

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. 8

August 21-25, 2023

NASA Goddard Space Flight Center, 8800 Greenbelt Rd, Greenbelt, Maryland 20771

NASA Langley Research Center, Nealy Ave, Hampton, VA 23665

Hybrid Site Visit

ALL TIMES IN US EASTERN DAYLIGHT TIME (UTC-4:00)

This agenda is a draft, subject to change, and was last updated on 8/22/2023 10:09 PM

AGENDA

MONDAY, AUGUST 21, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628513>

| | | |
|----------------|---|--|
| 8:00 AM | Welcoming Remarks and Introductions (10-minute remarks and introductory comments) | <i>Mr. Norm Augustine, Chair</i> |
| 8:10 AM | Overview of NASA Goddard Space Flight Center (GSFC) (40-minute presentation) | <i>Dr. Makenzie Lystrup, Center Director, NASA-GSFC</i> |
| 8:50 AM | Overview of NASA-GSFC Budget (10-minute presentation) | <i>Mr. Raymond Rubilotta, Assoc. Center Director, NASA-GSFC</i> |
| 9:00 AM | Listening Session 1: NASA-GSFC Leadership (75-minute listening session) <i>Participants:</i> <i>Dr. Makenzie Lystrup, Center Director, NASA-GSFC</i> <i>Ms. Cynthia Simmons, Deputy Center Director (Acting)</i> <i>Dr. Christyl Johnson, Deputy Center Director for Technology & Research Investments</i> <i>Mr. Raymond Rubilotta, Associate Center Director</i> <i>Ms. Crystal Gayhart, Director, Human Resource Office</i> <i>Ms. Veronica Hill, Director, Office of Diversity and Equal Opportunity</i> <i>Ms. Michelle Jones, Director, Office of Communication</i> <i>Mr. Tom Browder, Chief Counsel, Office of General Counsel</i> <i>Ms. Sherri Corbo, Director, Office of Chief Financial Officer</i> <i>Mr. Bob Gabrys, Director, Officer of Education</i> <i>Ms. Mary Stevens, Director, Office of Procurement</i> <i>Mr. Wes Deadrick, Director, IV&V</i> <i>Mr. Dave Reth, Director, Management Operations</i> | |

Ms. Maria Nowak, Deputy Director, Safety & Mission Assurance
Ms. Cathy Richardson, Director, Flight Projects (Acting)
Mr. Tom McCarthy, Director, Engineering & Technology
Mr. Marlo Maddox, Deputy Director, Sciences & Exploration
Mr. Rob Leahy, Director, Information Technology & Communications
Mr. David Pierce, Director, Wallops and Suborbital & Special Orbital Projects

10:15 AM Break to Begin Tour of GSFC Complex

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

10:30 AM Tour Begins from Building 8 Lobby
Detector Development Laboratory (B30)
TBD, NASA-GSFC
Engineering Laboratories (B11)
TBD, NASA-GSFC
Technical Support Building (B19)
TBD, NASA-GSFC
Central Heating and Refrigeration Plant (B24)
TBD, NASA-GSFC
GSFC Library (B21)
TBD, NASA-GSFC

12:00 PM Tour Pauses for Lunch in Building 21 Cafeteria

12:55 PM Tour Pauses, Committee Returns to Building 8 Auditorium

OPEN SESSION

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1:00 PM Listening Session 2: NASA-MSFC Mid-Career/Supervisor Listening Session
(90-minute listening session)
Participants: Group of Mid-Career/Supervisor Employees

2:30 PM Continue Tour of NASA-GSFC

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

2:30 PM Tour Begins from Building 8 Lobby
Instrument Construction and Development Laboratory (B5)
TBD, NASA-GSFC

* Placeholder Title – To Be Updated by Speaker

10:09 PM
08/22/23

Technical Processing Facility (B28)

TBD, NASA-GSFC

Integration and Test Facility (I&T Complex) (B7/10/15/29)

TBD, NASA-GSFC

Flight Control Operations/Network Control Center/Spacecraft Operations (B3/13/14)

TBD, NASA-GSFC

5:00 PM

Tour Concludes for the Day

TUESDAY, AUGUST 22, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628514>

8:00 AM

Reconvening Remarks

(5-minute remarks and introductory comments)

Mr. Norm Augustine, Chair

8:10 AM

Listening Session 3: NASA-GSFC Early Career Employees

(75-minute listening session)

Participants: *Group of Early Career Employees*

9:25 AM

Continue Tour of NASA-GSFC

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

9:30 AM

Tour Begins from Building 8 Lobby

Instrument Development Facility (B37)

