

*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. 5**

**June 26-28, 2023**

**NASA Michoud Assembly Facility, 13800 Old Gentilly Road, New Orleans, Louisiana 70129**

**NASA Stennis Space Center, Hancock County, Mississippi 39529**

**Hybrid Site Visit**

**ALL TIMES IN US CENTRAL DAYLIGHT TIME (UTC-5:00)**

This agenda is a draft, subject to change, and was last updated on 6/25/2023 9:48 AM

**AGENDA**

**MONDAY, JUNE 26, 2023**

**TOUR SESSION**

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

<b>12:30 PM</b>	<b>Tour Begins in Michoud Assembly Facility Building 101 Lobby</b> <b>Building 102 Offices</b> <i>Office Space Viewing</i> <i>Board Tram</i> <b>Building 103</b> <i>Factory Tour Commences</i> <b>Model Room Discussion</b> <i>Discussion Led by Mr. Lonnie Dutreix, Director, Michoud Assembly Facility</i> <b>Vertical Weld Center</b> <i>Tour Stop</i> <b>Dome Tool / Intertank</b> <i>Tour Stop</i> <b>Lockheed Martin Orion Manufacturing Area</b> <i>Viewing of Capsule, Launch Abort System, and Orion Astronaut Seating</i>
<b>1:40 PM</b>	<i>Tour Break</i>
<b>1:50 PM</b>	<b>Tour Resumes</b> <b>Exploration Upper Stage Area Overview</b> <i>Mr. Lonnie Dutreix, Director, Michoud Assembly Facility</i> <i>Mr. Brad Solomon, Chief Information Officer, NASA-MSFC</i> <b>Detroit Ring Tool / Engine Section / Boat Tail</b> <i>Tour Stop</i> <b>Vertical Assembly Building</b> <i>Viewing Vertical Assembly Center, Hydrostatic Test Tank, Tank Wash Cell, Vertical Stack Cell</i> <b>Final Assembly Area</b> <i>Viewing Core Stage II Production</i>

3:05 PM	<i>Tour Break</i>
<b>3:15 PM</b>	<b>MAF Windshield Tour</b> <i>Mr. Lonnie Dutreix, Director, Michoud Assembly Facility</i>
3:45 PM	<i>Tour Ends with Closing Remarks from Mr. Lonnie Dutreix, Director, Michoud Assembly Facility</i>
4:00 PM	<i>Committee Moves to Closed Session</i>

#### **HQ/MSFC Visit Team**

Jamie Krauk, Deputy Associate Administrator for Mission Support Transformation  
Keith Lowe, HQ Mission Support Integration Office  
Kathy Byars, MSFC Center Executive Officer  
Brad Solomon, MSFC Chief Information Officer  
Carrie Olden, MSFC Legislative Affairs  
Kim Keith, MSFC External Relations Lead  
Janey Sudnik, MSFC Public Affairs Specialist

#### **MAF Visit Team**

Lonnie Dutreix, MAF Director  
Hansel Gill, MAF Deputy Director  
Keith Savoy, MAF COO

Craig Betbeze, MAF STRAT COMM Team Lead  
Steven Seipel, MAF Multimedia Lead  
Heather Keller, MAF Communications Strategist  
Matthew Higgins, MAF Communications Strategist

