

# MINUTES

## TECHNICAL COMMITTEE ON ARCHITECTURAL ACOUSTICS (TCAA)

146th Meeting of the Acoustical Society of America

11 November, 2003

7:30 PM

Austin, TX

Chair: **K. Anthony Hoover**  
[thoover@cavtoci.com](mailto:thoover@cavtoci.com)

Secretary: **Lily Wang**  
[lwang4@unl.edu](mailto:lwang4@unl.edu)

### INTRODUCTIONS AND ACKNOWLEDGEMENTS

Thanks to:

- General Chair: **Clark S. Penrod**
- Technical Program Chair: **Evan K. Westwood**
- Paper Sorter: **Jack Randorff**
- All Session Chairs: **Ken Roy, Alex Case, Yasushi Shimizu, Jack Randorff, Peter Ladefoged, Richard Lyon, William Hartmann, Sanford Fidell, David Marsh**
- All paper presenters

### WELCOME

- Students and first time attendees

### CONGRATULATIONS!

- **Dr. Leo Beranek**, 2002 National Medal of Science Laureate
- New Fellows: **Tim Foulkes, Ron Freiheit**
- **Dick Campbell**, elected Vice-President of the ASA Foundation

### PREVIOUS MINUTES

- **Neil Shaw** made a motion to approve previous minutes of Nashville TCAA meeting. **Elizabeth Cohen** seconded. Motion was approved unanimously.

### OLD BUSINESS

#### 1) Classroom Acoustics

- The Outreach for Classroom Acoustics Task Force is being chaired by **Bob Coffeen** and **Red Wetherill**. **Wetherill** reported that he believes outreach should aim directly to the clients, such as the National Education Association, state agencies, unions, teachers, etc. He welcomes any ideas and suggestions from TCAA members. Also he asks for five or six people to work with him on this task force to come up with a working plan. **Les Blomberg** volunteered. Other interested parties can contact **Wetherill** at [redwetherill@sbcglobal.net](mailto:redwetherill@sbcglobal.net)

- **Les Blomberg** reported that three new websites on classroom acoustics are up and running: <http://www.schoolnoise.org> , <http://www.quietclassrooms.org> , and <http://www.classroomacoustics.org> . **Blomberg** passed around a packet of resource documents that can be mailed out to interested parties. He is willing to distribute other free documents (contact **Blomberg** at [les@nonoise.org](mailto:les@nonoise.org) )
- 2) TCAA Web Page Update (**Les Blomberg**)
- TCAA web page is doing well and may be found at <http://www.nonoise.org/quietnet/tcaa/index.htm>
- 3) Student Council Update (**David T. Bradley**)
- Student chapters are being set up, with help of Regional Chapters Committee. **Erica Bowden** reported that a pilot student chapter at the University of Nebraska is being set up this spring, and more chapters will be added in Fall 2004.
  - The Student Council plans to offer a Mentoring Award – any student may nominate any other member of ASA.
  - All students are encouraged to check the student bulletin board at the conference, to attend the student social at the conference, and to visit the ASA student webpage: <http://www.acosoc.org/student/>
  - Concerning the ASA “Students Meet Members for Lunch” program at conferences, **Damian Doria** reported that someone should be a TC contact so that the coordinator (**Uwe Hansen**) knows who to ask for member names. **Elizabeth Cohen** volunteered to be this contact for the NYC conference.
- 4) Concert Hall Research Group Update (**Tim Foulkes**)
- About 10 years ago, the Concert Hall Research Group commissioned measurements in a variety of concert halls. These results were published in tabular form, and pulled together on a CD. The beta version was passed out in Nashville. **Paul Calamia** suggested having impulse responses in wav format rather than Matlab format; he has written script to convert the Matlab files to wav files. A third generation is being produced now. Hopefully the final version of the CD will be available in 2004.
- 5) 2<sup>nd</sup> Concert Hall Acoustics Summer Institute (**Chris Jaffe, Robin Glosemeyer**)
- This institute was successfully held on August 11-14, 2003 in Saratoga Springs, NY, and its theme was integrating acoustics into performing arts spaces. At least 20 students attended with full fellowships.
- 6) Subcommittee on University / Consultant Partnerships for Research (**Paul Calamia**) – no report
- 7) Halls for Music Performance Book Update (**Tim Foulkes, Chris Storch, Ian Hoffman**)
- The editors of the book thanked all contributors. **Foulkes** offered special thanks to **Hoffman** for the great amount of work he put in, coordinating the production with the University of Toronto Press.

