# **Structural Acoustics and Vibration Technical Committee**

Open Meeting
170th ASA Meeting in Jacksonville, Florida
3 November 2015
7:30 p.m.
Daytona

### **Minutes**

- 1. Call To Order
  - In attendance (17 people): Brian Anderson, David Feit, Kenneth Foote, Jerry Ginsberg, Sabih Hayek, Matthew Kamrath, Robert Koch, Elizabeth Magliula, James McDaniel, Christina Naify, James Phillips, Allan Pierce, Eric Ungar, Jinying Zhu, Ellen Skow, Trevor Jerome, Tyler Flynn
- 2. Jacksonville Meeting Agenda (additions or other modifications)
- 3. Approval of the 169<sup>th</sup> ASA Meeting Minutes from Pittsburgh, Pennsylvania

### **Meetings**

4. 169<sup>th</sup> ASA Meeting, Pittsburgh, PA, May 18-22, 2015 Robert Keolian, Matthew Poese, Co-chairs

Winners of The Best Paper Awards for Students and Young Presenters for SAVTC at the 169<sup>th</sup> ASA Meeting in Pittsburgh

#### 1st Place

Kritika Vayur, Pennsylvania State University Vibrational analysis of hollow and foam-filled graphite tennis rackets

#### 2nd Place

Timothy Daniel, Washington State University Magnetic excitation and identification of flexural modes of a circular plate

Thank you to Ben Shafer for organizing the student and young presenter paper awards in Pittsburgh.

- 5. 170<sup>th</sup> Meeting, Jacksonville, FL, November 2-6, 2015 Richard Morris, Chair
  - a. 40 SAV papers total: 22 invited, 18 contributed
    - Thank you to the following special session organizers: Brian Anderson, Ken Cunefare, James Phillips, Ben Shafer, Robert Koch

- Technical Program Organizer: Robert Koch
- b. Student and young presenter paper awards: SAVTC team effort in Ben Shafer's absence
  - There are (only) 5 student and young presenter award contestants at this meeting
    - James Phillips, Brian Anderson, and Ken Cunefare (who could use a helper for 1 presenter Thurs 2:30-4:30PM) to handout & collect judging forms
      - Ken Cunefare could use a helper for 1 presenter Thurs 2:30-4:30PM forms
- c. Society Luncheon and Lecture, Thursday, 12:00 2:00 pm, Grand Ballroom 4
  - Joseph Travis, Robert O. Lawton Distinguished Professor, Florida State University
    - o "Approaches to science, falsification vs. hypothetico-deductive, and some of the consequences of failing to recognize the limitations of each"
    - New policy: Member/student pairing now made during online preregistration
- d. 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 to be developed for Salt Lake City
- 6. 171<sup>st</sup> Meeting, Salt Lake City, Utah, May 23-27, 2016 Scott Sommerfeldt, Chair
  - a. Final Special Sessions:
    - Wavenumber Transform Methods: Co-Chairs, Micah Shepard and Matthew Shaw
    - Active Control of Structures and Their Radiation: Chair, Ben Shafer
    - Building Isolation from Seismic and Ground-Borne Vibration: Co-Chairs: James Phillips and Hasson Tavossi
    - Real-World Instructive Case Studies in Structural Acoustics and Vibration: Co-Chairs: Robert Koch and Elizabeth Magliula
    - Computation Methods in Structural Acoustics and Vibration: Chair: Robert Koch
    - Analysis of Vibration Based Musical Instruments: Co-chairs: Dan Russell & Brian Anderson:

- b. TPO: Benjamin Shafer
- c. Student and young presenter paper awards: Benjamin Shafer
- d. ASA School 2016
- 7. 172<sup>nd</sup> Meeting, Honolulu, Hawaii, Fall 2016 David Adams and Whitlow Au, co-chairs
  - a. **Finalize** Special Sessions:

Must be finalized in Jacksonville and coordinated with ASJ counterparts.

ASA/ASJ has worked together to compile a combined list of Special Sessions. SAVTC needs to assign ASJ co-chairs for the following ASA Special Sessions: (open spreadsheet, discuss ideas)

- Session in honor of Allan Pierce: Chair, Sean Wu
- Building vibration analysis, measurement and mitigation: Co-chairs, James Phillips & Hasson Tavossi
- Dynamics of Ribbed Structures: Co-chairs, Andrew Hull & Elizabeth Magliula
- Fluid flow induced vibration and noise: Co-chairs, Kuangcheng Wu & Robert Koch
- Metamaterials: Co-chairs, Jeff Cipolla, Christina Naify, and/or Michael Haberman
- Non-contact vibration excitation and sensing techniques: Co-chairs, Scott Sommerfeldt & Brian Anderson
- b. TPO: Benjamin Shafer (Honolulu virtual TPOM approx. 10-12 Aug 2016)
- c. Student and young presenter paper awards: Benjamin Shafer
- 8. 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. **Preliminary** Special Sessions:

SAVTC must set Preliminary Special Sessions in Jacksonville (and coordinated with EAA counterparts as much as possible). Sessions must be finalized in Salt Lake City.

