# **Structural Acoustics and Vibration Technical Committee**

Open Meeting
171st ASA Meeting in Salt Lake City, Utah
24 May 2016
7:30 p.m.
Salon G.

## **Minutes**

- 1. Call to Order at 7:33 pm
  - In attendance (30 people): Brian Anderson, Pegah Aslani, Jon Blotter, Kenneth Cunefare, Michael Denison, David Feit, Tyler Flynn, Huber Hall, Matthew Kamrath, Peter Kerrian, Robert Koch, Elizabeth Magliula, Rudolph Martinez, James McDaniel, Jon Mooney, Kyle Myers, Christina Naify, Gordon Ochi, Brandon Olnos, Austin Phillips, James Phillips, Thomas Rossing, Daniel Russell, Vyacheslav Ryaboy, Micah Shepherd, Scott Sommerfeldt, Hasson Tavossi, Earl Williams, Kuangcheng Wu, Sarah Young
- 2. Salt Lake City Meeting Agenda (additions or other modifications)
  - No changes proposed
- 3. Approval of the 170<sup>th</sup> ASA Meeting Minutes from Jacksonville, Florida
  - Approved without modification

## **Meetings**

4. 170<sup>th</sup> Meeting, Jacksonville, FL, November 2-6, 2015 Richard Morris, Chair

Winners of The Best Paper Awards for Students and Young Presenters for SAVTC at the 170<sup>th</sup> ASA Meeting in Jacksonville:

#### 1st Place

David Torello, Georgia Institute of Technology Characterization of air-coupled ultrasonic receivers for nonlinear Rayleigh wave nondestructive evaluation

#### 2nd Place

Ryan Salmon, Georgia Institute of Technology Solid-liner suppressor design, construction, and development

Thank you to James Phillips for stepping up and organizing the student and young presenter paper awards in Jacksonville in Benjamin Shafer's absence.

- 5. 171<sup>st</sup> Meeting, Salt Lake City, Utah, May 23-27, 2016 Scott Sommerfeldt, Chair, Brian Anderson, Co-Technical Chair
  - a. 43 SAV papers total: 20 invited, 23 contributed
    - Thank you to the following special session organizers: Micah Shepard, Benjamin Shafer, James Phillips, Hasson Tavossi, Elizabeth Magliula, Robert Koch, Dan Russell, and Brian Anderson
    - Technical Program Organizer: Benjamin Shafer
    - Student and young presenter paper awards: Benjamin Shafer
      - o There are 12 student and young presenter award contestants at this meeting
  - b. Society Luncheon and Lecture, Thursday, 11:45 1:30 pm, Joseph Smith Memorial Building, 10th Floor (6-min walk from Marriott)
    - Professor Jeremy Grimshaw, Associate Dean in College of Fine Arts and Communications, Brigham Young University
      - o "Exactly Out of Tune: Acoustics, Aesthetics, Culture, and Ritual in Balinese Gamelan Music"
      - New policy: Member/student pairing now made during online preregistration
  - c. ASA's Students Meet Members for Lunch program
    - New "approach" led to large increase in number of interested students for Jacksonville
    - Call out from ASA to assist David Blackstock. See Elaine Moran if interested
    - New pairing process supposedly to be developed for Salt Lake City (news?)
  - d. ASA broadcasting/recording 19 sessions, two TC Meetings, and the 'Education In Acoustics' admin committee meeting at the Salt Lake City meeting
    - Per ASA VP, this is maximum capacity of sessions possible given current volunteer support
    - Examining cost (~\$80K one estimate), strategies, and advantages/disadvantages of funding effort going forward in Honolulu, Boston, and beyond.
    - Some discussion points brought up during the SAVTC meeting include.
      - Live streaming costs the society money. What is the goal/benefit of streaming? – Possibly, to allow those who cannot attend the meeting to participate.
      - We need to allow people to watch but not incentivize people to only watch online
      - How many people are watching the stream? approx. 100, the society is keeping track of the participation
      - Is there any possibility of presenters presenting at a distance in the future? It appears that this possibility has not been extensively discussed yet.
      - Is the live stream only available to ASA members? SAVTC was unsure of the answer to this question