- The book was produced in color. Each contributing consulting firm will receive 2 free books for each poster they contributed. These will be sent by the end of 2003. The editors encouraged firms to donate extra copies to libraries, universities, clients, etc. A special copy was presented to **Bill Cavanaugh**, for being the first to suggest a poster book in 1982.
  - **Greg Miller** has volunteered to be an editor for the next poster book on drama theaters; he asked for additional people to help. **Robin Glosemeyer** volunteered.
- 8) Update on request to ASA Books Committee to reprint Cremer, Mueller, and Schultz texts (**Damian Doria**) – no update
- 9) Newman Student Award Fund Update (**Bill Cavanaugh**)
- Annual newsletter will be mailed at beginning of 2004 to all ASA AA-interested members. 2003 activities included sponsoring the Student Design Competition through the generous Wenger Foundation donation; Newman Student Award medals; and two recipients of the Schultz Grant. See webpage for more information:  
<http://www.newmanfund.org>
- 10) Product Safety Committee (**Nancy Timmerman**)
- This subcommittee has been asked to collect information on flammability, toxicity, and safety issues of materials associated with acoustics, including duct lining and sound absorptive foams. If you're interested in working on this, please contact **Timmerman** at [nstpe@hotmail.com](mailto:nstpe@hotmail.com) . **Jeff Szymanski**, **Brandon Tinianov**, and **Warren Blazier** all voiced interest.
- 11) Satellite/topical meeting ideas (**Dana Hougland**)
- Satellite meetings increase attendance at regular meetings. TC's are being asked to generate ideas for topics (contact **Hougland** at [dhougland@smwinc.com](mailto:dhougland@smwinc.com) )
  - Forensic acoustics at this conference was well attended. Thanks to **Jack Randorff** for organizing the Forensics seminar (co-sponsored by NCAC).

## NEW BUSINESS

- 1) Nomination of new ASA Fellows
- All TCAA members are encouraged to nominate new ASA Fellows. Nominations must consist of letters from two ASA Fellows and a third ASA Member. You do not have to be a fellow to initiate this procedure.
- 2) Election of new TCAA Chair
- **Lily Wang** and **Brandon Tinianov** were nominated. **Bill Cavanaugh** motioned for nominations to be closed. TCAA membership elected **Wang** to be new TCAA Chair. The Chair typically appoints the Secretary; **Wang** asked **Tinianov** to be TCAA Secretary, and he accepted.

### 3) Technical Council Items (**Tony Hoover**)

- The ASA Vice-President, **Anthony Atchley**, is looking for input from TC's to see how TC's are working. Are we where we want to be in 2010? Are special sessions working? Should all sessions be special? Should contributed papers be posters? Are technical initiatives satisfactory? How is information distribution? These questions are asked on a cyclical basis to ensure that our society remains responsive and strong. Please consider and email your thoughts to **Hoover**.
- **Allan Pierce**, the editor of JASA, repeated his request for someone in TCAA to help with TCAA obituaries. Please contact **Hoover** if interested.
- AIP Physics Success Stories are being updated. **Tony Embleton** noted that this document is sent to congressmen. If anyone is interested in helping to update the Acoustics story, please contact **Ben Stein**, the AIP Liaison.
- At the 75<sup>th</sup> Anniversary meeting in New York, TCAA and TC-Noise will be having abbreviated meetings one right after the other, on Thursday evening. Also **Bill Cavanaugh** and **Hank Bass** are editing a book that summarizes major TC activities over the past years; if you can think of a significant event in TCAA, please pass onto **Hoover**.

