

MINUTES

(revised: 7 May 08)

TECHNICAL COMMITTEE ON ARCHITECTURAL ACOUSTICS (TCAA)

154th Meeting of the Acoustical Society of America

28 November 2007

7:30 PM

New Orleans, LA

Chair: **Brandon Tinianov**

Secretary: **Alex Case**

TCAA Chair, Brandon Tinianov, called the meeting to order at 7:35 p.m.

1. **Welcome and Introductions.** 69 members and guests were in attendance, including 5 new students and first-time attendees.
2. **Approval of Minutes.** The minutes of the previous meeting, held in Salt Lake City, were approved without changes.
3. **Acknowledgements.** The committee expressed its enthusiastic gratitude to the following for their hard work on this New Orleans meeting: General Chair Fred C. DeMetz; Technical Program Co-Chairs, George E. Ioup and Juliette W. Ioup; TPOM Representatives, David S. Woolworth and Angelo J. Campanella; Session Chairs, David Braslau, Alex Case, Damian Doria, Edward Duncan, Tony Hoover, Tim Leishman, and David Woolworth. Thanks were also expressed to all paper presenters.
4. **Congratulations.** Earnest congratulations were expressed for our new ASA Fellows honored in New Orleans: Elizabeth Cohen, Masayuki Morimoto, and Brandon Tinianov.
5. **Chair's Report on Technical Council Items.** Brandon Tinianov reported the following:
 - There is a jazz concert (Marlon Jazz Quartet) on Thursday night, 7 PM
 - The possibility of providing *Noise News International* magazine for all ASA members listing Architectural Acoustics as their first specialty was raised. A motion to initiate this member benefit passed unanimously.

- Acoustics Today may merit some additional distribution through an increase in the number of issues per year and/or release of an online version.
 - Motion (Brandon Tinianov): Expand the annual rate from 4 to 6
 - Yes = 1
 - No = 50+
 - The motion did not pass. The recommendation is to remain at the rate of 4/year.
 - Motion (Brandon Tinianov): Acoustics Today should be expanded to include an online presence
 - Yes = 50+
 - No = 1
 - Motion carries.
 - Motion (Brandon Tinianov): Acoustics Today in online form should be open to the public.
 - Yes = 50+
 - No = 0
 - Motion carries.
- LEED for healthcare is open for comment until December 15, 2007 (available at usgbc.org). In current form, it offers the possibility for 2 points in acoustics. It was noted that no acoustic points are available in the current LEED for schools specifications, which is *not* currently under review.
 - Motion (Steve Pettyjohn) TCAA shall draft a letter of support for 2 Acoustics-related points for LEED.
 - Yes = 50+
 - No = 0
 - Motion passes unanimously.
- Brandon Tinianov announced the possibility of releasing a DVD of JASA, 1929-present, with a suggested MSRP \$100. This would contain everything currently online and in the 12 CD-R set, plus front matter, obituaries, patents, etc. not currently available online or on CD). If created, the CD-Rs would be phased out. It is intended to be a member benefit, not a source of profit.
 - Motion (Brandon Tinianov): The TCAA supports the creation of this JASA on DVD, 1929 to present, for an expected MSRP of \$100.
 - Yes = 50+
 - No = 2
 - Motion carries

- Charles Schmid asks for a show of hands: Would you buy it? More than 30 say, “Yes.”
- Vision 2010 – ASA continues to seek new areas of influence and membership. Some thoughts are medical acoustics, nanotechnology, etc. Express your ideas to the TCAA chair.
- NSF proposal for education/research in Latin America - \$60,000-100,000, 2-week master institute for a post-doc level audience. Allan Pierce has asked for a list of contacts in Latin American and topics of interest. It was suggested that this project learn from similar existing efforts: Physical Acoustics Summer School (see Hank Bass and Anthony Atchley), and the Concert Hall Research Group Summer Institute (see Bill Dohn). The topic of “Swing Styles of Latin America” was offered.
- Fellows raffle: a fellow is needed to serve as usher for the student winner of a ticket raffle to the Fellows Luncheon. Ning Xiang volunteered with incredible enthusiasm.
- Comments on this meeting
 - Tony Hoover notes that the rooms he has been in so far are some of the quietest he has ever heard at an ASA conference in a hotel / conference center.
 - Bob Coffeen asks, “Why can’t we have wireless lavs for presenters available in every room so that presenters are not forced to present from behind the podium?”