- 6. 172<sup>nd</sup> Meeting, Honolulu, Hawaii, November 28–December 2, 2016 David Adams and Whitlow Au, Co-chairs
  - a. Some SAVTC members voiced frustration and unhappiness with the meeting being scheduled (again) right after Thanksgiving because of the higher transportation costs. SAVTC chair was requested to formally express protest of this scheduling to the Technical Council. [Update: SAVTC Chair did report this formally to the Technical Council at the SLC Friday Technical Council meeting, for further relaying to the Executive Committee]
  - b. SAVTC has additional funds funds to cover travel costs for invited speakers to both the Honolulu and Boston meetings. Robert Koch requested that SAVTC members please let him know if they need such funds.
  - c. Final Special Sessions: Finalized in Jacksonville and now coordinated with ASJ co-chair counterparts:
    - **Building vibration analysis, measurement and mitigation**: Co-chairs, James Phillips and Hasson Tavossi
    - Dynamics of ribbed structures: Co-chairs, Andrew Hull and Elizabeth Magliula
    - Fluid flow induced vibration and noise: Co-chairs, Kuangcheng Wu and Robert Koch
    - Metamaterials: Co-chairs, Jeff Cipolla, Christina Naify, and Michael Haberman
    - Non-contact vibration excitation and sensing techniques: Co-chairs, Scott Sommerfeldt and Brian Anderson
  - d. Student and young presenter paper awards: Benjamin Shafer
  - e. TPO: Benjamin Shafer (Honolulu virtual TPOM: 10-11 Aug 2016)
  - f. Upcoming 2016 dates for the Honolulu TPOM:
    - 6 June: Call for Papers ideally speakers would be invited by this date
    - 11 July: Abstract deadline
    - 12-28 July: TPOs work with session conveners to make preliminary schedules for each session
    - 29 July: each TC submits their draft sessions schedules (preferred day/time, invited and contributing speakers in order
    - 29 July 5 Aug: Tech Chair (Bruce Howe) with advisors, takes these and formulates the first draft meeting schedule in ScholarOne, iterating as needed with individual TPOs and conveners.
    - 5-8 August (2 day meeting): "pre-virtual TPOM meeting" Tech Program Chair (Bruce) meets more formally with Co-chairs of meeting and other advisors to finalize draft complete schedule and complete entry in ScholarOne by 8 August.

- 10-11 August: the formal Virtual TPOM with all TPOs from ASA and ASJ attending, Tech chair, meeting co-chairs, etc. Final product is the final schedule on ScholarOne. "In-person" TPOM held at same time in hotel, including tour and handling/discussing/organizing other items; the 5+ ASJ TPOs and others.
- 7. 173<sup>rd</sup> Meeting/Acoustics 17, Joint ASA/EAA meeting in Boston, MA, Spring 2017 Damian Doria, ASA Chair, Robert Koch, Technical Chair
  - a. Finalize Special Sessions:

Must be finalized in Salt Lake City and coordinated with EAA counterparts.

- Acoustic metamaterials and phononic crystals: Co-chairs, Christina Naify and Yun Jing (PA TC) (EAA co-chair Jose Sanchez-Dejesa from Valencia Polytechnic University)
- Vibration of sports equipment: Chair, Dan Russell
- Novel techniques for nondestructive evaluation: Co-chairs, Brian Anderson and Marcel Remillieux (EAA co-chair Sylvain Haupert)
- Energy methods in structural acoustics and vibration: Co-chairs, Don Bliss and Linda Franzoni
- Groundborne noise and vibration from transit systems: Chair, James Phillips [Update: James plans to find a local/Boston-area co-chair for this session?]
- Novel Treatments in Vibration Damping: Chair, Kenneth Cunefare (EAA cochair Manuel Collet)
- Numerical Methods and Benchmarking in Computational Acoustics: Co-chairs, Robert Koch and Micah Shepherd (EAA co-chairs Manfred Kaltenbacher and Steffen Marburg)
- b. Metamaterials session above might be split as needed depending upon number and type of papers ultimately included in the session. SAVTC needs to coordinate with Physical Acoustics (PA) about metamaterials [Update: SAV and PA TC chairs and metamaterials principals have discussed and come to a consensus on a "standing" joint SA/PA metamaterials special session going forward
- c. The Boston meeting TPOC will consist of the newly elected 2015 Technical Committee Chairs plus the TC chairs with terms to 2016 and 2017.
- d. Technical Program Organizer: Benjamin Shafer
- e. Student and young presenter paper awards: Benjamin Shafer

