



# Acoustical Society of America

OFFICE OF THE  
STANDARDS SECRETARIAT

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**S2/706**

Minutes of the meeting of  
**Accredited Standards Committee S2, Mechanical Vibration and Shock**  
Held  
Wednesday, 28 November 2007  
New Orleans, LA

## 1) Opening of the meeting

Mr. Herfat opened the meeting at 4:00 p.m. and introductions were made. He explained that Mr. Eshleman was unable to attend the meeting and he would, therefore, serve as chair.

He announced that both Mr. Eshleman and Mr. Douglas would be recognized as Fellows of the ASA at this meeting and extended congratulations to them.

Mr. Herfat also noted the passing of Douglas Muster, one of the founding members and long-time Chair of ISO/TC 108, who was also a long-time leader in S2.

The presence of Mr. Chervak, representing USA CHPPM, a new member of S2 was acknowledged. The attendance list is given at the end of this document.

## 2) Approval of the agenda

The agenda (**S2/697**) was approved.

## 3) Approval of the minutes

The minutes of the S2 meeting held in San Antonio, TX. on 19 June 2007 (**S2/695**) were approved.

## 4) Review of S2 activities

### a) Discussion on committee activities

Mr. Herfat reviewed the S2 Advisory Report dated 15 October 2007 (**S2/698**). He noted in particular some suggestions from the Advisory Group for new S2 work, specifically:

- Shaft alignment.
- Active & passive control systems for vibration and sound. These technologies have been in use in the aerospace and automobile industries for more than a decade. The relationship of this work to the mechanical mobility work was discussed.
- Risk Assessment and Risk Management standards that are required after the diagnostics of machines. The relationship of this proposal to the existing ISO prognostics work was discussed.

The long-standing problem of finding sufficient participation in the area of vibration and shock generating systems both nationally and internationally was discussed. Mr. Booth has indicated that he no longer has support to participate at the international level.

Mr. Herfat asked for suggestions as to how to increase the input to S2 (and TC 108) from the U.S. civil /structural engineering community, and encouraged U.S. experts in ISO working groups to become better prepared for the international debates.

### b) Review of working group reports

Mr. Herfat reviewed the Summary of S2 WG Reports Nov. 2007 (S2/699) and asked WG Chairs who were present to update or elaborate on their reports.

**S2/WG 2 – Terminology and Nomenclature in the Field of Mechanical Vibration and Shock – D.J. Evans**

Mr. Evans was not present. Mr. Peppin reported that some progress has been made on revising ANSI S2.1 but no draft is yet ready for the 30 Day Review.

**S2/WG 3 – Signal Processing Methods – T.S. Edwards**

Since being appointed as Chair of this WG, Mr. Edwards has not taken any action either nationally or in ISO/TC 108/WG 26. No report was submitted.

**S2/WG 4 – Characterization of the Dynamic Mechanical Properties of Viscoelastic Polymers – W.M. Madigosky**

The project leader, Mr. Herfat, reported that voting on the revision of ANSI S2.9 closed earlier this year with two negative votes and several comments were received. The changes have been incorporated into the draft and as soon as copyright issues are resolved the document can be re-circulated for 30-Day Review.

**S2/WG 5 – Use and Calibration of Vibration and Shock Measuring Instruments – D.J. Evans**

Mr. Evans' report (included in S2/699) indicated that the scheduled WG meeting failed to take place and no progress has been made on this project as yet.

**S2/WG 6 – Vibration and Shock Actuators – G. Booth**

Mr. Booth's report (included in S2/699) indicated that "nothing is happening". He has notified Ms. Blaeser that he can no longer serve as TAG Chair for SC 6 and the ASACOS Nominating Committee has nominated Ms. Peterson to replace him. The status of WG 6 is unclear. Ms. Peterson has agreed to try to develop U.S. interest in this subject matter.

**S2/WG 7 – Acquisition of Mechanical Vibration and Shock Measurement Data – B.E. Douglas**

Mr. Douglas reported on the status of ISO 221289. This WG has no active national work program.

**S2/WG 8 – Analysis Methods of Structural Dynamics – M. Mezache**

Since the last meeting, Mr. Mezache was appointed Chair of this WG. The primary responsibilities of this WG are to provide U.S. input to various ISO working groups (TC 108/WG 24 and WG 29). This WG is also responsible for the maintenance of the mechanical mobility standards (S2.31, S2.32 and S2.34) which are currently under revision in ISO. The ANSI and ISO versions of these standards are very closely aligned since they were contributed to ISO by S2.

**S2/WG 9 – Training and Accreditation – R. Eshleman**

Mr. Eshleman was not present to expand on his written report. Ms. Blaeser noted that the status of the CASCO-mandated changes in the ISO 18436 series are under discussion this week at the TC 108/SC 5 interim working group meetings taking place in Paris and that it seems likely that all decisions reached in Prague in regard to this issue will be revised.

**S2/WG 10 – Measurement and Evaluation of Machinery for Acceptance and Condition – R. Eshleman**

**S2/WG10/Panel 1 – Balancing – R. Eshleman**

Mr. Eshleman reported that this Panel is not active.

