ATTACHMENT A Proposed scope and rationale for new work item for SI - Letter from G. Daigle to G.S.K. Wong, Chair SI, dated 16 December 1990

Background Information:

At the SI meeting held on Thursday, 29 November 1990 in San Diego, California, Mr. Daigle presented a proposal for a new work item for SI (see ATTACHMENT A). It was the consensus of those attending the SI meeting that the work item should be approved and a new working group set up in SI.

Mr. G.S.K. Wong, Chair SI, and the proposer of the new work item, Mr. G. Daigle, both recommend approval of the new work item. If approved, it will become SI/WG20, with G. Daigle as chair.
December 16, 1990

TO: G.S.K. Wong
   Chair, SI

FROM: Gilles Daigle

SUBJECT: Draft scope for new WG in SI on "Ground Impedance" and "Ground Effect" for the purpose of measuring and predicting sound pressure levels outdoors.

Part I: Measurement of Ground Impedance

Scope: Develop a standard describing recommended procedures to characterize and the instrumentation to measure the acoustic properties of a wide variety of natural ground surfaces outdoors.

Part II: Attenuation of Sound due to the Ground

Scope: Develop a standard describing recommended procedures to account for the attenuation of sound propagating in the presence of the ground.

cc D. Johnson
28 February 1991

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/341 sent to the Organizational Members of Standards Committee S1 on 1 January 1991 to be closed on 28 February 1991

SUBJECT: Approval of written response to the Air Movement and Control Association, Inc. regarding their request for interpretation of ANSI S1.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters

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

<table>
<thead>
<tr>
<th>CLASSIFICATION OF MEMBERS</th>
<th>AFFIRMATIVE VOTES</th>
<th>NEGATIVE VOTES</th>
<th>ABSTENTIONS</th>
<th>NOT RETURNED</th>
<th>TOTAL</th>
</tr>
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<tr>
<td>G - GOVERNMENT</td>
<td>6</td>
<td></td>
<td>0</td>
<td>0</td>
<td>6</td>
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<tr>
<td>GI - GENERAL INTEREST</td>
<td>7</td>
<td></td>
<td>0</td>
<td>0</td>
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<tr>
<td>TOTAL</td>
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<td>0</td>
<td>2</td>
<td>21</td>
</tr>
</tbody>
</table>

TOTAL 19
Continuation of results of letter ballot S1/341:

**AFFIRMATIVE VOTES:**

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**NEGATIVE VOTES:**

None

**ABSTENTIONS:**

None
Continuation of results of letter ballot S1/341:

NOT RETURNED:

Kushler, B.  Exchange Carriers Standards Association
Linderoth, R.T.  Sonetronics, Inc.

Avril Brenig  Standards Manager

cc:  Vice Chair, Standards Committee
     Chair and Vice Chair, ASACOS
Administrative Letter Ballot
Accredited Standards Committee on Acoustics, S1


Authorized by: G.S.K. Wong, Chair S1
Circulated By: A. Brenig, ASA Standards Manager

Reference Documents:

ATTACHMENT A - Letter from the Air Movement and Control Association, Inc. (AMCA) dated 23 October 1990 regarding the interpretation of ANSI S1.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters

ATTACHMENT B - Proposed S1 response to the Air Movement and Control Association (AMCA) request for interpretation of ANSI S1.11-1986, as edited at the S1 meeting, held on 29 November 1990

Background Information:

Under ANSI procedures, all requests for interpretation of standards are processed by the Standards Committee responsible for original development of the standard.

A letter of inquiry on the interpretation of ANSI S1.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters dated 23 October 1990 was received from the Air Movement and Control Association, Inc. (see ATTACHMENT A).

The proposed response for S1, as drafted by Mr. Wong, Chair S1, was discussed at the S1 meeting held on 29 November 1990. An amended version was drafted, as given in ATTACHMENT B.

Mr. Wong recommends that the proposed S1 response, as shown in ATTACHMENT B, be approved by S1 for forwarding to the Air Movement and Control Association, Inc.
Question:

Shall Accredited Standards Committee S1, Acoustics, approve the proposed response from S1, as contained in ATTACHMENT B, for forwarding to the Air Movement and Control Association, Inc. (AMCA), regarding the request for interpretation of ANSI S1.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters?