### 4) Library of Congress Sound Preservation Committee (**Elizabeth Cohen**)

- **Cohen** reported that this committee seeks to publish a series of papers on sound preservation and best practices, including appropriate listening rooms for sound preservation. If anyone is interested in working with group, please contact **Cohen** (email [ecohen@ucla.edu](mailto:ecohen@ucla.edu)). **Dana Houglund** reported that she has good contacts with Library of Congress. **Neil Shaw** suggested contacting the Society of Motion Picture and Television Engineers (SMPTE).

## FUTURE MEETINGS

### 1) New York, NY: May 24-28, 2004 (75<sup>th</sup> Anniversary of the ASA)

- Co-chairs **Russell Johnson** and **Damian Doria**
- **Gary Elko** is the Technical Program Chair. **Dick Campbell** agreed to be TCAA TPOM rep. **John Erdreich** later agreed to be TPOM rep instead, due to his proximity to NYC.
- 75th Anniversary Committee (**Patricia Kuhl** and **Leo Beranek**)
  - A banquet will be held on Tuesday night, honoring our past. Wednesday morning will be at City Center, looking to the future. A virtual music orchestra will end the Wednesday morning session. Restricted session for fellows and older members (75 and older) follows from 12:30-1:30 PM. Assorted NYC tours are planned for Wednesday afternoon.
- Sessions include:
  - Special Session honoring **Leo Beranek (90<sup>th</sup> Birthday)**
  - Memorial Session honoring **Robert Apfel**

- Special Session on Standards and Use of Standards. **George Winzer** is our TCAA standards representative. **Bob Hellweg** reported that they are planning to have a paper on standards in AA and their importance through the years.
- TCAA Special Sessions:
  - Acoustics of Virtual Environments (**Elizabeth Cohen, Mendel Kleiner**)
  - Alternate Acoustic Environments for Performing Arts Presentations (**Chris Jaffe**) – **Neil Rohlnick**, director of RPI Eye-Ear lab to co-chair this session with him. **Alex Case** has volunteered to help, and **Neil Shaw** is going to help get some recordings out there. **Jaffe** is going to try to get some performance artists to get involved.
  - Bell Labs and Acoustics, joint with Engineering Acoustics (**Neil Shaw, Gary Elko**) – EA plans to be submit, according to **Damian Doria**
  - Effect of Room Acoustic Environment on Human Productivity/Performance, joint with Noise (**Lily Wang, Rendell Torres**)
  - How to Quantify Opera House Acoustics (**Jin Jeon, Yoichi Ando**)
  - Multisensory integration and the concert experience: How visual input affects what we hear (**Jerry Hyde**)
  - Theaters for Drama Performance – Another Two Decades (1984-2004), Poster Session (**Greg Miller**) – co-chair requested, **Robin Glosemeyer** volunteered.
  - Student Design Competition (**Bob Coffeen, Robin Glosemeyer, Lily Wang**) – 2004 announcement concerning an outdoor music pavilion has been posted at <http://www.newmanfund.org> . **Ralph Muehleisen** thanked organizers for getting the competition out in the fall.

## 2) Future Conference Schedule:

- San Diego: 15-19 November 2004 – Ideas for special sessions include:
  - Classroom Acoustics So Far, joint with Noise (**John Erdreich**), maybe also include ideas for outreach
  - Coupled Rooms (**Ralph Muehleisen, David Bradley**)
  - Libraries (**Elizabeth Cohen**)
  - Robert Young Memorial Session, joint with Noise, Music, EA (Alan Marsh)
  - Scattering (**Dick Campbell**)
  - Spatial and Binaural Evaluation of Performing Art Spaces, joint with Signal Processing (**Ning Xiang**)
  - Integration of Synthesis Techniques with Acoustical Music, joint with Music (**Tony Hoover, Dick Campbell**)
  - Speech Intelligibility and Privacy (**Ken Roy**)
  - Soundscape – focused on architectural point of view (**Brigitte Schulte-Fortkamp**)

