



175th MEETING OF THE

# AERONAUTICS AND SPACE ENGINEERING BOARD

July 23-24, 2025 NASEM Keck Center - Room 100 500 5th Street NW, Washington, DC Online via Zoom and Livestream

### **WEDNESDAY, JULY 23, 2025 - KECK 100**

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<b>ASEB</b>	<b>OPEN</b>	SESSION	
Livestream: https://vimeo.co			

Livestream: https://vimeo.com/event/5249233

		CLICK HERE TO JOIN
9:30 AM	Meeting Room Opens to Public	
9:35 AM	Welcome	Dr. Ilan Kroo, ASEB Chair
9:40 AM	NASA Aeronautics Future Vision (25 minutes for presentation and 15 minutes for Q&A)	<b>Mr. Robert Pearce</b> Associate Administrator, ARMD-NASA
10:20 AM	NASA Space Technology Insights (25 minutes for presentation and 15 minutes for Q&A)	<b>Mr. Clayton Turner</b> Associate Administrator, STMD-NASA
11:00 AM	Break (15 minutes)	
11:15 AM	Panel: Autonomy in the National Airspace System (NAS) (15 minutes for each presentation and 15 minutes for Q&A)	

This panel will examine how autonomous aircraft are being integrated into the National Airspace System, with a focus on safety, certification, and coordination with piloted operations. Speakers will highlight current technologies, regulatory progress, and partnerships shaping the future of air mobility.

## Panelists:

Dr. Parimal Kopardekar, Advanced Air Mobility (AAM) Mission Integration Manager, NASA Mr. Steve Bradford, NextGen Chief Scientist for Architecture, NextGen Development, FAA

12:00 PM Open Session Break (1 hour 15 minutes)

# 175th Meeting of the Aeronautics and Space Engineering Board July 23, 2025

#### 1:15 PM Panel Al for Air Traffic Control and Advanced Air Mobility

(15 minutes for each presentation and 15 minutes for Q&A)

This panel will examine how AI is transforming air traffic management and enabling the safe integration of advanced air mobility systems. Topics will include AI-driven decision support tools, UAM corridor planning, and strategies for managing congestion in increasingly complex airspace. Panelists will share insights from FAA, NASA, and industry efforts to modernize and automate the future of airspace operations.

#### Panelists:

Mr. Akbar Sultan, Director, Airspace Operations and Safety Program, NASA

Dr. Jia Xu, CEO, SkyGrid

Mr. David Murphy, Product Manager, ANRA Technologies

#### 2:15 PM Space Development Agency Science &

Dr. Sanjay Parthasarathy

**Technology Programs and Priorities**Cell Director, Custody and Emerging Capabilities
(20 minutes for presentation and 10 minutes for Q&A)
Space Development Agency
United States Space Force

2:45 PM Break (15 minutes)

#### 3:00 PM Panel: Supersonic and Hypersonic Flight Tech & Airspace Considerations

(15 minutes for each presentation and 20 minutes for Q&A)

This panel will explore the reemergence of high-speed flight, focusing on the integration of supersonic and hypersonic vehicles into national and global airspace. Panelists will address sonic boom mitigation, environmental and regulatory challenges, and the infrastructure needed to support commercial and defense applications of next-gen high-speed platforms.

#### Panelists:

Mr. Don Scata, Jr., Deputy Director, Office of Environment and Energy, FAA

Ms. Maureen Kudlac, Acting Deputy Director, Advanced Air Vehicles Program, NASA

Mr. Glenn Case, Co-Founder and CTO, Hermeus

Dr. John R. Olds\*, Technical Fellow, SpaceWorks Enterprises, Inc

#### 4:20 PM Closing remarks

Dr. Ilan Kroo, ASEB Chair

#### **ASEB OPEN MEETING ADJOURNS**



# JOINT SPRING MEETING OF THE

# **AERONAUTICS AND SPACE ENGINEERING BOARD and the SPACE STUDIES BOARD**

July 24, 2025 NASEM Keck Center — Room 100 500 5<sup>th</sup> Street NW, Washington, DC Online via Zoom and Livestream

#### **THURSDAY, JULY 24, 2025 - KECK 100**

	-SSB OPEN SESSION os://vimeo.com/event/5249237	CLICK HERE TO JOIN
9:35 AM	Meeting Room Opens to Public	
9:40 AM	Welcome and Opening Remarks	<b>Dr. Margy Kivelson</b> , SSB Chair <b>Dr. Ilan Kroo</b> , ASEB Chair
9:45 AM	A Shared Mission in a Defining Moment (20 minutes for presentation and 10 minutes for Q&A)	Ms. Vanessa Wyche* Acting Associate Administrator, NASA
10:15 AM	Break (15 minutes)	
10:30 AM	NASA SOMD Key Issues and Priorities (25 minutes for presentation and 15 minutes for Q&A)	<b>Mr. Kenneth Bowersox</b> Associate Administrator, SOMD-NASA
11:10 AM	NASA MSD Key Issues and Priorities (25 minutes for presentation and 15 minutes for Q&A)	<b>Mr. David Mitchell</b> Associate Administrator, MSD-NASA
11:50 AM	Break (10 minutes)	
12:00 PM	Lunchtime Talk: Contrails Study Briefing (30 minutes for presentation and 15 minutes for Q&A)	<b>Dr. Timothy C. Lieuwen</b> Contrails Committee Chair
12:45 PM	Break (15 minutes)	
1:00 PM	Update from Congressional Staff (30 minutes for all presentations and 30 minutes for Q&A)	
	Panelists:	

