



174<sup>th</sup> MEETING OF THE

## AERONAUTICS AND SPACE ENGINEERING BOARD

October 8-9, 2024

NASEM Beckman Center, Huntington Room  
100 Academy, Irvine, California 92617

TUESDAY, OCTOBER 8, 2024

### OPEN SESSION

Livestream Link: <https://vimeo.com/event/4618416>

CLICK HERE TO JOIN

9:30 AM Meeting Room Opens to Public

9:40 AM **Welcome**

**Dr. Ilan Kroo, ASEB Chair**

9:45 AM **NASA Aeronautics Research Mission Directorate  
(ARMD) – Key Issues for 2025**  
*(30 minute presentation and 30 minutes for Q&A)*

**Mr. Robert Pearce\***  
Associate Administrator  
ARMD, NASA

10:45 AM **Additive Manufacturing in the Smart Factory**  
*(30 minute presentation and 30 minutes for Q&A)*

**Dr. Melissa Orme**  
Vice President, Additive Manufacturing  
Boeing

11:45 AM Break *(15 minutes)*

12:00 PM **WORKING LUNCH Keynote Talk  
Human Systems Integration  
EVA Suits, Space, and Suit Strategies**

**Dr. Bonnie Dunbar**  
Professor, Aerospace Engineering,  
John & Bea Slattery Chair, and Director,  
Aerospace Human Systems Laboratory, Texas A&M University

1:00 PM Break *(15 minutes)*

1:15 PM **Hybrid Thermally Efficient Core (HyTEC) Project**  
*(25 minute presentation and 20 minutes for Q&A)*

**Dr. Frank Preli**  
VP Technology, Pratt and Whitney  
**Mr. Tony Nerone\***  
Project Manager, HyTEC, NASA-GRC

\* Virtual Presenter

ALL TIMES PST

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- 2:15 PM**      **Update from X-59 Quiet Supersonic Program**      **Mr. Peter Coen\***  
*(30 minute presentation and 30 minutes for Q&A)*      Quesst Integration Manager  
ARMD, NASA
- 3:00 PM      Break *(15 minutes)*
- 3:15 PM**      **Briefing of “NASA at a Crossroads” Report**      **Mr. Norm Augustine**  
*(30 minute presentation and 30 minutes for Q&A)*      Chair, Committee on NASA Mission Critical  
Workforce, Infrastructure, and Technology
- 4:15 PM**      **Open Meeting Adjourns**

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**WEDNESDAY, OCTOBER 9, 2024**

**OPEN SESSION**

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**CLICK HERE TO JOIN**

- 9:30 AM Meeting Room Opens to Public
- 9:45 AM **Welcome** **Dr. Ilan Kroo, ASEB Chair**
- 9:50 AM **NASA Space Technology Mission Directorate (STMD) Update & Outlook** **Dr. Prasun Desai\***  
(30 minute presentation and 30 minutes for Q&A) Deputy Associate Administrator  
NASA-STMD
- 10:50 AM Break (25 minutes)
- 11:15 AM **NASA Exploration Systems Development Mission Directorate (ESDMD) Update & Outlook** **Dr. Lori S. Glaze\***  
(30 minute presentation and 30 minutes for Q&A) Acting Deputy Associate Administrator  
NASA-ESDMD
- 12:15 PM Lunch Break (60 minutes)
- 1:15 PM **Panel: The Challenge of Unfailing Safety** (11 minute presentations and 25 minutes for Q&A)  
Safety comes first in aeronautics and space endeavors. Sustaining a safety culture, flight or pilot schools, emergency training, mechanical issues, and regulators all have a role.
- Mr. Michael X. Franovich\***, Director, Division of Risk Assessment, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission  
**Mr. Christopher Tarsa**, Executive Director, Naval Safety Command  
**Mr. Bruce DeCleene\***, Director, Office of Senior Technical Experts, Aircraft Certification Office, Federal Aviation Administration
- 2:15 PM **Update on Meeting RTG/RPS Production Rates for 238Pu** **TBD**  
(25 minute presentation and 20 minutes for Q&A)
- 3:00 PM **OPEN MEETING ADJOURNS**

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**IMPORTANT NOTES**

**Presenters:**

- Please do not include ITAR-controlled or sensitive information in your presentation.
- A National Academies Board staff member will ask you to sign a form before the meeting allowing us permission to use your likeness and presentation for our livestream video, which will be posted on our Board website after the meeting. Please get in touch with us before the meeting if you have any concerns about this usage.

**Board Members and Presenters:**

- Remote access will be provided through Zoom. This will allow you to participate in the meeting even if you can't be physically present.
- Please note that Zoom allows audio and any materials exchanged or viewed during the session to be recorded and shared.
- By participating in this activity, you agree to let your voice, likeness, and any materials you provide be recorded for use and dissemination. This includes any language, format, or media now known or later devised.
- You release the National Academies of Sciences, Engineering, and Medicine from any and all claims, liability, or damages arising from any such use. If you disagree, please do not join the session.

**Thank you all for your cooperation, and we look forward to a successful meeting.**