- Vancouver, BC, Mid-May 2005 (Joint with CAA) – Ideas for special sessions include:
  - Preserving Acoustical Integrity in the course of Renovation (**Dan Raichel**)
- Minneapolis, Fall 2005 (Joint with INCE, NOISE-CON)
  - **Bob Hellweg** reported that Noise-Con will be held from Mon-Wed Oct. 17-21, co-chaired by **Patricia Davies** and **Stuart Bolton**. All TC Noise papers will be part of Noise-Con, and all Noise-Con papers will be distributed on CD-Rom. TCAA may want to have special sessions that are part of Noise-Con. The meeting planners expect this to be a very integrated meeting where attendees will pay one fee and attend both conferences.
- Providence, Spring 2006
- Hawaii, Dec. 2006 (Joint with Japanese Acoustical Society, INCE/Internoise + possibly INCE Japan)
  - This meeting will be held Tuesday through Saturday; Monday through Wednesday will be Internoise.

## TECHNICAL INITIATIVES

### *Approved for 2003*

- \$750 for Student Design Competition (preapproved) – no funds distributed to date
- \$600 for Student Receptions (Nashville and Austin with NCAC&NS) (preapproved) – 2003 funds spent
- \$300 for Web Site Maintenance (preapproved) – 2003 funds spent
- \$500 for AIA Certification for Continuing Education (**Tony Hoover**) – no funds distributed to date. A basic 2 hour course has been created by **Neil Shaw**; **Bennett Brooks** is fine-tuning it.
- \$2,000 for Outreach for Classroom Acoustics (**Bob Coffeen**, **Red Wetherill**) – no funds distributed to date
- \$1000 to work with Education in Acoustics on developing and promoting lesson plans (modules) for grade/middle school teachers (**Neil Shaw**, **Rendell Torres**) – this Technical Initiative was resubmitted in Nashville ASA with clarification. No funds distributed to date. **Elizabeth Cohen** has a site where it can be tested.

### *Submitted for 2004*

- \$500 for AIA Certification for Continuing Education (submitted in Nashville for 2004) (**Tony Hoover**)
- \$1000 additional funding for Outreach for Classroom Acoustics, for a total of \$3000 (**Red Wetherill**)
- \$500 to cover international invited speaker **Harold Marshall's** participation in the NYC "Multisensory" special session, chaired by **Jerry Hyde**.

### *New Ideas to Consider*

- **Ken Roy** proposed that TCAA put together a workgroup to evaluate and compile a database of generic material absorption coefficients. Perhaps a University could take this on as a student activity? **Lily Wang** mentioned that there is a database of absorption coefficient data at the PTB webpage: <http://www.ptb.de/en/org/1/17/173/datenbank.htm> . NIOSH has a list of data from an old project, according to **Jeff Szymanski**. **Dana Hougland** suggested asking for seed funds for this project. **Roy** will be a focal point to pull together ideas about this project (contact him at [kproy@armstrong.com](mailto:kproy@armstrong.com) ).
- Develop more course material for AIA Continuing Education program (**Dana Hougland**) – **Hougland** suggests that besides producing general acoustic course material, TCAA could create packets on more topical areas, such as classroom acoustics, HIPAA, and home theaters. Volunteers to help and those with other ideas may contact **Hougland** (email [dhougland@smwinc.com](mailto:dhougland@smwinc.com) ).

### **INTRA-SOCIETY**

- No report

### **INTER-SOCIETY**

- ASHRAE: Session on Classroom Acoustics for Modular Units, planned for Anaheim meeting (Jan. 24-28, 2004)

### **ADJOURNMENT**

**Bob Coffeen** motioned for adjournment and **Ralph Muehleisen** seconded. By unanimous vote, the meeting adjourned at 9:45 PM.