

Minutes

TECHNICAL COMMITTEE ON ARCHITECTURAL ACOUSTICS (TCAA)

161st Meeting of the Acoustical Society of America
Seattle, Washington

Thursday 26 May 2011

8:00 PM

Willow A

Chair: **Alex Case**

Secretary: **Ken Good**

I. Welcome and Introductions

The meeting was called to order at 8:00pm by Alex Case with 85 attendees signing in, 5 new to the roster.

II. Previous Minutes

A motion to accept the minutes from the Cancun meeting was made by Ralph Muehleisen and seconded by Dave Woolworth, the motion carried.

III. Acknowledgements

- Thanks to:
 - General Co-Chair: **Thomas J. Matula**
 - Technical Program Chair: **Eric I. Thorsos**
 - TPOM Representatives: **Ron Sauro**
 - Session Chairs: **Alexander C. Bockman, Jonathan Botts, Bennett M. Brooks, William J. Cavanaugh, Peter D'Antonio, David Lubman, Ralph Muehleisen, Eric Reuter, Ken Roy, Gerhard Sessler, Gary Siebein, Jason E. Summers, David M. Sykes, Brandon Tinianov, Michelle C. Vigeant, Michael Vorländer, Ning Xiang, and Michael Yantis.**
 - All paper presenters
 - Note: Architectural Acoustics contributed 120 papers, plus 2 Knudsen Lectures, plus 2 Panel Discussions, plus 1 Reception, plus 1 Student Design Competition across 18 sessions!

IV. Congratulations!

Gold Metal: **Eric E. Ungar**

V. Chair's Report

- Technical Council Items –
 - ASA Education Coordinator, **Wendy Adams**, is looking for career profiles from TCAA for posting at <www.exploresound.org> site for outreach to K-12 students. It is minimal work as you only need express your interest to Wendy Adams (wendy.adams@colorado.edu) and, if yours is a good complement to the other bios she has, you sit down for an interview and *she* writes it up.

- ASA Education Coordinator, **Wendy Adams**, is also in the process of updating the graduate program list. Please keep your institutions info current by having your school's contact person visit the graduate directory at <<http://asa.aip.org/asagrad/gpdir.cm.html>> and inform her of any updates.
- Comments on this meeting
 - **Lou Sutherland** offered gratitude for the "FM" hearing assistance system at this meeting, but pointed out that a second microphone was required. ASA should consider a more integrated hearing assistance strategy for convention events.
 - Some concerns around Healthcare session on Friday, several from TCAA expressed a desire to have sessions Monday thru Thursday when possible
 - **Michelle Vigeant** commented that the Wireless Internet system was wonderful – several others concurred
 - The TC entertained discussion on the "overlap" of session. "Is the preference of the TC to have session overlap if necessary to stay within the 8:00am to 5:00pm boundaries or would we prefer to go beyond the 8:00am – 5:00pm if necessary to prevent session overlap?"

- It was suggested that the TC could consider limiting the number of session to fit within the conference timeframe without overlapping sessions

- We "straw poll" voted on the following:

Ok to overlap session when necessary	40
Do not overlap sessions, go beyond time frame if necessary	20
The TC should consider limiting the number of sessions to prevent overlap	25

VI. ASA Committee Reports

- Medals and Awards (new rep **Tim Foulkes**)
 - Tim Reported: The Medals and Awards committee meets during every ASA meeting to select recipients for major awards such as the Silver Medal, Gold Medal, the Helmholtz-Rayleigh Interdisciplinary Silver Medal and the R. Bruce Lindsay Award. TCAA becomes eligible to award a Silver (Sabine) medal about every 3 years. The primary selection criterion is the candidate's technical contributions to their field. If you know of someone in TCAA who you think might be a good candidate, contact me (Tim Foulkes) tfoulkes@cavtoccoi.com. More information on each medal is available on the ASA web site.
- Membership (**Ron Freiheit**)
 - Ron reminded the TC body that nominations for Fellowship are welcome and that non-fellows can make nominations
- Standards (**George Winzer**)
 - **Noral Stewart** reported that progress in being made with the S12.60 classroom standard inclusion in IBC
 - Reminder that included in your ASA membership is five free standards downloads per year