MEMBER ____________________________ YES ___ NO ___ ABSTAIN ____________

REPRESENTING ________________________ IF YOU ABSTAIN FROM VOTING, PLEASE STATE YOUR REASONS: ______________

TO MEMBERS:
PLEASE INDICATE YOUR CLASSIFICATION FOR THE PURPOSE OF THIS BALLOT AS FOLLOWS:

PRODUCER __________________________

CONSUMER __________________________ SIGNATURE _______________________

GOVERNMENT _______________________ PRINT NAME _______________________

GENERAL INTEREST _______________ DATE _________________________

INSTRUCTIONS FOR SUBMISSION OF COMMENTS:

(1) IF YOU ABSTAIN FROM VOTING OR VOTE NEGATIVE, YOU MUST STATE YOUR REASONS IN RETURNING THIS BALLOT.

(2) ALL SUBMITTED COMMENTS SHOULD BE CLEARLY MARKED EITHER TECHNICAL OR EDITORIAL.

(3) COMMENTS WHICH FORM THE BASIS FOR A NEGATIVE VOTE OR AN ABSTENTION SHOULD BE CLEARLY IDENTIFIED AS SUCH.

(4) A SPECIFIC STATEMENT INDICATING THE CHANGES THAT WOULD LEAD TO REVERSAL OF A NEGATIVE VOTE SHOULD ACCOMPANY ALL NEGATIVE BALLOTS.

NOTE: FAILURE TO RESPOND TO THREE (3) SUCCESSIVE BALLOTS MAY RESULT IN YOUR ORGANIZATION'S OR YOUR OWN REMOVAL FROM COMMITTEE MEMBERSHIP ROLLS.
October 23, 1990

G. S. K. Wong
National Research Council of Canada
Physics Division
Montreal Road
Ottawa, Ontario K1A 0R6

Subject: Calibration Standards for Frequency Analyzers

Dear Sir:

We have been advised that you may be in a position to assist us. The association publishes AMCA Standard 300, Reverberant Room Method for Sound Testing of Fans, in which the instrumentation is required to conform to the latest revision of ANSI S1.11.

Some users of AMCA Standard 300 have used Fast Fourier Transform (FFT) analyzers in place of equipment having octave or one-third octave filter sets. It would appear from S1.11 (1986) that an FFT analyzer would no longer be in compliance with the filter set requirements. We need to know whether this is true or not.

Also, we have been asked whether there is a general procedure available for the calibration of an FFT analyzer, and if this procedure is traceable to NIST.

Any assistance you can provide will be appreciated.

Very truly yours,

Paul R. Saxon
Director of Engineering Standards

PRS: smk
Proposed SI RESPONSE TO REQUEST FOR INTERPRETATION OF ANSI SI.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters, amended draft prepared at SI meeting held on 29 November 1990


This matter was discussed with Mr. L.W. Sepmeyer, Chairman of SI/WG5 Band Filter Sets. The conclusion is that FFT analyzers assume that the signal sequence is time stationary whereas in real life the signal from an air moving device may not repeat continuously; hence, the results from FFT analyzers may not be identical to those obtained with filters that satisfied the requirements of ANSI SI.11-1986. Therefore FFT analyzers would no longer be always in compliance with the filter set requirement. Mr. Sepmeyer concurred that the above matter will be clarified in the coming revision of ANSI SI.11-1986. Furthermore, there is no formal procedure for the calibration of FFT analyzers.

We hope that the above will be helpful to you.
DATE:        April 25, 1991

TO:          Acoustical Society of America

FAX NO.      212-949-0473

ATTENTION:   Dr. Avril Brenig, Standards Manager

Message:
In regard to my letter to you dated 12 March 1991:

Please accept my apology for the error in gender. I had intended to say "Dr." Brenig.

Yesterday I spoke with George Wong concerning the subject of the letter. He has advised me of the committee's philosophy concerning the continuance of classifications of equipment. Based on our discussion it would seem that little would be gained by pursuing the question at this time, and we therefore withdraw it.

We would like to state that we disagree with the committee's position. Purchasers of such equipment look to ASA standards for guidance in selecting equipment. For many purchasers, this equipment represents a substantial investment and should be expected to have a service life beyond the five year review cycle of an ANSI/ASA document. Put in the simplest terms, purchasers need to be advised as to how a change in a standard affects their equipment. This might be done effectively in an appendix if not in the body of the document.