6. ASA Committee Reports

Medals and Awards (Dave Lubman for Red Wetherill)

Dave Lubman has nothing yet to report, as he and Red have not met yet this week.

Membership (Ron Freiheit)

Ron Freiheit notes that 3 members from TCAA are becoming fellows this week. Please see Ron to discuss recognizing others.

Standards (George Winzer)

Bob Hellweg pointed out that every member’s current coupon for 5 free standards will expire in December and a new coupon for 5 more will be released in January. Please take advantage of this valuable member benefit.

Bob Coffeen offers thanks to the firms whose support has made the classroom acoustics standard so widely available. (applause of support)

Student Council (Michelle Vigeant)

Michelle reminds all in attendance of the upcoming Grants Workshop this week in New Orleans.

She reports that Georgia Tech and RPI are two new Student Chapters (bringing our total to 6!)

Students requesting funding for support in their travel and stay in Paris will be notified after submission of their abstract, but before the registration deadline.

Uwe Hansen needs volunteers for Thursday's event: Musical acoustics: science and performance.

Bennett Brooks notes that NCAC and TCAA are the sponsors of student social.

JASA and JASA-EL Editor (Ning Xiang)

Lily Wang is now an associate editor with Ning, a much-needed addition of resources as the number of submissions is significant (about 40/year).

POMA editor (Ralph T. Muehleisen)

The new Proceedings For Online Meetings On Acoustics (POMA) is to begin. Submitting authors of abstracts for papers presented at each ASA conference will receive an email a few weeks after the conference requesting a POMA submission. These submissions may not simply be the computer presentations, but must have accompanying prose to fully describe and explain the graphics of the presentation. These will not be peer reviewed, but are submitted to a short checklist procedure. Look for it at: asa.aip.org/poma.html

Dave Woolworth suggests each session chair could reinforce this process by also making a request of all of their presenters to submit their work to POMA. James Phillips further suggested that this be added to the instructions to the chairs package sent in advance of all special sessions.

The path of an effort might then be: presentation at an ASA conference, posting of the presentation online at the conference, write-up for POMA weeks after the conference, and eventual submission to JASA. The author(s) must initiate each step. There is no automatic or intended flow through each of these publication events. POMA publication does not preclude eventual JASA publication.

Joint Subcommittee on Speech Privacy in Healthcare Facilities (Greg Tocci)

2010 document covering all areas of acoustics for AIA has been released for comment. AIA has reviewed "interim guideline" which is to be integrated into their design manual. Stand-alone white paper will remain as reference. AIA will vote on revised manual in 6-8 months.

Books+ (**Brandon Tinianov**):

- **Theaters for Drama Performance**
Current effort is stalled, as editors have been unresponsive. Books+ needs a simple one-page proposal outlining marketing plan and budget for the project. Requests for this have not been fulfilled. This title will sit unreleased until someone is motivated to take the initiative.
Bill Cavanaugh suggests these editors should be kindly asked to step down and let others get it done.
- **How to Soundproof Your Home**
It is ready for publication. Online publication expected in mid-winter, 2008.
- **Poster Collection Book on Worship Spaces**
TCAA is asked to submit a proposal to Books+. Original plan was that this should follow the Theaters for Drama effort mentioned above.

AIP (**Martha Heil**)

AIP has two fellowships for post-docs. Apply to work in state department (science advisor) or in congress. It is an important chance to become involved with public policy. Please see aip.org/gov/fellowships for more information.

7. **TCAA Subcommittee Reports**

Newman Student Award Fund Update (**Bill Cavanaugh, Carl Rosenberg**)

The subcommittee has made good progress this year. The Newman Fund's 2007 newsletter is under preparation at this time. 2007 medal winners are: Yun Jing, Dorea Ruggles, Georgia Zedidou, Joseph K. Digerness, Minjia Qu, and Jonathan Rathsam. Congratulations to each of them.

Concert Hall Research Group Update (**Bill Dohn**)

Bill Dohn is not in attendance in New Orleans, but work is underway for the next summer institute, to be held in summer of 2009. Contact Bill Dohn if you would like to participate or have suggestions for content or location.

Classroom Acoustics Update (**David Lubman, Lou Sutherland, Bob Coffeen**)

Lou Sutherland began by encouraging the Executive Council to make some funds available to support Bob Coffeen and David Lubman's upcoming announcement (see below).

Lou Sutherland notes that we already have \$5,000 Technical Initiatives for two Classroom Acoustics publications, one written for architects, and one for educators. Lou requests that we consider appointing an editorial panel, to be

chaired by Bob Coffeen (TCAA representative), a TC Noise representative, and Mrs. Tinianov or similar resource familiar with PTA workings.