 Metamaterials: Chair, Christina Naify (who suggested EAA co-chair Jose Sanchez-Dejesa from Valencia Polytechnic University)
 [Update: this single session later divided into three separate, more focused, sessions entitled "Acoustic metamaterials, Phononic Crystals, and Acoustic Metasurfaces"]

- Vibration of sports equipment: Chair, Dan Russell
- Novel techniques for nondestructive evaluation: Chair, Brian Anderson (who suggested EAA co-chairs Sylvain Haupert and Marcel Remillieux)
- Energy methods in structural acoustics and vibration: Co-chairs, Don Bliss & Linda Franzoni
- Groundborne vibration from transit systems: Co-chairs, James Phillips
   [Update: James plans to find a local/Boston-area co-chair for this session]
- Jerry Ginsberg suggested a potential session about the early work at the U.S.
   Navy labs, but there are two potential problems: classified work and tracking down authors

b. The TPOC will consist of the newly elected 2015 Technical Committee Chairs plus the TC chairs with terms to 2016 and 2017.

c. Student and young presenter paper awards: Benjamin Shafer

### 9. Future meetings:

174<sup>th</sup> Meeting, New Orleans, Louisiana, December 4-8, 2017

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

176<sup>th</sup> Meeting, Victoria, British Columbia, Canada, 6-9 November 2018

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

178<sup>th</sup> Meeting, TBD, Fall, 2019

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

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

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

• ASA Louisville to possibly tie in with this theme

Robert Koch stated his intention that the SAVTC should begin a process to brainstorm between meetings what future special sessions the group wants to organize. The group could then finalize at the committee meetings the resulting session selection decisions. In this way, the SAVTC could decide what long-term strategic technical direction(s) it wants the committee to go in.

### Reports

- 10. Topics from the Technical Council Meeting:
  - ASA Strategic Leadership for the Future
    - o Report of Strategic Leadership for the Future Initiative
      - Full kick-off at Jacksonville meeting
      - Open Task Force meeting, Thursday, 2-4PM, Rm 4104
    - o Goals:
      - 1. Awareness of Acoustics

- ➤ Suggestion from Greg McDaniel: the ASA could benefit greatly in this goal by attempting to formalize relationships with the currently popular trend of artists who are using acoustics in their work. For example, Greg suggested possibly using technical initiative funding to organize acoustics-in-art exhibits at future ASA meetings.
- 2. Membership Engagement and Diversity
- 3. Dissemination of Information
- 4. Financial Stewardship
- Executive Council Member-led discussion
- No more reimbursements of outside food/drink at TC meetings
- ASA broadcasting/recording 8 sessions at Jacksonville meeting
  - o TCs are responsible for identifying which sessions to broadcast/record
  - o No SAVTC registrants
  - o Even Noise TC is broadcasting live Thurs PM meeting
  - o Requires a consent form for each speaker (if declined, just hole in stream)
  - No cost (yet) to access streamed sessions
- JASA Editor-in-Chief Report
  - Associate Editors needed for JASA and JASA EL
- Revised Technical Initiatives
  - Budget for Technical Initiatives "Ongoing Programs" (i.e., discretionary)
     voted by TC to be increased to \$5K annually per TC.
  - For 2016 (Honolulu meeting) and 2017 (Boston meeting), TC Council voted for an extra \$3K per TC budgeted for Invited Speaker travel

#### 11. Report from Student Council: Matthew Kamrath

- Send post-doc, job, and other conference opportunities to James Esplin
- Submit Mentor Award applications by the spring 2016 SLC meeting
- Student activities
  - o Fellowship/Grant Panel
  - New Student Orientation
  - Student Meet and Greet
  - Student Outing
  - Student Reception
  - Jam Session
  - YAN outing
- Resume help desk
- Check the Twitter feed and Facebook for updates
- Look for feedback form
- Mathew Kamrath's position is open after Salt Lake City, applications in January 2016
- Intro to TCs James Phillips
- Student travel subsidies

- Meet members for lunch program expanding
- 12. Report from Medals and Awards Committee: Sabih Hayek
- 13. Membership Committee: James Phillips or Kai Ming Li
  - Need volunteer to attend Membership Committee meeting Wednesday, 12-3 PM, Boardroom 3
  - James Phillips already had another meeting. Robert Koch volunteered but stated he could only attend for the first hour
     [Update: Kai Ming Li met Robert Koch and attended the full Membership Committee meeting as originally planned]

### 14. ASACOS: Robert Koch

- Reported on the approval of document "Info for Working Group Members (Document # 453) that defines the responsibilities of ASACOS working group members, copyright rules, etc.
- Reminder that ASA members are entitled to download five free standards each calendar year
- 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)
  - Seek a stronger connection to all TCs we are looking for new members!
  - SMMFL –need a larger volunteer pool to attend lunches with students
  - Resume Help Desk –recruiting more volunteers

#### 16. SAVTC webpage update - Brian Anderson

- Brian reported that he had made many recent updates, but stated that website needs more content and made request for submittals.
- 17. SAVTC Invited to Publish SAV TC Report for Summer 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. 2,000 words
  - Author options:
    - a) Robert Koch
    - b) Other SAVTC member
    - c) Combination of (a) and (b)?

[Update: Sabih Hayek, Elizabeth Magliula, and James Phillips expressed an interest in also participating in the development/authoring of this article]

- 18. Notice from the ASA College of Fellows Steering Committee:
  - "The College of Fellows Steering Committee (CoF) notes that the reason for the "Fellow" ribbons is to identify Fellows as persons who may be able to assist with questions about the Society, its meetings, activities, possible career advice, or other issues. The goal, which is generally shared by all Fellows, is to offer active service and assistance to all members of the Society."

#### 19. Technical Initiatives for 2016

- Technical Initiative was submitted for Brian Anderson for SAVTC Web maintenance
  - o \$500 for each 2016 and 2017
  - o [Update: Approved on the Consent Agenda at the ASA Jacksonville Friday morning Technical Council meeting]

### 20. New Business

 Alan Pierce reported on a colleague of his, Massimo Ruzzene, at the National Science Foundation (NSF) who is asking for white papers for his new planned FY 2016 topic for the Emerging Frontiers in Research and Innovation (EFRI) Program entitled "NewLAW: New Light and Acoustic Wave Propagation - Breaking Reciprocity and Time-Reversal Symmetry"

## 21. Adjourn