Could you please convey these thoughts to the committee?

Best regards,

AIR MOVEMENT AND CONTROL ASSOCIATION, INC.

Paul R. Saxon
Director of Engineering Standards

ab425.smk
March 12, 1991

Mr. Avril Brenig  
Standards Manager  
Acoustical Society of America  
345 East 45th Street  
New York, NY 10017-9404

Re: ANSI S1.11/ASA 65

Dear Mr. Brenig:

Thank you for your letter of March 1st. We believe that ASA's reply will be most helpful to our members.

We would like to ask another question or two about the same standard. Our association has tried to ensure that the equipment our members purchase will be appropriate for the intended service. As you can see from the enclosed copy of page 4 of AMCA Standard 300-85, Sections 4.3 and 4.4 specified the Type E Class II and Type E Class III equipment. We now understand that these classes no longer apply. We would appreciate your guidance in learning what is current with respect to these types or classes. This will be helpful in the interim and in the upcoming revision of AMCA Standard 300-85.

Any assistance you can offer will be appreciated.

Best regards,

Paul R. Saxon  
Director of Engineering Standards

PRS:smk

cc: Pete Neitzel  
Pete Hanly  
Mark Stevens

RECEIVED  
MAR 14, 1991  
ASA STANDARDS SECRETARIAT
The octave bands most frequently used are defined by ANSI Standard Specification for full octave and one-third octave filter sets.

### Table 1 ANSI Full and One-Third Octave Bands [4] [5] (Calculations Rounded)

<table>
<thead>
<tr>
<th>AMCA Band no.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tr>
<td>ANSI Band no.</td>
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<td>21</td>
<td>24</td>
<td>27</td>
<td>30</td>
<td>33</td>
<td>36</td>
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</tr>
<tr>
<td>Center ( f_{1/3} )</td>
<td>63</td>
<td>125</td>
<td>250</td>
<td>500</td>
<td>1000</td>
<td>2000</td>
<td>4000</td>
<td>8000</td>
</tr>
<tr>
<td>Upper ( f_{1/3} )</td>
<td>90</td>
<td>180</td>
<td>355</td>
<td>710</td>
<td>1400</td>
<td>2800</td>
<td>5600</td>
<td>11200</td>
</tr>
<tr>
<td>Lower ( f_{1/3} )</td>
<td>45</td>
<td>90</td>
<td>180</td>
<td>355</td>
<td>710</td>
<td>1400</td>
<td>2800</td>
<td>5600</td>
</tr>
<tr>
<td>Bandwidth ( f_{1/3} )</td>
<td>45</td>
<td>90</td>
<td>175</td>
<td>355</td>
<td>690</td>
<td>1400</td>
<td>2800</td>
<td>5600</td>
</tr>
</tbody>
</table>

The One-Third Octave Bands Most Frequently Used are Defined by ANSI S1.6/11

<table>
<thead>
<tr>
<th>ANSI Band no.</th>
<th>AMCA BAND 1</th>
<th>AMCA BAND 2</th>
<th>AMCA BAND 3</th>
<th>AMCA BAND 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center ( f_{1/3} )</td>
<td>17 18 19</td>
<td>20 21 22</td>
<td>23 24 25</td>
<td>26 27 28</td>
</tr>
<tr>
<td>Upper ( f_{1/3} )</td>
<td>50 63 80</td>
<td>100 125 160</td>
<td>200 250 315</td>
<td>400 500 630</td>
</tr>
<tr>
<td>Lower ( f_{1/3} )</td>
<td>56 71 90</td>
<td>112 140 180</td>
<td>224 280 355</td>
<td>450 560 710</td>
</tr>
<tr>
<td>Bandwidth ( f_{1/3} )</td>
<td>11 15 19</td>
<td>22 28 40</td>
<td>44 50 75</td>
<td>95 110 150</td>
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</tbody>
</table>