David Lubman reports that a 'non-profit' organization has appeared and has made effective progress with the National Organization of the PTA. The ASA Panel On Public Policy has developed a statement against classroom amplification as a substitute for good acoustics.

Martha Heil reports that the PTA has made statements that "encourage sound reinforcement technology to overcome poor acoustics"

David Lubman suggests that Bill Yost might be willing to help counter-market this. Lubman asks, "Will this Technical Committee organize an effort to get the PTA to rescind?"

- Motion (David Lubman): TCAA approves of having a representative of the ASA meet with the National PTA to discuss this.
 - Yes = 50+
 - No = 0
 - Motion passes unanimously.

Student Design Competition (Bob Coffeen)

Bob Coffeen reports a current Design Competition idea might be something in the classroom acoustics domain, such as: "Improving The Transmission Loss (And Other Acoustic Properties) Of A Shell Of A Modular Classroom."

Acoustic Product Safety Group (Nancy Timmerman)

Nothing to report. If you have interest, speak with Nancy Timmerman.

Acoustic Data Working Group (Ken Roy)

Expect a database at next meeting for review.

Another Two Decades of Drama Theaters (Greg Miller/Robin Glosemeyer)

Nothing to report.

TCAA Student Paper Award – Results from Salt Lake City (Brandon Tinianov)

Congratulations to first place recipient Michelle Vigeant (University of Nebraska); and to second place recipient Yun Jing (RPI).

Subcommittee on Green Building Acoustics (Ralph Muehleisen)

The activities of this subcommittee are very much like the Speech Privacy Subcommittee. They carefully watch LEED and comment when needed and look for opportunities to help. This subcommittee also acts as an information exchange to help TCAA members obtain LEED credit for projects.

To join email list:

asa-gba-request@acousticsweb.com

Proposed subcommittee on Building Performance Research And Standards Guidance (Ken Roy)

Ken Roy proposes that we initiate a new standing committee that seeks to better communicate our acoustics knowledge and pushes toward standards where appropriate (very much in the spirit of Classroom Acoustics). He suggests we pass this on to S1 or S12 as appropriate for integrating into the standards.

He recommends we call it:

“Subcommittee On Architectural Acoustics Design Standards”

Ken Roy volunteered to chair this subcommittee.

8. **New Business**

- Proceedings of Meetings on Acoustics - Authors can begin to submit papers to POMA on November 1. The first issue, however, will be available for viewing after first of the year. The only papers eligible for submission at this time are those which were presented at the Salt Lake City ASA meeting.
- Habitat for Humanity volunteer day on Saturday, December 1st. This event was capped at 32, but easily could have been more do to long list of motivated and generous ASA members!

9. **Planning of Future Meetings**

- Paris, joint with EAA, Euronoise and ECUA, (June 30 – July 4, 2008)
 - **Michael Vorländer** is General Chair (EAA).
 - Technical organizers in AA are **Lily Wang** (ASA) and **Jens Holger Rindel** (EAA)
 - TPOM meeting is in Paris, Feb 14-16,2008. We are in need of a TPOM Representative. See Brandon if you are interested and available.
 - Registration fees: 450 Euros (one first-author paper), each additional first-author paper costs 300 Euros more; students 200 Euros; hotel costs are

expected to be lower than average ASA meeting. Early reservations are recommended.

- Students were encouraged to submit abstracts before Jan 10th to secure grant before early bird registration
- Abstracts are due January 10, 2008. Photos are requested for student/professional networking. Member privacy is protected – the photos will be used only at convention to help international colleagues find and meet each other.
- 172 total structured sessions. Each structured/special session is requested to have at least 6 planned/invited papers. 9 or 12 is ideal quantity for ½ day session. (8-12 PM, 2-6 PM)
- All papers will be 20 minutes long (invited or contributed).
- Optional 6-page paper may be written for CD Proceedings.
- There are grants being generated for students. Attendance fees may be waived, dorms secured, etc.
- The Architectural Acoustics structured sessions are:
 - AA01 - Acoustics of opera houses
Joint with: MU, PA, NS
Org. by Robin Glosemeyer Petrone & Roberto Pompoli
Description: Creating desirable performing and listening environments in opera houses.
 - AA02 - Archeological acoustics
Org. by David Lubman & Jens Holger Rindel
Description: Acoustical effects and phenomena encoded in ancient structures and artifacts.
 - AA03 - Comparison of US and European standards in building/room acoustics
Joint with: ASACOS
Org. by Kenneth Roy & Eddy Gerretsen
Description: Both national and international standards in acoustics are used in the USA and European communities, so what has our experience been with both the measurement and application of these standards in building acoustics?
 - AA04 - Coupled volume acoustics
Org. by Jason Summers & Judicaël Picaut
Description: Room-acoustic design, physical and numerical modeling, measurements, analysis methods, and subjective / objective evaluations related to coupled rooms.