- **Student Council (Norm Philipp)**
 - Norm reported that the Students had a strong influence at the Seattle meeting, with society overview session hosted by **Lauren Ronsse** and coordinated the student reception with the ASA Jam
 - Students should note that students studying in the US will have Hong Kong registration waved if they are listed as an author or co-author at the meeting
 - Twitter feed continues and is well received
 - We welcome **Sam Clapp** at the new student rep
 - Enthusiastic THANKS to **Norm Philipp** for his service
 - It was note that 35 students benefited from the waved registration
- **JASA and JASA-EL Editor (Ning Xiang, Lily Wang, Franck Sgard)**
 - Editor-in-Chief **Allan Pierce** requests proposals for review papers within Architectural Acoustics. 3 to 5 proposals would be welcome. Send proposals to Ning (xiangn@rpi.edu) and/or TCAA Chair (alex_case@uml.edu) by June 13. Worthy proposals will be developed with some early assistance of E-i-C, so while acceptance for publication is never assured, review papers represent a good opportunity for publication.
 - Suggested that if you summit to JASA that you also volunteer to review for JASA (Return the favor)
- **POMA editor (Ralph T. Muehleisen)**
 - Ralph reminded the body to please submit POMA Papers; you have two years to submit so papers presented at meeting from 2009 are still eligible.
 - Also clarified that POMA is Editorial review for grammar and obvious errors for correction – not rejection.
 - Poles were taken on several POMA format related items:

Is POMA valuable to you?

Yes	67
No	2
Abstain	0

How should POMA be reviewed?

Peer review	6
Editors review (current format)	75
Abstain	4

Do you desire more uniformity with other publishing?

Yes	38
No	22
Abstain	9

- **Public Policy(Nancy Timmerman)**
 - Nancy Timmerman reported ASA's Panel on Public Policy (PoPP) has had requests to consider creating a policy on wind turbines, to include effects on people and wildlife, on land and in the water, and including both sound and vibration. Nancy has agreed to chair a subcommittee on this topic and is looking for volunteers to assist in the effort. There was a special session on noise on Wind Turbines in Seattle, and some participants have agreed to participate. Please let her know (nstpe@hotmail.com) if you want to be involved. The effort will include what parameters need to be considered.
 - **Peggy Nelson** is Public Policy's new chair.
 - **Ken Roy** and **Michelle Vigeant** reported to Public Policy on classroom acoustics
- **Women in Acoustics**
 - **Erica Ryherd** reported that Women In Acoustics is active and strong. There is a lot going on including the launch of a new website
- **Regional Chapters**
 - **Bob Coffeen** reported a new student chapter at the University of Cincinnati

VII. **TCAA Subcommittee Reports**

- **Newman Student Award Fund Update (Bill Cavanaugh, Carl Rosenberg)**
 - Bill Cavanaugh reported Newman fund had a 25th Year Celebration this week, Newman medalists were recognized, thanks to Wenge Foundation for your support.
- **Concert Hall Research Group Update (Tim Foulkes)**
 - **Tim Foulkes** reported on the meeting in Santa Fe. Although the subcommittee does not have a time nor location to announce at this time they will be working on another symposium for the future.
- **Classroom Acoustics Update (David Lubman, Lou Sutherland, Bob Coffeen)**
 - **Dave Lubman** reported good progress on the classroom acoustics booklets **Dave Woolworth** is working on a draft for submission
- **Acoustic Data Working Group (Ron Sauro)**
 - Ron Reported that the Lab is ready to measure and a he will be asking the TCAA secretary to send a request for material testing priority in the upcoming months
- **Joint Subcommittee with Noise on Speech Privacy (Greg Tocci)**
 - Greg reported that the FGI guidelines with inclusions of acoustics is published and used as code in hospitals.
- **TCAA Student Paper Award – Results from Cancun (Ken Good)**
 - Ken reported the results from Cancun Student Paper
1st: **Miriam A. Kolar**
2nd: **Ana M. Jaramillo**
 - All students should note that online submission of their paper at:
<http://scitation.aip.org/jhtml/asaconfsite/signin_user.jsp> and at POMA

