

**TRB Midyear Meeting  
Subcommittee on Aviation Noise and Vibration (AEP80(1) w. AV030)**

**The Aviation Noise Subcommittee is sponsored by the Standing Committee on Transportation-Related Noise and Vibration (AEP80) and joint with the Standing Committee on Environmental Impacts of Aviation (AV030)**

Subcommittee chair: Chris Hobbs, FAA

Thursday, 11:30AM - 12:30 PM

- I. Subcommittee Business
  - Attendance, etiquette, membership
- II. Topic du Jour
  - Understanding noise from novel aircraft
- III. Talks
  - Research by people on the path to understanding
- IV. Brainstorming
  - What more can be done to reach understanding  
(on this and other relevant topics)
- V. Conclusion
  - Summary
  - Annual meeting in 6 months!

## I. Welcome and Committee Business

Attendance: Please post your name and email in the chat box  
("to all" if you feel comfortable, otherwise to the chair only)

## Virtual Meeting Reminders:

**Meeting ends on time at 12:30 Eastern**

**Please stay on mute unless invited to speak**

**Please ask questions! Go to "chat" button**

**To get the meeting notes and other news: sign up as a Friend of the Committee**

Go to [mytrb.org](http://mytrb.org) and log in

Go to "become a friend of a committee"

Look for AEP80 or AV030

Already signed up? Please check your profile

### Code of Conduct

<http://onlinepubs.trb.org/onlinepubs/dva/2021Chair/01-NASEMCodeofConduct.pdf>

## II. Understanding Noise from Novel Aircraft

- A. Starting with the sound, what about it might illicit a human response?
  - 1. Can we quantify this quality?
  - 2. What is the measure of the human response?
- B. Lab work
  - 1. Study people's response in the lab
  - 2. Helps understand both the validity of assumptions and quantifies the measures postulated in A.
- C. *In situ*
  - 1. Nothing is as true a reaction as one measured in real life.
  - 2. How does the measure correlate with the reaction?
- D. What follows?

## **III. Presentations:**

- **Dr Antonio Torija Martinez, University of Salford (UK) – Psychoacoustics-Based Metrics for Drone Noise Impact Assessment**
- **Dr Siddhartha Krishnamurthy, NASA Langley Research Center -- Urban Air Mobility Vehicle Noise Cooperative Psychoacoustic Test Planning**
- **Dr Alexandra Loubreau, NASA Langley Research Center - Sonic Boom Community Testing: NASA QSF18 Risk Reduction Test**

## IV. Open Forum

- Should we study the past to address new sources of noise?
- Are there other examples of aviation noise besides UAS, UAM, and SST?
- What extant studies are underway for new noise makers?
  - Fundamental characteristics of the sound
  - Different ways people react to the sound
- What is next after knowing how people react to a noise maker?
  - Is anyone studying this?

## V. Review

- New sound may have characteristics that people react to
- Studying people in a lab can verify and initially quantify people's reaction to the measure understudy
- Real world surveys may give be the pinnacle of understanding

## Questions?

**Subcommittee on Aviation Noise and Vibration**  
**Please send ideas for IN PERSON annual meeting!**

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