- AA05 - Acoustics and electroacoustics of small rooms
 Joint with: EA
 Org. by Jiri Tichy & Mendel Kleiner
 Description: The session will deal with the sound field in small rooms at low frequencies to improve the transfer functions to reduce the adverse effects of modes by the room shape and damping, modal distribution, sound dispersion, source modification and distribution and other physical and psychoacoustic phenomena.
- AA06 - Low frequency absorption: Mechanisms, measurement methods and application
 Joint with: NS
 Org. by Peter d'Antonio & Christian Nocke
 Description: This session will explore mechanisms exploited to achieve low frequency absorption or control, measurement methods to verify performance and applications of traditional and new low frequency control devices.
- AA07 - New measurement parameters in performing arts spaces
 Joint with: MU
 Org. by Lily Wang & Brian Katz
 Description: This session will discuss new measurement parameters and methods being developed for use in the design and assessment of performing art spaces, in order to go beyond and/or improve those in the current standard.
- AA08 - Student design competition
 Org. by Byron Harrison & Anders Christian Gade
 Description: The Student Design Competition, open to all students of building science and acoustics, is an adjudicated competition for the design of a theoretical facility in which architectural acoustics and noise control are of significant importance.
- AA09 - New frontiers in room acoustical modeling
 Org. by Murray Hodgson & Vincent Valeau
 Description: This session will present papers on novel approaches to room-acoustical modeling and room sound-field prediction.
- AA10 - Airborne and impact sound insulation
 Joint with: NS
 Org. by Berndt Zeitler & Patrizio Fausti
 Description: This session reviews the current laboratory research and design techniques involved with improvements of airborne and impact sound insulation in buildings and occupied spaces.

- AA11 - Acoustics of open-plan spaces
 Joint with: NS
 Org. by Kenneth Roy & Valtteri Hongisto
 Description: An emerging architectural design trend is to open-up the architectural spaces both vertically and horizontally, so what are the consequences on acoustic performance, and more importantly, what novel applications of acoustical materials and systems can be applied to resolve acoustic issues?
- AA12 - Speech segregation in rooms
 Joint with: PP
 Org. by Barbara Shinn-Cunningham & Mathieu Lavandier
 Description: This session will focus on the influence of sound reflections and reverberation on the intelligibility of a speech target source in the presence of directional interfering speech or noise sources.
- AA13 - Acoustics and privacy in healthcare facilities I: Emerging policy around the world
 Joint with: NS
 Org. by David Sykes & Kerstin Persson Waye
 Description: Societal context & emerging public policies, standards & guidelines. This session presents several perspectives of the emerging policy situation: International (40-nation, Paris-based International Union of Architects), National (US AIA & AHA), Asian (Japan), sectorial (LEED HC as an example of 'green' building rating systems worldwide), and technical/standards-development (ISO, ANSI, ASTM, ASHRAE).
- AA14 - Acoustics and privacy in healthcare facilities II: Emerging research around the world
 Joint with: NS
 Org. by William Cavanaugh & Kerstin Persson Waye
 Description: Overview of emerging research that supports the need to improve acoustics in healthcare facilities: some recent case studies involving innovative methods from Europe and North America.
- AA15 - Surround sound acoustics
 Joint with: MU
 Org. by Tony Hoover, Alexander Case & Etienne Corteel
 Description: Investigate and give direction to various issues of acoustics, audio, and aesthetics that are important in the design of surround sound studios, listening rooms, and installations.