**TUESDAY, JUNE 27, 2023**

**OPEN SESSION**

*LIVE-STREAMED FOR PUBLIC ACCESS*

Livestream Link: <https://vimeo.com/event/3515174>

- 8:00 AM Welcoming Remarks and Introductions** *Mr. Norm Augustine, Chair*  
(10-minute remarks and introductory comments)
- 8:10 AM Overview of NASA Stennis Space Center (SSC)** *Dr. Richard Gilbrech, Center Director, NASA-SSC*  
(30-minute presentation)
- 8:40 AM Overview of NASA-SSC Budget** *Mr. Rodney McKellip, Assoc. Center Director, NASA-SSC*  
(15-minute presentation)
- 8:55 AM Overview of NASA Shared Services Center (NSSC)** *Ms. Jamie Krauk, Acting Exec. Director, NASA-NSSC*  
(30-minute presentation)
- 9:25 AM Discussion of NASA-SSC and NASA-NSSC Overviews**  
(35-minute discussion)  
**Participants:** *Dr. Richard Gilbrech, Center Director, NASA-SSC*  
*Mr. John Bailey, Deputy Center Director, NASA-SSC*  
*Mr. Rodney McKellip, Assoc. Center Director, NASA-SSC*  
*Mr. Pat Appelman, Director, Center Operations Directorate, NASA-SSC*  
*Ms. Jamie Krauk, Acting Exec. Director, NASA-NSSC*  
*Mr. Ken Newton, Director, Service Delivery, NASA-NSSC*  
*Ms. Nikki Tubbs, Director, Support Operations, NASA-NSSC*  
*Ms. Susan Whitfield, Director, Human Resources, NASA-SSC/NASA-NSSC*  
*Ms. Anita Harrell, Acting Deputy Assoc. Administrator for Integration, NASA-MSD*
- 10:00 AM Break**  
(10-minute break)
- 10:10 AM Listening Session 1: NASA-SSC and NASA-NSSC Leadership**  
(75-minute listening session)  
**Participants:** *Dr. Richard Gilbrech, Center Director, NASA-SSC*  
*Mr. John Bailey, Deputy Center Director, NASA-SSC*  
*Mr. Rodney McKellip, Assoc. Center Director, NASA-SSC*  
*Mr. Pat Appelman, Director, Center Operations Directorate, NASA-SSC*  
*Ms. Jamie Krauk, Acting Exec. Director, NASA-NSSC*  
*Mr. Ken Newton, Director, Service Delivery, NASA-NSSC*  
*Ms. Nikki Tubbs, Director, Support Operations, NASA-NSSC*  
*Ms. Susan Whitfield, Director, Human Resources, NASA-SSC/NASA-NSSC*  
*Ms. Anita Harrell, Acting Deputy Assoc. Administrator for Integration, NASA-MSD*  
*Additional NASA SSC/NSSC Senior Staff (Participants Listed at End of Agenda)*

11:25 AM Break to Begin Tour of Complex

#### TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

**11:35 AM**      **Tour Begins from Roy Estess Administration Building  
Fred Haise Test Stand**  
*Mr. Maury Vandar, Chief, Test Operations, NASA-SSC  
Mr. Jeff Henderson, A1 Test Director, NASA-SSC*

12:05 PM      *Tour Pauses for Lunch*

**1:15 PM**      **Tour Resumes  
SSC HIVE**  
*Tour Stop*

1:45 PM      *Tour Pauses*

#### OPEN SESSION

LIVE-STREAMED FOR PUBLIC ACCESS

Livestream Link: <https://vimeo.com/event/3515174>

**1:45 PM**      **Listening Session 2: NASA-SSC and NASA-NSSC Early Career Employees**  
(75-minute listening session)  
**Participants:**      **Group of Early Career Employees (Participants Listed at End of Agenda)**

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

#### TOUR SESSION

TOURS WILL NOT BE LIVE-STREAMED FOR PUBLIC ACCESS

**3:15 PM**      **Tour Resumes from Roy Estess Administration Building  
B Test Stand**  
*Mr. Maury Vandar, Chief, Test Operations, NASA-SSC  
Mr. Ryan Roberts, B2 Test Director, NASA-SSC*  
**Intelligent and Autonomous Systems**  
*Mr. Landon Tynes, Intelligent and Autonomous Systems Software Developer, NASA-SSC*

4:45 PM      *Tour Concludes for the Day; Committee Moves to Closed Session*

**WEDNESDAY, JUNE 28, 2023**

**TOUR SESSION**

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

**8:10 AM**      **Tour Resumes from Roy Estess Administration Building**  
                 **E Complex**  
                 *Mr. Chris Mulkey, E-1 Test Director, NASA-SSC*  
                 **High Pressure Industrial Water Facility**  
                 *Mr. Greg Carmouche, Senior Test Director, NASA-SSC*  
                 **High Pressure Gas Facility**  
                 *Mr. Justin Lucas, Engineer, NASA-SSC*