- using: <<http://poma.peerx-press.org/cgi-bin/main.plex>> is required for eligibility in Architectural Acoustics Student Paper Awards
- TCAA had 9 entries for student papers in Cancun and over 20 in Seattle Thanks to the many members who served as judges and thoughtfully offered their feedback.
 - Student Design Competition (**Bob Coffeen** and **Andy Miller**)
 - Bob reported that since 2003 we have awarded over \$60,000 to the competitors.
 - Thank you to Wenger for their support and sponsorship for the competition over the years
 - The Seattle competition for Seattle was organized by **Andy Miller** of BAI and **Bob Coffeen**
 - The Winners for Seattle:
 - **Anna Arvidsson**: Chalmers Univ. of Technology
 - **Malin Landh**: Chalmers Univ. of Technology
 - **Mihkel Toome**: Chalmers Univ. of Technology
 - *Commendation (listed by school)*
 - Chalmers Univ. of Technology
 - Jonas Lundgren
 - Patrik Thorsson
 - Dario Bogdanovic
 - Tobias Gothfelt
 - Marcus Stark
 - Vijendra Bhat
 - Sandra Berg
 - Anna Glansberg
 - Erik Allinger
 - Fredrik Asphult
 - Simen Tornquist
 - Rensselaer Polytechnic Inst.
 - Matthew Azevedo
 - Kristen Murphy
 - Vanessa Li
 - Thank you to judges: **David Adams, Rob Currann, Steven Dance, Tony Hoover, Scott Pfeiffer, Lauren Ronsse, Robert Smolling, and Michael Yantis,**
 - **Phillip Robinson** and **Dave Woolworth** have volunteered to coordinate the competition for Hong Kong
 - Subcommittee on Green Building Acoustics (**Ralph Muehleisen**)
 - asa-gba-request@acousticsweb.com
 - Ralph reported that little formal activity at this time however (**Noral Stewart** is doing a great job with the International Code Council, Noral presented an update in a Monday Session.)
 - Ralph is looking for a replacement in this role.

- **Dave Lubman** reported on Classrooms acoustics – we expect the Green Building to open for comment in July – need comments for lowering the background noise level to 40dBA.
- **Bennett Brooks** moves that the TCAA chair or chair appointee be empowered to write a position regarding the 40dB background noise. The motion was seconded by **Bruce Olson**
- Vote : The TC empowers the chair or an appointee of the chair to write a position on behalf of TCAA

Yea	83
No	0
Abstain	2

- **Ralph** volunteered for to write the position, the chair accepted.
- Also noted: The US access board is in process to add “access guideline” for classroom acoustics
- Subcommittee on building performance research and standards guidance (**Ken Roy**)
 - Ken reported that standards for regulation need to be performance driven current focus on healthcare; then intending to look at updating others.
- PACS# revision Subcommittee (**Ning Xiang, Angelo Campanella, Ralph Muehleisen**)
 - In the past year, the revision proposal for Architectural Acoustics PCAS# 43.55 has been approached by the TCAA. The proposed revision has been submitted to the Editor-in-Chief. The revision has undergone many iterations, taking into account valuable recommendations by acousticians all over the world. The subcommittee, on behalf of the TCAA, would like to express our high respect and appreciation to many individuals who actively participated in PACS # revision:
 - **Yoichi Ando, Leo Beranek, John Bradley, Bennett Brooks, Trevor Cox, Tim Foulkes, Tim Gulsrud, Carl Hopkins, Jin Young Jeon, Jian Kang, Yiu Lam, Jie Pan, Judicaël Picaut, Philip Robinson, Jason Summers, Hideki Tachibana, Vincent Valeau, Michelle Vigeant, Michael Vorlaender, JiQing Wang (CC Wong)**
- Drama Theatre Book Subcommittee (**David Bradley, Erica Ryherd, Michelle Vigeant**)
 - **Dave Bradley** reported that *Another Two Decades of Drama Theaters* book was launched at the Cancun meeting and is available (**\$45 ASA members / \$60 Non-members**). The TC thanks Dave, Erica & Michelle for all their work on the quality publication.
- Worship Spaces Book Subcommittee (**David Bradley, Erica Ryherd**)
 - **Erica Ryherd** reported that a call for contributions for a new Worship Spaces book will be going out soon

VIII. New Business

- (**Noral Stewart**) ICC Green Construction Code

- Noral reported: after the TCAA meeting in Cancun, ASA agreed to allow me to submit a proposal to the ICC on behalf of ASA, subject to approval of a committee that included ASA officers, **Paul Schomer**, and **Peggy Nelson**. A proposal was developed and submitted on January 3, 2011 on behalf of ASA, NCAC, ASTM, and the co-chairs of the INCE committee on Building Acoustics. Subsequently, the Board of INCE and the governing body of ASHRAE TC 2.6 both unanimously endorsed the position. **Dave Marsh** represented us at hearings in Dallas and the proposal was accepted as submitted. However, some concerns were expressed that we had deleted the Outdoor-Indoor requirements and that some referenced standards might not be in fully mandatory language. Two proposals made by others were also accepted which would effectively modify our proposal. Over the summer we will have to continue to work with the ICC to figure out what else we need to do. The final adoption hearings are scheduled for Phoenix, the same week as the ASA San Diego meeting. The attached presentation provides more detail.
- **(David Bradley)**: A new on-line communications WG is being formed to address on line communications
- **(Bob Aster)** educations outreach program – collected equipments and has been shooting footage for the program. Bob is asking for a 3d rendering for demonstrating room modes
- **(Jason Summers)**: Jason presented a motion to create - Benchmarks in Architectural Acoustics Subcommittee, the motion was seconded by **Ralph Muehleisen**
 - Vote : The TC votes to create a new subcommittee titled Benchmarks in Architectural Acoustics