# 8. 174<sup>th</sup> Meeting, New Orleans, Louisiana, Fall 2017 XXX Chair

# a. **Preliminary** Special Sessions:

SAVTC must set Preliminary Special Sessions in Salt Lake City. Sessions must be finalized in Honolulu, Fall 2016.

- Acoustic Metamaterials: Chair, Christina Naify
- Standards in structural acoustics and vibration: Chair, Benjamin Shafer (SAVTC will request that Standards committee co-sponsor the session) [Update: SAVTC approached and agreed to so-sponsor this special session]
- Uncertainty modeling in structural acoustics and vibration: Co-chairs, Micah Shepherd and Kuangcheng Wu
- SAV applications of FEA, BEA, and SEA Computational Methods: Co-chairs, James Phillips and Elizabeth Magliula
- Active noise and vibration control: Co-chairs, Scott Sommerfeldt and Jon Blotter

## b. Pre-SLC Meeting Brainstormed Special Session Topic Ideas:

SAVTC members were requested to submit session topic ideas even if they cannot chair it or don't know at what meeting to schedule it

- Noise and vibration in rotating machinery (e.g., motors, gears, pumps, ...)
- Structural Acoustic Optimization
- others?
- c. TPO: Benjamin Shafer (Virtual TPOM on 10 August 2017)
- d. Student and young presenter paper awards: Benjamin Shafer

## 9. Future meetings:

175<sup>th</sup> Meeting, Minneapolis, Minnesota, 7-11 May, 2018

176<sup>th</sup> Meeting, Victoria, British Columbia, Canada, 5-9 November 2018

177<sup>th</sup> Meeting, Louisville, Kentucky, 13-17 May, 2019

178<sup>th</sup> Meeting, TBD, Fall, 2019 – not yet finalized because of additional requirements regarding the International Year of Sound

179<sup>th</sup> Meeting, Chicago, Illinois, Spring, 2020

180<sup>th</sup> Meeting, Cancun, Mexico, Fall 2020

181<sup>st</sup> Meeting, XX, XX, Spring 2021

Note: ICA proposes 2019 to be The International Year of Sound

## Reports

- 10. Topics from the Technical Council Meeting:
  - ASA Strategic Leadership for the Future
    - o Effort well underway and pervasive (new ASA Org Chart, EAR, etc.)
    - o See pamphlets available (everywhere) at conference
    - 'Strategic Plan Champions' meeting this Thursday, 2-4PM, in Alta if interested
  - No more reimbursements of outside food/drink at TC meetings
  - ASA broadcasting/recording 19 sessions plus TC/Admin meetings at SLC meeting
    - o TCs are responsible for identifying which sessions to broadcast/record
    - o No SAVTC registrants
    - o Requires a consent form for each speaker (if declined, just hole in stream)
      - In SLC, 159 papers involved, only ~20 not participating
    - o No cost (yet) to access streamed sessions but that might change soon
  - Proposed Interdisciplinary Session designation for 'Metamaterials' special session going forward has been retracted (ID deemed inappropriate designation for this case)
  - Revised Technical Initiatives
    - For 2016 (Honolulu meeting) and 2017 (Boston meeting), TC Council voted for an extra \$3K per TC budgeted for Invited Speaker travel
  - Task Force volunteers sought from TC's to address assorted ASA policies on photography at ASA meetings, commercialism, appropriate business casual dress, etc.
    - o If interested, tell SAVTC Chair
- 11. Report from Student Council: Matthew Kamrath (This is Matt's last ASA meeting as SAV TC Student Council Rep, new rep going forward is Tyler "TJ" Flynn)
  - Student Council is now online: asastudentcouncil.org, Facebook, Twitter, LinkedIn
  - Please let the Student Council know about any PhD, post-doc, or job opportunities. We will advertise it on our website.
  - There are many student activities during the meeting: e.g., New Student Orientation, Student Meet and Greet, Student Outings, and Student Reception
  - There are many resources for students: e.g., travel funds, students meet members for lunch, resume help desk, etc.
  - Ask a student council member if you have any questions. We are here to help.
- 12. Report from Medals and Awards Committee: James Phillips (has relieved Sabih Hayek as SAV TC rep through Spring 2017)
  - No formal report details yet since James' first meeting as M&A rep and (b) meeting to occur day after SAVTC meeting.