<table>
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<tr>
<th>ANSI Band no.</th>
<th>AMCA BAND 5</th>
<th>AMCA BAND 6</th>
<th>AMCA BAND 7</th>
<th>AMCA BAND 8</th>
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<tbody>
<tr>
<td>Center ( f_{1/3} )</td>
<td>29 30 31</td>
<td>32 33 34</td>
<td>35 36 37</td>
<td>38 39 40</td>
</tr>
<tr>
<td>Upper ( f_{1/3} )</td>
<td>800 1000 1250</td>
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<td>3150 4000 5000</td>
<td>6300 8000 10000</td>
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<tr>
<td>Lower ( f_{1/3} )</td>
<td>900 1120 1400</td>
<td>1800 2240 2800</td>
<td>3550 4500 5600</td>
<td>7100 9000 11200</td>
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<tr>
<td>Bandwidth ( f_{1/3} )</td>
<td>710 900 1120</td>
<td>1400 1800 2240</td>
<td>2800 3550 4500</td>
<td>5600 7100 9000</td>
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</tbody>
</table>

The microphone and its associated cable shall be chosen so that their sensitivity does not change by more than 0.2 dB over the temperature range encountered in the measurement. Care shall be exercised to avoid introducing acoustical or electrical noise that could interfere with the measurements when the microphone is traversed.

### 4.3 OCTAVE BAND ANALYZER

The octave band analyzer shall conform to the latest revision of ANSI Standard S1.11 Specification for Octave, Half-Octave, and Third-Octave Band Filter Sets, Type E, Class II [5]. Analyzers are used to separate broad-band signals into the eight preferred octave bands (see definitions - octave bands).

### 4.4 ONE-THIRD OCTAVE BAND ANALYZER

The one-third octave band analyzer shall conform to the latest revision of ANSI S1.11 Type E, Class III. This type of analyzer is used to separate broad-band signals into the twenty-four one-third octave bands which are keyed to the eight preferred octave bands. The improved resolution available with a one-third octave band analyzer permits better characterization of fan sound signatures, particularly with reference to discrete-frequency components.

### 4.5 DATA RECORDING

This standard does not attempt to set limitations on data recording equipment. Considerations include long-term stability, ease of use, and the method of averaging the sound pressure signal. Modern integrating-type analyzers are recommended because they produce \( L_p \) values eliminating any need for visual averaging. Graphical level recorders can be used to make permanent records and ease the problem of making visual averages from meter readings.

### 4.6 CHARACTERISTICS OF THE REFERENCE SOUND SOURCE

The reference sound source (RSS) used in the substitution method and in the test room qualification procedure shall meet the requirements below. It must be calibrated appropriately so that measurements made using the reference sound...
1 March 1991

Mr. Paul R. Saxon
Air Movement and Control Association, Inc.
30 West University Drive
Arlington Heights, Illinois 60004-1893

Dear Mr. Saxon:

We refer to your letter dated 23 October 1990, addressed to Dr. George S.K. Wong, Chairman of Accredited Standards Committee S1, Acoustics. Your letter of inquiry specifically related to clarification of whether FFT analyzers would be in compliance with filter set requirements of ANSI S1.11-1986 Specification for Octave-Band and Fractional-Octave-Band Analog and Digital Filters.

Your inquiry was discussed with Mr. L.W. Sepmeyer, Chairman of S1/WG5 Band Filter Sets and at the meeting of S1 held on 29 November 1990, in San Diego, California where a proposed response was developed. This response was sent to ballot of Accredited Standards Committee S1 on 15 January 1991. The ballot has now closed, with unanimous approval of the position given below.

The conclusion is that FFT analyzers assume that the signal sequence is time stationary whereas in real life the signal from an air moving device may not repeat continuously; hence, the results from FFT analyzers may not be identical to those obtained with filters that satisfied the requirements of ANSI S1.11-1986. Therefore FFT analyzers would no longer be always in compliance with the filter set requirement. Mr. Sepmeyer concurred that the above matter will be clarified in the coming revision of ANSI S1.11-1986. Furthermore, there is no formal procedure for the calibration of FFT analyzers.

We hope that the above will be helpful to you.

Sincerely,

Avril Brenig
Standard Manager

cc: Eldred Embleton McKinley Sepmeyer Wong
Mr. Paul R. Saxon  
Director of Engineering Standards  
Air Movement and Control Association, Inc.  
30 West University Drive  
Arlington Heights, IL 60004-1893

Dear Mr. Saxon:

We thank you for your two communications, i.e. letter of 15 March 1991 and telefax of 25 April 1991.

We have discussed this matter with the Chair of Accredited Standards Committee S1, Acoustics, and at the Standards Committee meeting of S1, held on 2 May 1991, in Baltimore, Maryland.