Yea	81
No	0
Abstain	4

- **(Tony Hoover)**: Tony made an appeal for volunteer(s) for the next Jam at the San Diego meeting. Please contact Tony if you'd like to help <THoover@mchinc.com>

IX. Planning of Future Meetings

- **San Diego, CA Oct 31-Nov 4, 2011** the technical program is complete (no action required at the Seattle meeting)
 - The TCAA TPOM Reps are **Michelle Vigeant** and **Tyrone Hunter**, thank you Michelle & Tyrone
 - Call for papers is out. Abstracts must be submitted online by Monday, 27 June 2011. Session Chairs, full speed ahead.
 - Confirmed special sessions are:
 - Networking In Soundscapes - Establishing A Worldwide Collaboration, joint with Noise, Standards (**Gary Siebein** and **Bennett Brooks**)
 - Active Acoustics – Methods for Effective Coordination (**Roger Schwenke**)

- Technical Tour: UCSD Music Building (**Roger Schwenke**)
 - Accuracy Of Absorption, Scattering, and Diffusion Coefficients, joint with Noise, Signal Processing (**Peter D'Antonio**)
 - Ear Training Methods For Architectural Acousticians And Consultants (Joint With Education) (**Sebastian Otero**)
 - Architectural acoustics and audio - rooms, systems, and techniques for adapting, enhancing, and fictionalizing acoustic traits, joint with Psychological & Physiological (**Tony Hoover** and **Alex Case**)
 - Variable Acoustics on Concert Stages, joint with Music (**Michelle Vigeant** and **Bill Dohn**)
 - Update on Acoustic Products, Treatments, and Solutions (**Matthew Golden** and **Kenneth Good**)
- **Hong Kong, May 14-18, 2012** – Final Sessions Due Tonight, but the program is pretty much complete, as outlined below. This is an international meeting organized in league with multiple organizations, so the planning process is slower and more involved. Speak with **Ning Xiang** after this meeting to discuss possible additions, but as he has been coordinating all session ideas across the globe, things may not change much from here.
 - It was noted that Airfare is reasonable and housing/hotel fees are reasonable – Registration is \$700 – again students must be a listed author for waved registration
 - ASA Architectural Acoustics Co-Chair for organizing the technical program is **Ning Xiang**. Thanks Ning!
 - NEED TPOM rep: **Ken Roy** volunteered to be the TPOM rep for Hong Kong, thank you Ken
 - TPOM meeting will be in December 2011.
 - Up to \$1k support from ASA may be available, but local or frequent Hong Kong traveler preferred.
 - Joint with WESPAC, ASC, and Hong Kong Institute of Acoustics
 - www.acoustics2012hk.org
 - **Tom Ho** (General Chair); **Maurice Yeung** (Co-Chair); **KC Lam** (Technical Program Co-Chair).
 - ASA co-organizers: **Whit Au** (Co-Chair); **Lisa Zurk** (Technical Program Co-Chair)
 - Advance Registration:
 - 700 US\$
 - 300 US\$ Students registration (waived for students are listed as a paper author.)
 - Proposed Sessions:
 - Objective and subjective parameters of spatial impression in performing arts spaces, joint with Psychological & Physiological (**Michelle Vigeant** and **Jin Yong Jeon** - WESPAC)
 - Investigations of objective measures and/or subjective studies examining spatial impression, including listener envelopment

and apparent source width, in classical music concert venues. Design examples of actual halls that emphasize spatial parameters are also included in this topic.

