

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

DIVISION ON ENGINEERING AND PHYSICAL SCIENCES
AERONAUTICS AND SPACE ENGINEERING BOARD

Committee on NASA Mission Critical Workforce, Infrastructure, and Technology

Meeting No. 11

September 25-29, 2023

NASA Jet Propulsion Laboratory, 4800 Oak Grove Drive, Pasadena, CA 91109

NASA Armstrong Flight Research Center, Edwards Air Force Base, CA 93523

Hybrid Site Visit

ALL TIMES IN US PACIFIC DAYLIGHT TIME (UTC-7:00)

This agenda is a draft, subject to change, and was last updated on 9/23/2023 2:35 PM

AGENDA

MONDAY, SEPTEMBER 25, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721448>

8:00 AM	Welcoming Remarks and Introductions (15-minute remarks and introductory comments)	<i>Mr. Norm Augustine, Chair</i>
8:15 AM	NASA Office of JPL Management and Oversight (NOJMO) (15-minute presentation)	<i>Dr. Azita Valinia, Deputy Director, NOJMO, NASA</i>
8:30 AM	Jet Propulsion Laboratory (JPL) Overview (30-minute presentation)	<i>Dr. Laurie Leshin, Director, JPL</i>
9:00 AM	Budget Overview (15-minute presentation)	<i>Mr. Sammy Kayali, Chief Financial Officer and Director for Laboratory Operations Integration, JPL</i>
9:15 AM	Listening Session 1: JPL and NOJMO Executive Leadership (60-minute listening session) <i>Participants: Group of JPL and NOJMO Executive Leadership</i>	
10:15 AM	<i>Break to Begin Tour of JPL Facilities</i>	

TOUR SESSION*TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS*

- 10:20 AM** **Tour Begins from 321-B20**
Spacecraft Assembly Facility & Environmental Test Laboratory
Tour Stop
- 12:00 PM** *Tour Pauses for Lunch*
- 12:55 PM** *Tour Pauses, Committee Returns to 321-B20*

OPEN SESSION*LIVE-STREAMED FOR PUBLIC ACCESS*

Livestream Link: <https://vimeo.com/event/3721448>

- 1:00 PM** **Listening Session 2: JPL Mid-Career/Supervisor Listening Session**
(90-minute listening session)
Participants: **Group of JPL Mid-Career/Supervisor Employees**
- 2:30 PM** *Break to Continue Tour of JPL Facilities*

TOUR SESSION*TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS*

- 2:35 PM** **Tour Begins from 321-B20**
Deep Space Network & Spaceflight Operations Facility
Tour Stop
- 4:00 PM** *Tour Pauses, Committee Returns to 321-B20; Committee Adjourns to Closed Session Discussions*

TUESDAY, SEPTEMBER 26, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721459>

- 8:00 AM** **Reconvening Remarks** *Mr. Norm Augustine, Chair*
- 8:15 AM** **Listening Session 3: Early Career Listening Session**
(75-minute listening session)
Participants: **Group of JPL Early Career Employees**
- 9:30 AM** *Break to Continue Tour of JPL Facilities*

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

- 9:35 AM** **Tour Begins from 321-B20**
Micro Devices Laboratory
Tour Stop
- 11:40 AM** *Tour Pauses, Committee Returns to 321-B20*

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721459>

- 11:45 PM** **Closing Remarks and Closeout Session with JPL and NOJMO Executive Leadership**
(30-minute listening session)
Participants: **Group of JPL and NOJMO Executive Leadership**
- 12:15 PM** *Committee Breaks into Closed Session Discussion*
- 2:00 PM** *Committee Departs for NASA-ARFC*

WEDNESDAY, SEPTEMBER 27, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721469>

- 8:30 AM Welcoming Remarks and Introductions** *Mr. Norm Augustine, Chair*
(10-minute remarks and introductory comments)
- 8:40 AM Overview of NASA Armstrong Flight Research Center (AFRC)** *Mr. Brad Flick, Center Director, NASA-AFRC*
(60-minute presentation)
- 9:40 AM Break**
(10-minute break)
- 9:15 AM Listening Session 1: NASA-AFRC Leadership**
(75-minute listening session)
Participants: *Mr. Brad Flick, Center Director, NASA-AFRC*
Ms. Laurie Grindle, Deputy Center Director, NASA-AFRC
Mr. Sean Mcmorrow, Assoc. Director for Mission Support, NASA-AFRC
Mr. Eddie Zavala, Director of Programs and Projects, NASA-AFRC
Mr. Troy Asher, Director for Flight Operations, NASA-AFRC
Mr. Stephen C. Jensen, Director of Research Engineering, NASA-AFRC
Mr. Bruce Lipe, Deputy Director for Mission Operations, NASA-AFRC
Mr. Glenn L. Graham, Director for Safety Mission and Assurance, NASA-AFRC
Mr. Joshua M. Martin, Deputy Chief Financial Officer for Resources, NASA-AFRC
Ms. Cynthia J. Bixby, Chief Engineer, NASA-AFRC
Mr. J. Brett Swanson, Center Chief Counsel, NASA-AFRC
Ms. Joy Murphy, Director for California Human Resource, NASA-AFRC
Ms. Keri L. Eliason, Equal Employment Opportunity Officer, NASA-AFRC
- 11:00 AM Break to Begin Tour of NASA-AFRC Complex**