Accredited Standards Committee S1, Acoustics, cannot give the requested guidance to your organization, or others, that really rests with the user to decide:

1. When ANSI revises a standard, usually there are substantial technological advancements in the subject matter. The new revised version may not have any direct relation to the old standard.

2. It is the responsibility of the users to select the new Order Numbers to satisfy their particular applications. In this case, the AMCA should have their own experts or consultants to decide on the specific needs of AMCA Standards 300-85.

3. It is not practical for ANSI to provide such recommendations due to the relatively large number of standards produced, and it will be a burden to progress if a working group has to find new "classes" to fit the old ones.

We understand your position but following consideration of the issue by the Chair and Standards Committee S1, the matter is not considered suitable for handling by the standards' developing bodies. These issues should be addressed internally by the users.

With best wishes, we are

Sincerely,

Avril Brenig  
Standards Manager

AB/li  
cc:  Eldred  
     Embleton  
     Wong
20 March 1991

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/342 sent to the Organizational Members of Standards Committee S1 on 15 January 1991 to be closed on 28 February 1991

SUBJECT: Approval recommendation to disband working group S1/WG10 Scales and Ratios for Plotting - by the time of the next meeting (i.e. on Thursday, 2 May 1991) if no action is taken to resolve the problem concerning copyright of proposed ANSI Standard S.22-199X Scales and Ratios for Plotting

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

<table>
<thead>
<tr>
<th>CLASSIFICATION OF MEMBERS</th>
<th>TOTAL</th>
</tr>
</thead>
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<td>G - GOVERNMENT</td>
<td>7</td>
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<td>GI - GENERAL INTEREST</td>
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<td>TOTAL</td>
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TOTAL 19
Continuation of results of letter ballot S1/342:

**AFFIRMATIVE VOTES:**

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Arrington, J.</td>
<td>U.S. Army Primary Standards Laboratory</td>
</tr>
<tr>
<td>Bohl, C.D.</td>
<td>American Industrial Hygiene Association</td>
</tr>
<tr>
<td>Davis, L.</td>
<td>Larson-Davis Laboratories</td>
</tr>
<tr>
<td>Embleton, T.</td>
<td>Acoustical Society of America</td>
</tr>
<tr>
<td>Fung, T.</td>
<td>U.S. Army Communication Electronics Command</td>
</tr>
<tr>
<td>Garinther, G.</td>
<td>U.S. Army Human Engineering Laboratory</td>
</tr>
<tr>
<td>Mayer, G.C.</td>
<td>AT&amp;T</td>
</tr>
<tr>
<td>McKinley, R.</td>
<td>U.S. Department of the Air Force (USAF)</td>
</tr>
<tr>
<td>Michel, G.C.</td>
<td>Bruel &amp; Kjaer Instruments, Inc.</td>
</tr>
<tr>
<td>(alternate)</td>
<td></td>
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<tr>
<td>Nedzelnitsky, V.</td>
<td>National Institute of Standards and Technology</td>
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<tr>
<td>Patterson, J.H.</td>
<td>U.S. Army Aeromedical Research Laboratory</td>
</tr>
<tr>
<td>(alternate)</td>
<td></td>
</tr>
<tr>
<td>Peppin, R.J.</td>
<td>Scantek, Inc.</td>
</tr>
<tr>
<td>Walker, B.E.</td>
<td>National Council of Acoustical Consultants</td>
</tr>
<tr>
<td>Wang, S.</td>
<td>Air-Conditioning &amp; Refrigeration Institute</td>
</tr>
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**NEGATIVE VOTES:**

<table>
<thead>
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<th>Name</th>
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</thead>
<tbody>
<tr>
<td>Sepmeyer, L.W.</td>
<td>Audio Engineering Society, Inc.</td>
</tr>
</tbody>
</table>

**ABSTENTIONS:**

None
Continuation of results of letter ballot S1/342:

NOT RETURNED:

Kushler, B. Exchange Carriers Standards Association
Linderoth, R.T. Sonetronics, Inc.