**11:00 AM**      *Tour Concludes for the Day*

**OPEN SESSION**

*LIVE-STREAMED FOR PUBLIC ACCESS*

Livestream Link: <https://vimeo.com/event/3515256>

**11:10 AM**      **Close Out Session with NASA SSC and NASA NSSC Executive Leadership**  
                 (60-minute discussion)  
                 **Participants:**      *Dr. Richard Gilbrech, Center Director, NASA-SSC*  
                                      *Mr. John Bailey, Deputy Center Director, NASA-SSC*  
                                      *Mr. Rodney McKellip, Assoc. Center Director, NASA-SSC*  
                                      *Ms. Jamie Krauk, Acting Exec. Director, NASA-NSSC*  
                                      *Mr. Ken Newton, Director, Service Delivery, NASA-NSSC*  
                                      *Ms. Nikki Tubbs, Director, Support Operations, NASA-NSSC*  
                                      *Ms. Anita Harrell, Acting Deputy Assoc. Administrator for Integration, NASA-MSD*

**12:10 PM**      *Committee Breaks into Closed Session Discussion*

**Listening Session: 1 Senior Leadership Participants**

NASA Stennis Space Center  
Dr. Richard Gilbrech, Center Director  
John Bailey, Deputy Director  
Rodney McKellip, Associate Director  
Troy Frisbie, Chief of Staff/Legislative Affairs Officer  
Anne Peek, Chief Technologist  
Duane Armstrong, Manager, Strategic Business Development Office  
Deborah Norton, Chief Financial Officer  
Christine Powell, Manager, Rocket Propulsion Test Program Office  
Joseph Schuyler, Director, Engineering & Test Directorate  
Terrance Jones, Deputy Director, Human Resources  
Pamela Covington, Director, Office of Communications  
Dinna Cottrell, Chief Information Officer (SSC/NSSC)  
Gary Benton, Director, Safety & Mission Assurance Directorate

\* Placeholder Title – To Be Updated by Speaker

9:48 AM  
06/25/23

Patrick Appelman, Director, Center Operations Directorate  
Kelly Martin-Rivers, Deputy Director, Southeast Region Office of STEM Engagement  
Katrina Emery, Director, Office of Diversity & Equal Opportunity (SSC/NSSC)  
Ronald Bald (Acting), General Counsel (SSC/NSSC)  
Eli Ouder, Procurement Officer (SSC/NSSC)  
Susan Whitfield, Director, Human Resources (SSC/NSSC)

**NASA Shared Services Center**

Jamie Krauk, Executive Director (Acting)  
Ken Newton, Director Service Delivery  
Nicolina Tubbs, Director, Support Operations  
Troy Taylor, General Counsel  
Brian Wagner, Human Resources Supervisor  
Teri Green, Financial Manager  
Kim Bastidas, Financial Manager  
Danny Harvill, Chief Information Officer

**Listening Session 2: Early Career Employees**

NASA Stennis Space Center  
Armando Delgado, Engineering & Test Directorate  
Luke Roger, Engineering & Test Directorate  
Steven Helmstetter, Engineering & Test Directorate  
Louis Thompson, Office of STEM Engagement  
Jared Meredith, Safety & Mission Assurance Directorate  
Jessica Harder, Safety & Mission Assurance Directorate  
Rebecca Mataya, Office of Chief Financial Officer  
Lauren Green, Office of Chief Financial Officer  
Holly Hallal, Office of Chief Financial Officer  
Samson Cantu, Center Operations Directorate  
Jacob Haasl, Center Operations Directorate  
Josh Miltier, Office of the Chief Information Officer

**NASA Shared Services Center**

Benjamin Stevens, Information Technology  
Rodney Oliver, Information Technology  
Gavin Ladner, Information Technology  
Kaitlyn Henby, Financial Management  
Wendy Sundeen, Financial Management  
Alan Smith, Human Resources  
Deborah Cogley, Human Resources  
Joyce Kelly, Human Resources  
Kimberly Johnson, Office of Procurement  
Clifford Eugene, Office of Procurement

**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](mailto:dnagasawa@nas.edu)) by Thursday, 22 June 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.