



CAA Standards Meeting Minutes

November 4, 2018

Victoria BC

Present:

Tim Kelsall – Chair

Jean-Philippe Migneron

Andy Metelka

John Swallow

Bill Gastmeier – Phone

Stephen Keith - Phone

1. Welcome – Explanation that the ASA Board had invited the CAA Board for dinner at the same time as this meeting and thus many members had to be absent.
2. Appointment of Minutes Taker – Tim Kelsall
3. Approval of agenda - Approved
4. Approval of Minutes
5. Update since last meeting
6. CAA 101

French Translation drafted by Pier-Gui Lalonde, P.Eng., ing., Integral DX Engineering Ltd. French speaking committee members are requested to review before next meeting.

7. Items from CAA board (not available as board members could not attend)

8. Update From Subcommittees

- a. Environmental Noise (Bill Gastmeier) see attached
Impulse noise in NPC 300 not yet updated but ISO 1996-3 considered a possibility
- b. Wind turbines – Brian Howe – no report
- c. CAC TC43 SC1, - Stephen Keith – see attached
Stephen has nearly completed the term he is allowed. To help spread the load several Vice-Chairs (listed) have been appointed responsible for particular types of standard within their specialties
- d. IEC, Instrumentation – Lixue Wu – no report
- e. Z107.10 / Editorial (Dave Quirt) – no report
- f. Building Acoustics ISO/TC43/SC2 and ASTM E33 – David Quirt – no report
- g. Human Vibration ISO TC 108/SC4 (Tony Brammer) – see attached
- h. Loudness Evaluation – Colin Novak

9. New Business

J.P. Mignerone mentioned that the Province of Quebec Ministries of Environment and Transportation have commissioned 3 Universities to study improvements in assessing human reaction to noise along the lines of the WHO report concerning the effects of noise on residential communities.

The occupational noise regulation is no longer a priority for updating but the Ministry of Health has recommended an 85/3 criterion.

10. Next Meeting Spring – by phone

Subcommittee Reports:

Building Acoustics – David Quirt

- From my perspective there are no major changes from my last report.
- The ISO standards that provide part of the foundation for building code requirements were approved last year, and will probably not have further major revisions for several years. In due course I expect the Code will switch to the new version, now denoted as ISO 12354.
- Attempts to add structure-borne flanking to the ASTM standards seems to be having little uptake – informed building science is not part of the Republican dream.

Like Stephen Keith I am in my last months as Chair of ISO/TC43/SC2 “Building Acoustics” but may continue in a reduced role.

2018 November Report on Standards Council of Canada Canadian Advisory Committee for ISO TC43 And TC43/SC1

New Standards Council of Canada term limits for ISO and IEC committee chairs

- A new chair must be found for this committee. According to SCC rules, a new chair must be nominated before December 31 2018. The chair is elected for a 3 year term, and can be reappointed for a maximum allowable time of 9 years.

Canadian Advisory Committee vice chairs

- The workload for this committee is high (see below). To reduce the effort required by the committee chair an unusually large number of vice chairs has been approved by the Standards Council of Canada.
- TC43 vice chairs
 - o Helen U. - Loudness
 - o Victoria M. - General audiology and hearing aid fitting
 - o Christian G. - Hearing thresholds and close to the ear measurements

- TC43/SC1 vice chairs
 - o Colin N. - vehicle noise, blocked forces, dynamic forces
 - o Alberto B. - hearing protectors
 - o Stephen K. - (alternate Tim K., Bill G.) machinery noise, IT equipment, orphaned standards
 - o Bill G. - (alternate Tim K., Stephen K) environmental noise, sound propagation
 - o Ann N. - shooting ranges
 - o Catherine G. - soundscapes
 - o Tim K. - air terminal devices, ducted silencers
- Orphaned standards – no vice chair
 - o Airborne noise from vessels at sea
 - o Annoyance
 - o Office space sound quality
 - o Noise prediction software
 - o Pavement texture using surface profiles
 - o Tire noise

International representation on ISO acoustics and noise committees

- 1 project leader, 1 international secretary, 1 member TC43 advisory panel, 20 subject matter experts

Workload, in past year

ISO/TC43 –Reviewed 3 new drafts and reaffirmed 4 published standards. Approved the following final draft for publication

ISO 389-1 (Ed 2) - Acoustics -- Reference zero for the calibration of audiometric equipment -- Part 1: Reference equivalent threshold sound pressure levels for pure tones and supra-aural earphones

ISO/TC43/SC1 – Reviewed 7 new draft and reaffirmed 20 published standards. Abstained on drafts related to ships and SC2 (on office space quality).

Approved the following 6 final drafts for publication

ISO 7779 (Ed 4) - Acoustics -- Measurement of airborne noise emitted by information technology and telecommunications equipment

ISO 11200 Amd 1 - Acoustics -- Noise emitted by machinery and equipment -- Guidelines for the use of basic standards for the determination of emission sound pressure levels at a work station and at other specified positions -- Amendment 1

ISO 17201-1 (Ed 2) - Acoustics -- Noise from shooting ranges -- Part 1: Determination of muzzle blast by measurement

ISO 4869-1 (Ed 2) - Acoustics -- Hearing protectors -- Part 1: Subjective method for the measurement of sound attenuation

ISO 4869-2 (Ed 2) - Acoustics -- Hearing protectors -- Part 2: Estimation of effective A-weighted sound pressure levels when hearing protectors are worn

ISO 3743-2 (Ed 2) - Acoustics -- Determination of sound power levels of noise sources using sound pressure -- Engineering methods for small, movable sources in reverberant fields -- Part 2: Methods for special reverberation test rooms

Voted disapproval of the following final 2 drafts for publication

ISO 17201-3 - Approval for layout for ISO/FDIS 17201-3

ISO 12913-2 - ISO/DTS 12913-2 "Acoustics - Soundscape - Part 2: Data collection and reporting requirements".