TBD, NASA-GSFC

Exploration Sciences Building (B34)

TBD, NASA-GSFC

Area 200/300 – Space Geodesy, Mag Test Facility

TBD, NASA-GSFC

11:50 AM

Tour Concludes for the Day; Committee Prepares for Open Session

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628513>

12:00 PM

Close-Out Session with NASA GSFC Executive Leadership

(60-minute discussion session)

Participants: *Ms. Cynthia Simmons, Deputy Center Director (Acting)*
Dr. Christyl Johnson, Deputy Center Director for Technology & Research Investments
Mr. Raymond Rubilotta, Associate Center Director
Ms. Crystal Gayhart, Director, Human Resource Office
Mr. Tom Browder, Chief Counsel, Office of General Counsel
Ms. Sherri Corbo, Director, Office of Chief Financial Officer
Ms. Mary Stevens, Director, Office of Procurement
Mr. David Reth, Director, Management Operations
Ms. Deidre Healey, Director, Safety & Mission Assurance
Ms. Cathy Richardson, Director, Flight Projects (Acting)
Mr. Tom McCarthy, Director, Engineering & Technology

* Placeholder Title – To Be Updated by Speaker

10:09 PM
08/22/23

Dr. Christa Peters-Lidard, Director, Sciences & Exploration
Mr. Rob Leahy, Director, Information Technology & Communications
Mr. David Pierce, Director, Wallops and Suborbital & Special Orbital Projects

1:00 PM Committee Breaks into Closed Session Discussion

WEDNESDAY, AUGUST 23, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628538>

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|-----------------|--|---|
| 8:00 AM | Welcoming Remarks and Introductions (5-minute remarks and introductory comments) | Mr. Norm Augustine, Chair |
| 8:10 AM | Overview of NASA Langley Research Center (LaRC) (50-minute presentation) | Mr. Clayton Turner, Center Director, NASA-LaRC |
| 9:00 AM | Overview of NASA-LaRC Budget (10-minute presentation) | Ms. Lisa Ziehmman, Assoc. Center Director, NASA-LaRC |
| 9:10 AM | <i>Break</i> | |
| 9:20 AM | Listening Session 1: NASA-LaRC Leadership (75-minute listening session) Participants: Group of NASA-LaRC Leaders | |
| 10:35 AM | <i>Break to Begin Tour of LaRC Complex</i> | |

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

- | | |
|-----------------|---|
| 10:45 AM | Tour Begins from Building 2102 Lobby Building 1244 Hanger TBD, NASA-LaRC |
| 12:00 PM | <i>Tour Pauses for Lunch in Building 2102 Cafeteria</i> |
| 1:00 PM | Tour Continues from Building 2102 Lobby Building 1215 Integrated Operations Center TBD, NASA-LaRC |
| 1:35 PM | <i>Tour Pauses, Committee Returns to Building 2102</i> |

OPEN SESSION
LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628538>

1:45 PM **Listening Session 2: NASA-LaRC Early Career Employees**
(75-minute listening session)

Participants: **Group of Early Career Employees**

3:00 PM *Continue Tour of NASA-LaRC*

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

3:15 PM **Tour Continues from Building 2102 Lobby**
 Building 1251 Unitary Plan Wind Tunnel
 TBD, NASA-LaRC
 Building 2104 Measurement Systems Laboratory (MSL)
 TBD, NASA-LaRC

4:55 PM *Tour Concludes for the Day; Committee Prepares for Closed Session*

THURSDAY, AUGUST 24, 2023

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628553>

8:00 AM **Listening Session 3: NASA-LaRC Mid-Career Employees**
(75-minute listening session)
Participants: **Group of Mid-Career Employees**

9:15 AM *Continue Tour of NASA-LaRC*

TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

9:25 AM **Tour Continues from Building 2102 Lobby**
Building 1247E Compressor Plant
TBD, NASA-LaRC
Building 1268 Simulators
TBD, NASA-LaRC

11:05 AM *Tour Concludes for the Day; Committee Prepares for Closed Session*

OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3628553>

11:15 AM **Close-Out Session with NASA LaRC Executive Leadership**
(60-minute discussion session)
Participants:

11:45 AM *Committee Breaks into Closed Session Discussion*

FRIDAY, AUGUST 25, 2023

Committee Meets Entirely in Closed Deliberations

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 Daniel Nagasawa (dnagasawa@nas.edu) by Thursday, 17 August 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.