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

- 11:05 AM Tour Begins**
- 1:30 PM Tour Pauses for Lunch**
- 1:55 PM Tour Pauses, Committee Returns to Conference Room**

OPEN SESSION
LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721469>

2:00 PM **Listening Session 2: NASA-AFRC Mid-Career/Supervisor Listening Session**
(90-minute listening session)

Participants: ***Group of NASA-AFRC Mid-Career/Supervisor Employees***

3:30 PM *Committee Breaks into Closed Session*

THURSDAY, SEPTEMBER 28, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721478>

8:30 AM **Reconvening Remarks**

Mr. Norm Augustine, Chair

8:40 AM **Listening Session 3: Early Career Listening Session**

(75-minute listening session)

Participants: **Group of NASA-AFRC Early Career Employees**

9:55 AM *Break to Continue Tour of NASA-AFRC Complex*

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

10:00 AM **Tour Begins**

11:30 AM *Tour Pauses for Lunch*

12:25 PM *Tour Pauses, Committee Returns to Conference Room*

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3721478>

12:30 PM **Close Out Session with NASA-AFRC Leadership**

(75-minute listening session)

Participants: **Mr. Brad Flick, Center Director, NASA-AFRC**
 Ms. Laurie Grindle, Deputy Center Director, NASA-AFRC
 Mr. Sean Mcmorrow, Assoc. Director for Mission Support, NASA-AFRC
 Mr. Eddie Zavala, Director of Programs and Projects, NASA-AFRC
 Mr. Troy Asher, Director for Flight Operations, NASA-AFRC
 Mr. Stephen C. Jensen, Director of Research Engineering, NASA-AFRC
 Mr. Bruce Lipe, Deputy Director for Mission Operations, NASA-AFRC
 Mr. Glenn L. Graham, Director for Safety Mission and Assurance, NASA-AFRC
 Mr. Joshua M. Martin, Deputy Chief Financial Officer for Resources, NASA-AFRC
 Ms. Cynthia J. Bixby, Chief Engineer, NASA-AFRC
 Mr. J. Brett Swanson, Center Chief Counsel, NASA-AFRC
 Ms. Joy Murphy, Director for California Human Resource, NASA-AFRC
 Ms. Keri L. Eliason, Equal Employment Opportunity Officer, NASA-AFRC

1:30 PM *Committee Breaks into Closed Session Discussion*

* Placeholder Title – To Be Updated by Speaker

2:35 PM
09/23/23

FRIDAY, SEPTEMBER 29, 2023

Committee Meets Entirely in Closed Session

The following information is provided for any members of the general public who may be in attendance:

This meeting is being held to gather information to help the committee in its charge. This committee will examine the information and material obtained during this, and other public meetings, in an effort to inform its work. Although opinions may be stated and lively discussion may ensue, no conclusions are being drawn nor will recommendations be made. Observers who draw conclusions about the committee's work based on this meeting's discussions will be doing so prematurely.

Furthermore, individual committee members often engage in discussion and questioning for the specific purpose of probing an issue and sharpening an argument. The comments of any given committee member may not necessarily reflect the position he or she may actually hold on the subject under discussion, to say nothing of that person's future position as it may evolve in the course of the project. Any inference about an individual's position are therefore also premature.

If you would like to join the meeting in-person, please contact the staff officer Christopher Jones (cjones@nas.edu) by Wednesday, 20 September 2023 to arrange attendance and further details.

NOTES FOR PRESENTERS

Your presentation may not include unpublished data, ITAR controlled and/or other sensitive information.

At some point a staff member will be asking you to sign a consent form allowing us to use your presentation, specifically to post it on our website.

STATEMENT OF TASK

Committee Organized on February 2023

The National Academies of Sciences, Engineering, and Medicine (NASEM) will appoint an ad hoc committee to conduct a high-level review of NASA's workforce, infrastructure, and technological capabilities that are most relevant to the strategic goals specified in NASA's 2022 Strategic Plan and other key guiding documents. The committee will consider emerging technologies in selected engineering and science disciplines as well as critical facilities needed, and workforce skills required to perform and support the work of the mission directorates, both now and in the future.

The committee will pay particular attention to critical areas of NASA-wide interest that cross mission directorate boundaries, and the critical mission support underpinning mission accomplishments. The committee will make prioritized recommendations on actions needed to better align NASA's engineering and science workforce, skills, physical and systems infrastructure, and technologies with NASA's mission objectives and strategic goals. Recommendations will address improvements and additions to modeling capabilities, critical infrastructure, test facilities, and support required to perform the work.

The scope of the study will include all NASA mission directorates, including the Mission Support Directorate.