General ISO/TC43 and ISO/TC43/SC1 are responsible for 153 standards which are frequently revised, and are systematically reviewed every 5 years.

Upcoming ISO Meetings

- Matsue, Japan November 2018. International delegates Stephen K., with others by teleconference.
- Standards Council of Canada has allocated enough money to allow full compensation for travel, but no other delegates will be travelling to meetings this year.

Active members are needed on this committee; those interested in participating should contact Stephen Keith, skeith@hc-sc.gc.ca

Stephen Keith

Report of Subcommittee on Human Vibration

to

CAA Standards Committee

November 03, 2018

The subcommittee is harmonized with the Canadian Mirror Committee on ISO/TC 108/SC 4 “Human Exposure to Mechanical Vibration and Shock”, and operates in parallel with TSC 4 "Occupational Vibration Control" of the CSA Technical Committee on Occupational Hearing Conservation S304. The subcommittee continues to direct its efforts in support of the development of international standards. In this role, members of the subcommittee serve as Convenors of two Working Groups (WG5 - Biodynamic Modeling, and WG8 - Vibrotactile Perception). The most recent meeting of ISO/TC 108/SC 4 was held at Osaka, Japan, in August, 2018. Progress on documents of interest to this committee is summarized below.

- 1) The revision of ISO 2631-5 on the evaluation of human exposure to whole-body vibration, part 5 - method for evaluating vibration containing multiple shocks - has been published. The new standard is a complete rewrite of the previous version and so should be considered by anyone interested in the subject.
- 2) The revision of ISO 5982 on biodynamic models for the seated human has successfully completed the voting procedures and will be published. Both dynamic mass and transmissibility are predicted using compatible models.
- 3) As previously reported, the basic standard on whole-body vibration (ISO 2631-1) is being revised with the goals of updating guidance and removing inconsistencies in the current document.
- 4) Existing standards on the evaluation of human exposure to vibration in buildings (ISO 2631-2:2003), and the measurement and evaluation of the vibration transmissibility of gloves at the palm of the hand (ISO 10819:2013) have been reconfirmed. Canada and three other P-members voted for the revision of ISO 2631-2 and are requested to provide a working draft of a possible revision. Interested persons are asked to contact me.
- 5) ISO 5349-1:2001 on the measurement and evaluation of hand-transmitted vibration is to be amended to include an informative annex describing shocks entering the hand. We are invited to nominate experts. Interested persons are asked to contact me.
- 6) ISO 5349-2:2001, which provides practical guidance on the measurement of hand-transmitted vibration, is to be amended to include an informative annex containing a protocol on how to measure vibrations on humans. We are invited to nominate experts. Interested persons are again asked to contact me

Members of the Canadian Mirror Committee: Dr. Alberto Behar (ON), Dr. Paul-Emile Boileau (Vice -Chairman, QC), Dr. Anthony Brammer (Chairman, ON), Mr. Dan Charboneau (Shoxs, BC), Dr. Tammy Eger (Laurentian University, ON), Dr. Liam Gannon (DRDC, NS), Mr. Ed Lehtinen (Impacto Protective Products, ON), Mr. Mark Lougheed (BC), Dr. Pierre Marcotte (IRSST, QC), Dr. Subhash Rakheja (Concordia University, QC), Mr. Timothy Rees (Shoxs, BC), Dr. Dan Robinson (Robinson Ergonomics, BC), Mr. John Swallow (Swallow Acoustical Consultants, ON), and Dr. Vic Schroter (MoE, ON).

A.J. Brammer

November 03, 2018

**CAA Standards Committee
November 2018 Meeting
Environmental Noise Subcommittee Report**

Submitted by: Bill Gastmeier, HGC Engineering

1. The Ministry of the Environment and Climate Change (MOECC) has been renamed the Ministry of Environment, Conservation and Parks (MECP) by the Ford Government
2. NPC 300 Environmental Noise Guideline - Stationary and Transportation Sources - Approval and Planning (NPC-300) has been universally implemented in Ontario. Several unresolved or somewhat controversial issues include:
 - A vacant lot zoned for a noise sensitive use must be assessed and physical noise mitigation specified if required. Implementation may be deferred until development proceeds. Location of points of reception is open to interpretation.
 - A Class 4 area allows for relaxed criteria for industrial (stationary) noise in some instances. The MOECC cannot designate Class 4 areas. That is the responsibility of the land use planning authority, developer and industry in cooperation and there is no formal process so implementation is inconsistent.
 - Assessment of impulse sound levels remains controversial and not well defined. "ISO/NP PAS 1996-3 - Acoustics -- Description, measurement and assessment of environmental noise -- Part 3: Objective Method for the Measurement of Prominence of Impulsive Sounds and for Adjustment of LAeq" is currently under review and may provide some guidance at some point.
3. Aggregate license applications typically require noise studies for licensing purposes, however these are often contested by the public. Many Municipal Official Plans now also require that noise studies done to rezone the lands for aggregate extraction and that those studies demonstrate no adverse effects (poorly defined) and some require consideration of cumulative impacts, which is difficult to do.
4. The Federation of Canadian Municipalities and the Railway Association of Canada Proximity Guidelines for New Development in Proximity to Railway Operations are now in common use.
5. CN has moved the office which provides information and reviews development applications from Toronto to Montreal and is taking a less aggressive stance than in the past. CP review function remains in Toronto.
6. There have been no new approvals for wind energy projects in Ontario and existing wind farms continue to be subject to audits.
7. No current information has been received from other jurisdictions but will be sought for our next meeting.