- AA16 - Prediction methods in building acoustics
Org. by Berndt Zeitler & Catherine Guigou
Description: This session reviews the current research on the use of wave, statistical and energy approaches on building acoustics modeling to calculate the acoustic behavior of building components from the material properties and to estimate the acoustic performances of buildings from the performance of elements.
- AA17 - Measuring methods and uncertainty in building acoustics
Org. by Brandon Tinianov & Werner Scholl
Description: This session reviews the current research on novel and standardized measurement methods and uncertainty estimation in building acoustics.
- AA18 - Acoustics of concert halls
Org. by Leo Beranek, Daniel Commins and Takayuki Hidaka
Description: Creating desirable performing and listening environments in concert halls.
- Fall/Winter 2008 meeting, November 10-14, Miami, FL
 - Suggested special sessions:
 - Acoustics of single family residences (Dick Godfrey)
Dick is not present. If he proves not to be available, Nancy Timmerman has agreed to serve as alternate.
 - Special Session in Honor of Mike Nixon (Lou Sutherland, David Lubman)
 - Classroom Acoustics was meant to be part of session above, honoring Mike Nixon and has been merged into that single session.
 - Green Building standards and acoustics (B. Tinianov)
Confirmed
 - Multifamily structures – advances, legal issues, ... (A. Campanello)
 - withdrawn: What went wrong: facilities you designed... (Jessica Clements)
Ning Xiang reports this session is confirmed.
Jessica withdraws session (May 7, 2008)
 - Acoustics of small, multipurpose performance spaces (Michael Yantis, Bill Dohn)
Neither organizer is present

- Acoustics of retrofitted performance spaces (Diane Hougland)
Dave Woolworth will co-chair
- Knudsen Memorial Lecture - Barry Blesser (Bill Cavanaugh)
- Celebrating The Works Of Russell Johnson (Damian Doria).
Special Session plus possible Technical Tour (would need
Technical Initiative).
- Use of Innovative Materials (Molly Norris of Threshold Acoustic,
with Scott Pfeiffer)
Other titles under consideration:
Acoustic Challenges Of Integrating Curtain Walls Into Projects
Fostering Relationships With Architects
Charles Schmidt suggests this could be integrated with the
Russ Johnson Session above)

- Spring 2009 meeting, Portland, OR
 - Dave Bradley – Measurements And Modeling Of Scattering Effects
 - Bob Coffeen – Computer Auralization
 - Ken Roy – Health And Healing Environments
 - James Phillips - Mechanical Equipment In Multifamily Dwellings
 - Steve Pettyjohn – Acoustics Of Mixed Use Buildings
 - Bob Coffeen – Outdoor Performance Spaces
- Fall 2009
 - Baltimore proposed, San Antonio fallback, Washington DC last option
- Spring 2010 Washington, DC

10. **Technical Initiatives – Reports and Renewals**

Website Maintenance (preapproved) \$300

Tony Hoover suggests Brandon and Alex should check website for current content. Information is stale. Look and feel is in need of help. Brandon agrees to look into this.

Travel Funds for Invited Speakers (preapproved) \$1500

Proposals for the Spring 2008 meeting are being accepted.

Student Paper Awards (preappr) \$1000

Preapproved

AIA Certification for Continuing Education (Bennett Brooks, \$325 for 2007)

This initiative will need \$800 in 2008, but will not spend the \$325 TI of 2007.

Outreach for Classroom Acoustics (David Lubman, \$2000 for 2007)

Development of Booklet on “Methods to Improve Acoustics of Multi-Family Housing” (Brandon Tinianov, \$1000 for 2007)

TCAA expresses agreement that this is an important initiative.

Catalog and Digitize Riverbank Lab Notes (Ralph Muehleisen, \$1500)

Will not use money this year. Wishes to extend to 2008. Has assessed challenge associated with this large-scale project and is prepared to move forward.

Knudsen Lecture (Chair, \$1500 for 2007)

Move to 2008, will not spend \$1500 in 2007. Barry Blesser will speak.

Even Better than Real Thing, New Orleans (Alex Case, Tony Hoover, \$1000)

Money was spent as intended for very successful event.

Case Studies for ANSI S-12.60: Classroom Acoustics (Ralph Muehleisen, \$1000)

- Motion (Ralph Muehleisen): TCAA approves of \$1,000 Technical Initiative for the development of Case Studies related to ANSI S-12.60.
 - Yes = 50+
 - No = 0
 - Motion passes unanimously.

Technical Tour of a Russell Johnson Facility (Damian Doria, to be determined)

It is anticipated that some funds will be needed for the planned technical tour in Miami. To be determined at the next meeting of the TCAA.

11. **Other New Business**

None

12. **Meeting Adjournment**

- Motion (Tony Hoover): Adjourn
- Second (Ralph Muehleisen)
 - Yes = 50+
 - No = 0
 - Motion passes unanimously.
 - Meeting adjourned (10:45)