**S2/WG 10/ Panel 2 – Operational Monitoring and Condition Evaluation – R. Bankert**

Mr. Bankert was not present. He submitted comprehensive WG meeting minutes. This WG provides extensive U.S. input and experts to a large number of ISO standards in SC 2/WG 1, including the ISO 7919 series, the ISO 10816 series and the ISO 13373 series.

**S2/WG10/ Panel 3 – Machinery Testing – R. Eshleman**

Mr. Eshleman reported that this Panel is not active. To date, no action has been taken on his previous recommendation that this panel should be renamed "Alignment" and that one or two new work items on alignment should be brought forward. When a new work item proposal is received this can be accomplished.

**S2/WG10/Panel 4 – Prognosis – A. Hess**

Andrew Hess, who is also convenor of the ISO prognostics WG, has been appointed Chair of this Panel. It is anticipated that this panel will be populated with U.S. experts to provide U.S. input to ISO rather than develop its own standards.

**S2/WG 10/ Panel 5 – Data Processing, Communication, and Presentation – K. Bever**

Mr. Bever was not present and did not submit a report. Work is beginning on ISO 13374 Part 3 with a U.S. project leader.

**S2/WG 11 – Measurement and Evaluation of Mechanical Vibration of Vehicles – A.F. Kilcullen**

Mr. Kilcullen reported two working group meetings this year, both focused entirely on ISO projects.

**S2/WG 12 – Measurement and Evaluation of Structures – M. Mezache**

Since the last meeting, Mr. Mezache was appointed Chair of this WG. The primary responsibilities of this WG are to provide U.S. input to ISO/TC 108/WG 23. This WG has no active national work program.

**S2/WG 13 – Shock Test Requirements for Commercial Electronic Systems – B. Lang**

Since the last meeting, Mr. Lang was appointed chair of this WG. The document was submitted for ballot in S2 (ballot **S2/704**, not S2/696 as reported in the Advisory Report). At the time of the meeting, the ballot was still open. [Secretariat's note: This ballot closed on 12/6/07 with a vote of 14 yes, 16 abstain, and 5 not returned. Several comments were received and were referred back to the working group for recommended actions.]

**S2/WG 39 (joint with S3) – Human Exposure to Vibration – D.D. Reynolds**

Mr. Reynolds was not present but did submit detailed minutes of the most recent WG meeting.

**c) Decisions about documents where no progress is being made**

No actions were recommended in regard to any S2 documents. Mr. Peppin was asked to make every effort to try to advance the work on the revision of ANSI S2.1.

**d) Proposals for new projects**

Although several potential new work item proposals have been mentioned, no concrete proposals have been received.

**e) Working Groups to be disbanded or moved to inactive status**

No WGs are proposed for change of status.

#### f) Working Groups needing new Chairs

All WGs currently have chairs.

#### 5) Brief update on TC 108

Mr. Herfat had to leave the meeting at this point and asked Mr. Douglas to take over as Chair.

Mr. Douglas provided an update on TC 108 and specifically two open issues between ISO and IEC that involve subcommittees of TC 108.

TC 108/SC 3 has been embroiled in a long standing dispute with IEC/SC 47E, which is attempting to publish a calibration method rejected by SC 3 as an annex to a semi-conductor standard. Two representatives from SC 47E are traveling from Japan to meet with Mr. Douglas in New Orleans in a final attempt to resolve this problem.

TC 108/SC 5 has met with protest from IEC/TC 2, objecting to its approved work item on Electrical signature analysis - Part 1: Three-phase induction motors. This has been going on for several years and appeared to have been resolved in 2002 but has arisen again. When the negotiation between the two committees failed, TC 2 launched a competing work item which has recently been approved.

#### 6) New business

Mr. Waters, a student at the University of Texas at Austin, asked about the existence of standards related to human exposure to vibration underwater, specifically vibration that might be experienced by a diver exposed to a large impulse. Although S2 does not have such standards there are some Navy standards that might be applicable. Ms. Blaeser will provide some contacts to experts in this area.

Mr. Campanella asked about the status of work on vibration of sensitive equipment in buildings. This working group in ISO/TC 108/SC 2 has had difficulty and the convenor has recently withdrawn. There are two technical specifications published but they have been unable to convert them to standards.

#### 7) Future meeting dates

Mr. Douglas reported that there will be no S committee meetings in Paris. The next S2 meeting will take place in Miami during the week of November 10, 2008.

#### 8) Adjournment

There being no further business to discuss, the meeting was adjourned at 5:00 p.m.

Name	Affiliation	S2 Position
Ali T. Herfat	Emerson Climate Technologies	Vice Chair S2 PVR Emerson
Susan Blaeser	ASA	Standards Manager
Phil Battenberg	Quest Technologies	Chair S1
Angelo Campanella	Campanella Associates	Guest
Steven Chervak	UAS CHPPM	PVR USACHPPM
David Delaney	USA CERL	Chair S3/SC 1
Bruce Douglas	Resonance Technologies	AVR ASA Chair ISO/TC 108
Robert Hellweg	Hellweg Acoustics	Vice Chair ASACOS
Mac Mezache	Emerson Climate Technologies	AVR Emerson
Victor Nedzelnitsky	NIST	AVR NIST
Paul Schomer	Schomer and Associates	Chair ASACOS
Paul Waters	University of Texas	Guest