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS
ADMINISTRATIVE LETTER BALLOT
ACCREDITED STANDARDS COMMITTEE
ON ACOUSTICS, SI

Topic: Approval of recommendation to disband working group SI/WG10
Scales and Ratios for Plotting - by the time of the next meeting
(i.e., on Thursday, 2 May 1991) if no action is taken to resolve
the problem concerning copyright of proposed ANSI Standard
SI.22-199X Scales and Ratios for Plotting

Authorized by: G.S.K. Wong, Chair SI

Distributed by: A. Brenig, ASA Standards Manager

Reference Documents:

ATTACHMENT A Letter attachment from M. Strasberg to R.W.
Young dated 6 July 1990

ATTACHMENT B Memorandum from R.W. Young to M. Strasberg dated
16 November 1990

Background Information:

The correspondence noted above (ATTACHMENTS A and B) gives some
background in the matter, whose details have been described in previous
SI Minutes (see SI/331 from the SI meeting held on 21 May 1990). It
appears that there can be no resolution to the present problem
concerning copyright to proposed ANSI SI.22-199X.

At the SI meeting held on Thursday, 29 November 1990, it was decided to
ballot SI on the proposal that the working group SI/WG10 on Scales and
Ratios for Plotting (to develop a standard, harmonized with IEC
263-1982, that specifies standard proportions for the scales used to
plot frequency characteristics and polar diagrams) should be disbanded
by the time of the next SI meeting (2 May 1991), and the proposed
standard withdrawn from further processing if no resolution is then
forthcoming on the matter of its copyright.

Mr. G.S.K. Wong, Chair of SI, recommends that SI approve the disbanding
of the preparatory working group, SI/WG10, and the withdrawal of the
proposed standard from further processing if the matter is not resolved
by the time of the next meeting.
Question:

Shall Accredited Standards Committee S1, Acoustics, approve the recommendation to disband working group S1/WG10 Scales and Ratios for Plotting and withdraw the proposed standard ANSI S1.22-199X from further processing, by the time of the next meeting of S1, on 2 May 1991, if no resolution has been reached on the matter of copyright?

MEMBER __________________________  YES __ NO __ ABSTAIN __________

REPRESENTING ______________________ If you abstain from voting, please state your reasons: ______________________

TO MEMBERS:
Please indicate your classification for the purpose of this ballot as follows:

PRODUCER ________________________ SIGNATURE ________________________

CONSUMER ________________________ PRINT NAME ________________________

GOVERNMENT ______________________

GENERAL INTEREST __________________ DATE ______________________

INSTRUCTIONS FOR SUBMISSION OF COMMENTS:

(1) IF YOU ABSTAIN FROM VOTING OR VOTE NEGATIVE, YOU MUST STATE YOUR REASONS IN RETURNING THIS BALLOT.

(2) ALL SUBMITTED COMMENTS SHOULD BE CLEARLY MARKED EITHER TECHNICAL OR EDITORIAL.

(3) COMMENTS WHICH FORM THE BASIS FOR A NEGATIVE VOTE OR AN ABSTENTION SHOULD BE CLEARLY IDENTIFIED AS SUCH.

(4) A SPECIFIC STATEMENT INDICATING THE CHANGES THAT WOULD LEAD TO REVERSAL OF A NEGATIVE VOTE SHOULD ACCOMPANY ALL NEGATIVE BALLOTS.

NOTE: FAILURE TO RESPOND TO THREE (3) SUCCESSIVE BALLOTS MAY RESULT IN YOUR ORGANIZATION'S OR YOUR OWN REMOVAL FROM COMMITTEE MEMBERSHIP ROLLS.
Dear Bob:

Further to my letter of 23 March and subsequent discussion with you at the ASA meeting in May concerning copyright to standards published by ASA, an agreement is enclosed for your signature concerning the proposed standard SI.22 on "American National Standard Scales..." This agreement is intended to indicate that you do not object to ASA publishing, distributing, selling, and registering copyright to the standard, while reserving to yourself the right to copy and reprint that portion of the standard which you originated.

I believe that this agreement covers the concerns that you expressed to me. ASA will be able to proceed with the processing and subsequent publication of the standard when we have received a signed copy of the agreement from you.

Yours sincerely,

M. Strasberg
Copyright memo

16 November 1990

From: Robert W. Young, 1696 Los Altos Road, San Diego, CA 92109; tel (619) 273-8732, also FAX

To: Murray Strasberg, Secretary, Acoustical Society of America

C: A. Brenig, K.M. Eldred, Alan Powell

Subj: Copyright on S1.22 Scales and Sizes

1. Several days ago, by accident I found your letter of 6 July 1990 concerning copyright of standards published by the Acoustical Society of America, including an AGREEMENT for me to sign. With it was your letter of 23 March 1990 on the same subject. Many times during the past three months I tried in vain to find these misfiled letters. Sorry for the delay.