- Psychoacoustics in Rooms, joint with Psychological & Physiological (**Philip Robinson** and **Berhard Seeber**)
 - Fundamental research and application of masking, speech transmission, spatial hearing, and auditory scene analysis within the context to room-acoustic environments, including but not limited to: source width, envelopment, distance perception, localization, loudness, noise, reverberance, scene analysis, speech intelligibility, and room synthesis.
- Development and applications of micro-perforated sound absorbers, joint with Signal Processing (**Christian Nocke** and **Jonathan Botts**)
 - Theory and new developments of absorbers based on /derived from microperforation, various applications in different fields such as room acoustics, noise abatement or car noise use micro-perforated structures.
- Multiple-microphone measurements and analysis in room acoustics (**Boaz Rafaely** and **Sam Clapp**)
 - Recent developments in multiple-microphone methods involving microphone arrays and spatial-sampling systems, applied to measurements and retrieval of complex spatial data from sound fields in rooms, including measurement systems, signal processing, and experimental investigations.
- Acoustics in Concert Halls, joint with Noise (**Ning Xiang** (ASA) & **Jiqing Wang** (ASC))
 - Development of new design features and fundamental research in concert halls acoustics. Designs and validations of recently grand-opened venues. (limited to concert halls first, to limit number of invited speakers, if not enough, open to , opera houses, and theaters, multi-purpose halls, indoor and outdoor)
- Classroom Acoustics in Asia, joint with Noise (**Kenneth Roy** (ASA) & **Xiang Yan** (ASC))
 - Acoustic and Noise effects in schools and classrooms. Topics of interest to include architectural design for high performance or 'green' rated schools, relationship of acoustics and student perception and performance, field case studies and research studies on noise and acoustics in schools, studies of teacher/student communications and performance.
- Healthcare acoustics, joint with Noise (**Kenneth Roy**, **Erica Ryherd** (ASA), **Jerry Li** (**Li Jia**) (ASC))

- Acoustic and Noise effects in hospitals and other healthcare facilities. Topics of interest to include evidence based design (EBD) research or case studies on acoustic conditions in hospitals, staff or patient response, and architectural or noise control treatments.
 - Multifamily dwelling, joint with Noise (**Angelo Campanella (ASA)**)
 - Multifamily housing sound isolation developments and noise control issues.
- **Kansas City, MO, Fall 2012 (tentative: Oct 22-26, 2012; Bob Coffeen, Chair)**
 - Proposed sessions (we need 5 or 6 tonight):
 - Alternate approaches to room acoustics analysis (**Dave Woolworth**)
 - Methods, equipment, and strategies for room acoustics evaluation that challenge or enhance current standard practice for source and receiver directivity, frequency range, and room conditions.
 - Coordination of architectural & sound systems design (**Ken Roy**)
 - Instrumentation (**Eric Reuter & Matthew Golden**)
 - New concert halls and proscenium theaters (**Bob Coffeen**)
 - Feature the new Kauffman Center for the Performing Arts in Kansas City which opens in September of this year and featuring the acoustical consultant Yasuhisa Toyota of Nagata Acoustics
 - Plenary session at the folly theater (**Bob Coffeen**)
 - Bob is suggesting to the committee on meetings that the plenary session be held in the historic Folly Theatre which is directly across the street from the Marriott Hotel, the meeting hotel. And, prior to the beginning of the plenary meeting we would provide chamber or choral music by a ensemble from the University of Kansas School of Music
 - Classroom Acoustics; Focus on Education Implementation and Accomplishments in Classroom Acoustics (Joint with TCNoise) (**Lou Sutherland & David Lubman**)
 - Spatial and binaural evaluations of room-acoustics properties (**Ning Xiang**)
 - Computer Modeling in Buildings and the Environment as an Educational Tool (Joint with Education) (**Norm Philipp and Ron Sauro**)
- **Future Meetings, no action required:**
 - Montreal, Canada, 2-7 June 2013; Joint with Canadian Acoustical Association; Michael Stinson (Chair); Luc Mongeau (Technical Program Chair)
 - Session ideas are requested

X. Technical Initiatives – Reports and Renewals

- Technical Initiatives are meant to inspire and support innovative ideas. Suggestions for appropriate investments in outreach, education, and other ASA activities are strongly encouraged.
- Website Upgrade/Maintenance: The TC is pleased to announce our new webmaster **Sean Browne** (preapproved) \$300
- Travel Funds for Invited Speakers (preapproved) \$1500
- Student Paper Awards (preapproved) \$1000
- Funds for promotion of the new Drama Theatre Book (**Dave Bradley**) \$250:
 - vote unanimously in support

XI. Other New Business

- (None presented)

XII. XI. Meeting Adjournment

- Motion to adjourn at 10:15pm

Respectfully Submitted:
Kenneth W Good Jr
Secretary TCAA