- 13. Membership Committee: Kai Ming Li (stepping down as rep, need to find new Fellow rep!)
  - Earl Williams has volunteered to attend the SLC Membership Committee meeting Wednesday, 12-3 PM, Room 1532

#### 14. ASACOS: Robert Koch

- Susan Blaeser's last meeting as Standard's Manager due to retirement, Neil Stremmel is new Standards Manager
- Setting Standards organizational fees for 2017
- Within TC108 ISO Committee, potential re-establishment of the SC6 Shaker TAG
- 15. <u>NEW</u>: Report from SAVTC Liaison to Education in Acoustics TC: Matthew Kamrath Note: Education in Acoustics TC meets Wed PM (i.e., *after* SAVTC meeting)
  - A new, full-time Education and Outreach Coordinator, an ASA staffmember, will be hired soon (June 2016)
  - EdCom has a new website (asaedcom.org). Check it out.
  - EdCom is trying to foster a stronger connection with all of the TCs
  - Please let EdCom know if you can help with any of the following regularly occurring initiatives: Listen Up and Get Involved, Hands-On Demonstrations, Undergraduate Research Exposition, Rossing Prize, Acoustics Graduate Program Database, Students Meet Members for Lunch, and Resume Help Desk

## 16. SAVTC webpage update - Brian Anderson

- Brian now funded by Web Maintenance Technical Initiative (\$500 per year for 2016 and 2017)
- Some website content slowly coming in, but needs more:
  - o I.e., "Intro to SAVTC" Brief, James Phillips

## 17. SAVTC to Publish SAV TC Report for Fall 2016 issue of Acoustics Today:

- Intent is to discuss TC's purpose and interests, and careers in SAV
- Articles cover science AND "how people come to the field"
- Approx. only 2,000 words
- Authors:
  - a) Christina Naify
  - b) Robert Koch
- [Update: Report article manuscript has been completed by Robert and Christina and was submitted to Editor of 'Acoustics Today' in June 2016]

### 18. Technical Initiatives for 2016

- Technical Initiative approved for Brian Anderson for SAVTC Web maintenance
  - o \$500 for each 2016 and 2017 calendar years

## 19. Early Career Acoustician Retreat 2016

• Arising from ASA Strategic Plan Task Force 2 charged with increasing membership engagement and diversity, the Early Career Acoustician Retreat (EAR) organized to follow the Salt Lake City meeting.

- EAR 2016 is two-day workshop aimed at developing leadership and networking skills for early career professionals in the field of acoustics, allowing participants to socialize with fellow early career acousticians, expand their leadership and networking skills, learn more about the society, and contribute to the future of ASA.
- A pre-session to EAR will be offered from 4:00 5:15 pm on Friday May 27. A representative of each TC will be asked to make a very brief, "elevator-speech style", presentation to the participants, describing the interests of members of the TC and the type of professionals who are members of the TC. Following these brief presentations, the TC reps will be asked to stay for a reception to meet the EAR participants and optionally attend the dinner that follows at 5:30 PM
- Earl Williams has graciously volunteered to represent the SAV at the pre-EAR session Friday evening.
- 20. New Business
- 21. Adjourn