2. As I said at the ASACOS meeting in May, I shall be pleased to have anyone quote a paper of mine, on the condition only that he cite the journal where the paper appeared. I hope that all standards published by the Acoustical Society can be made similarly available for easy quotation by the public.

3. Unfortunately, the notice in S1.8-1989, ...Reference Quantities... is:

Copyright © 1990 by the Acoustical Society of America. No portion of this publication may be quoted or reproduced in any form without permission of the Acoustical Society of America.
Any request to reproduce this standard is whole or in part should be addressed to the Standards Secretariat, in care of the Acoustical Society of America,...

4. Such a copyright notice is contrary to "The purpose of the Society is to increase and diffuse the knowledge of acoustics and promote its practical applications." If someone wants to publish a Letter to the Editor, either agreeing or disagreeing with S1.8-1989, he would be required by the copyright notice to ask Avril Brenig for permission to quote a portion of S1.8.

5. The AGREEMENT you sent 6 July 1990 would have me certify that "I do hereby indicate my approval of the publication and distribution of said document...by said Society, and that I...will make no objection...to the registration of copyright to said document by said Society, subject to the following STIPULATION:

I reserve the right to copy that portion of said document originated by me for my own use or for reprinting...my own works...." I will not sign such an agreement. The stipulation would not relieve me and everyone else of obligation to obtain permission from Avril Brenig to quote from S1.8-1989, in a hypothetical LETTER TO THE EDITOR.

6. I urge that copyright by the Acoustical Society be claimed in the same brief terms as: Copyright © 1985 by The American Society of Mechanical Engineers. May I have a moment for this in the ASACOS agenda Monday afternoon, 26 November 1990?
28 March 1991

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LR/S1/343 sent to the Organizational Members of Standards Committee S1 on 1 February 1991 to be 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:

<table>
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<tr>
<th>Classification of Members</th>
<th>Number</th>
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CLASSIFICATION OF MEMBERS

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<th>Number</th>
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<tr>
<td>P - PRODUCER</td>
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<td>C - CONSUMER</td>
<td>3</td>
</tr>
<tr>
<td>G - GOVERNMENT</td>
<td>6</td>
</tr>
<tr>
<td>GI - GENERAL INTEREST</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
</tr>
</tbody>
</table>
Continuation of results of letter ballot S1/343:

AFFIRMATIVE VOTES:

Arrington, J.
Davis, L.
Embleton, T.
Pung, T.
Garinther, G.
(alternate)
Luttrell, L.F.
Mayer, G.C.
Michel, G.C.
(alternate)
Nedzelnitsky, V.
Patterson, J.H.
(alternate)
Schomer, P.D.
Sepmeyer, L.W.
Walker, B.E.
Wang, S.

U.S. Army Primary Standards Laboratory
Larson-Davis Laboratories
Acoustical Society of America
U.S. Army Communication Electronics Command
U.S. Army Human Engineering Laboratory
Computer & Business Equipment Manufacturers Association
AT&T
Bruel & Kjaer Instruments, Inc.
National Institute of Standards and Technology
U.S. Army Aeromedical Research Laboratory
U.S. Army Construction Engineering Research Laboratory
Audio Engineering Society, Inc.
National Council of Acoustical Consultants
Air-Conditioning & Refrigeration Institute

NEGATIVE VOTES:

Bohl, C.D.
McKinley, R.
Peppin, R.J.

American Industrial Hygiene Association
U.S. Department of the Air Force (USAF)
Scantek, Inc.

ABSTENTIONS:

None
Continuation of results of letter ballot S1/343:

NOT RETURNED:

Kushler, B.  Exchange Carriers Standards Association
Linderoth, R.T. Sonetronics, Inc.

Avril Brenig
Standards Manager

cc: Vice Chair, Standards Committee
Chair and Vice Chair, ASACOS
Return to: Letter Ballot Department  
Due date: 15 March 1991

ADMINISTRATIVE LETTER BALLOT  
ACCREDITED STANDARDS COMMITTEE  
ON ACOUSTICS, SI

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: G.S.K. Wong, Chair S1

Distributed by: A. Brenig, ASA Standards Manager

Reference Documents:
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.