Mr. David A. Turner, Senior Professional Staff Member, Space and Science (Minority),

U.S. Senate Committee on Commerce, Science, and Transportation

Science, and Transportation

**Mr. Brent Blevins**, Majority Staff Director, U.S. House Subcommittee on Space and Aeronautics **Ms. Pamela Whitney**, Minority Staff Director, U.S. House Subcommittee on Space and Aeronautics

Ms. Maddy Davis, Professional Staff Member - Space, U.S. Senate Committee on Commerce,

# Joint Meeting of the Aeronautics and Space Engineering Board and the Space Studies Board July 24, 2025

#### 2:00 PM Panel: U.S. Space Science Leadership in a Global Context

(15 minutes for each presentation and 15 minutes for Q&A)

This panel will examine how the U.S. can sustain scientific leadership amid rising global competition. The discussion will assess where global players are gaining ground and how the U.S. can strategically position itself for continued excellence in space science over the next decade

#### Panelists:

Dr. Scott Pace, Professor, Practice of International Affairs; Director, Space Policy Institute, GWU

Ms. Rachel Lindbergh, Space Policy Analyst, Congressional Research Service

Mr. Jared Stout\*, Chief Global Policy Officer, Axiom Space

3:00 PM Break (30 minutes)

#### 3:30 PM Panel: Entrepreneurship and Collaboration in the Al Era

(45 minutes for all presentations and 15 minutes for Q&A)

This panel will explore how startups and emerging tech companies are partnering with NASA in the evolving Al landscape. Discussions will cover funding models, dual-use technologies, intellectual property considerations, and how small businesses are shaping innovation in space and aerospace through industry and venture-backed initiatives.

#### Panelists:

Mr. Chad Anderson\*, CEO & Founder, Space Capital

Dr. Eric Smith, Sr. Principal for Al Strategy, Lockheed Martin Space

Mr. Tim Solms, CEO, Slingshot Aerospace

Mr. Justin Cyrus\*, Founder and CEO, Lunar Outpost

#### 4:30 PM Closing remarks

Dr. Margy Kivelson, SSB Chair

**JOINT OPEN MEETING ADJOURNS** 





# FRIDAY, JULY 25, 2025 - KECK 100

SSB OPEN SESSION Livestream: https://vimeo.com/event/5249240				
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9:35 AM	Meeting Room Opens to Public			
9:40 AM	Welcome and Opening Remarks	Dr. Margy Kivelson, SSB Chair		
9:45 AM	NASA SMD Key Science Issues and Priorities (25 minutes for presentation and 15 minutes for Q&A)	<b>Dr. Mark Clampin</b> Deputy Associate Administrator, SMD-NASA		
10:25 AM	Break (15 minutes)			
10:40 AM	NASA ESDMD Key Science Issues and Priorities (25 minutes for presentation and 15 minutes for Q&A)	<b>Dr. Lori Glaze</b> Associate Administrator, ESDMD-NASA		
11:20 AM	NOAA Key Observing and Information Systems Issues and Priorities (25 minutes for presentation and 15 minutes for Q&A)	<b>Dr. Mike Ford</b> NESDIS Chief Scientist NOAA		
12:00 PM	Break (15 minutes)			
LUNCHTIME TALKS: SCIENTIFIC DISCOVERY HIGHLIGHTS				
12:15 PM	ISS and Advancing Human Biology in Microgravi (20 minutes for presentation and 10 minutes for Q&A)	ty Dr. Jennifer Buchli Chief Scientist, ISS Program, NASA		
12:45 PM	Mars Rover Science: Organic Molecules and Ancient Habitats (25 minutes for presentations and 10 minutes for Q&A)	Dr. Daniel Glavin* Senior Scientist, NASA-GSFC Dr. Caroline Freissinet* Research Scientist, CNES Dr. Mitch Schulte Program Scientist, Mars Exploration		

Program/PSD, NASA-SMD

# 190<sup>th</sup> Meeting of the Space Studies Board July 24-25, 2025

1:20 PM JWST: Exoplanet Observations Dr. Joshua Lothringer

(25 minutes for presentations and 10 minutes for Q&A)

Asst. Astronomer

Space Telescope Science Institute

Dr. Knicole Colón

Research Astrophysicist and

JWST Operations Project Scientist, NASA-SMD

1:55 PM Closing remarks Dr. Margy Kivelson, SSB Chair

2:00 PM SSB OPEN MEETING ADJOURNS

#### **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.

#### **Committee & 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.