Mr. G.S.K. Wong, Chair S1, recommends approval of the changes, noted in ATTACHMENTS A and B, to the Accredited Standards Committee Procedures.
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.
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.
21 March 1991

TO: G.S.K. Wong, Chair S1

Re: Letter Ballot LB/S1/340 sent to Accredited Standards Committee S1 on 22 January 1991 and closed on 5 March 1991

SUBJECT: Approval of Officer and Individual Experts of S1 for 1991/1992

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

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<th>Total</th>
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<td>C - Consumer</td>
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</tr>
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<td>G - Government</td>
<td>6</td>
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<td>GI - General Interest</td>
<td>4</td>
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<td>Total</td>
<td>19</td>
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Enclosed please find tally of the above letter ballot, showing results as follows:

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<tr>
<th>Classification of Members</th>
<th>Total</th>
</tr>
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</tr>
<tr>
<td>GI - General Interest</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
</tbody>
</table>
Continuation of results of letter ballot S1/340:

AFFIRMATIVE VOTES:

Arrington, J.
Augspurger, G.L. (Alternate)
Bohl, C.D.
Embleton, T.
Fung, T.
Garinther, G. (Alternate)
Luttrell, L.F.
Mayer, M.S.
McKinley, R.
Michel, G.C. (Alternate)
Nedzelnitsky, V.
Peppin, R.J.
Schomer, P.D.
Sepmeyer, L.W.
Wang, S.

U.S. Army Primary Standards Laboratory
National Council of Acoustical Accountants
American Industrial Hygiene Association
Acoustical Society of America
U.S. Army Communication Electronics Command
U.S. Army Human Engineering Laboratory
Computer & Business Equipment Manufacturers Association
AT&T
U.S. Department of the Air Force
Bruel & Kjaer Instruments, Inc.
National Institute Standards and Technology
Scantek, Inc.
U.S. Department of the Army Environmental Office
Audio Engineering Society
Air-Conditioning & Refrigeration Institute

NEGATIVE VOTES:

None

ABSTENTIONS:

None
Continuation of results of letter ballot SI/340:

**NOT RETURNED:**

<table>
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<tr>
<th>Name</th>
<th>Organization</th>
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<tr>
<td>Davis, L.</td>
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<td>Exchange Carriers Standards Association</td>
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<tr>
<td>Linderoth, L.F.</td>
<td>Sonetronics, Inc.</td>
</tr>
<tr>
<td>Mozo, B.</td>
<td>U.S. Army Aeromedical Research Laboratory</td>
</tr>
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Avril Brenig  
Standards Manager

cc: Vice Chair, Standards Committee  
Chair and Vice Chair, ASACOS
Return to: Letter Ballot Department
Due date: 5 March 1991

ADMINISTRATIVE LETTER BALLOT
ACCREDITED STANDARDS COMMITTEE
ON ACOUSTICS, S1

Approved for circulation by: G.S.K. Wong, Chair S1
Distributed by: A. Brenig, Standards Manager
Reference Document: ATTACHMENT A - Lists Officers and Individual Experts for S1

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.

No change in S1 Officers is proposed for 1991/1992. The list of Officers and Individual Experts is attached for your consideration for confirmation. The ASA representatives to S1 for 1991/1992 are listed for your information.
### S1 Appointments

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<td>1990-1993</td>
</tr>
<tr>
<td>Vice Chairman</td>
<td>R. L. McKinley</td>
<td>1990-1993</td>
</tr>
<tr>
<td>ASA Representative</td>
<td>W. J. Galloway</td>
<td>1991-1992</td>
</tr>
<tr>
<td>Alt. ASA Representative</td>
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<td>1991-1992</td>
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<td>K. M. Eldred</td>
<td>1991-1992</td>
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<tr>
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<td>W. J. Galloway</td>
<td>1991-1992</td>
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<td>D. L. Johnson</td>
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<tr>
<td></td>
<td>G. C. Maling, Jr.</td>
<td>1991-1992</td>
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<td></td>
<td>L. W. Sepmeyer</td>
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</tr>
<tr>
<td></td>
<td>G. S. K. Wong</td>
<td>1991-1992</td>
</tr>
</tbody>
</table>

*NOTE: Subsequent to this ballot, the ASA representatives to S1 and S12 were interchanged: P. Schomer was named to S1 and W.J. Galloway was named as ASA representative to S12.*