

*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  
Virtual Meeting on Technology**

**June 12, 2023**

**Virtual Meeting**

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

This agenda is a draft, subject to change, and was last updated on 6/9/2023 3:35 PM

**AGENDA**

**MONDAY, JUNE 12, 2023**

**OPEN SESSION**

Livestream Link: <https://vimeo.com/event/3465149>

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| <b>10:00 AM</b> | <b>Welcome and Introductions</b>   | <i>Mr. Norm Augustine, Committee Chair</i> |
| <b>10:05 AM</b> | <b>Panel 1: Technology at the Mission Directorates</b><br>(75min discussion)<br><b>Moderator:</b> <i>Dr. Jaiwon Shin, Committee Member</i><br><b>Panelists:</b> <i>Representatives from Aeronautics Research Mission Directorate (ARMD)</i><br><i>Representatives from Exploration Systems Development Mission Directorate (ESDMD)</i><br><i>Representatives from Mission Support Directorate (MSD)</i><br><i>Representatives from Science Mission Directorate (SMD)</i><br><i>Representatives from Space Operations Mission Directorate (SOMD)</i><br><i>Representatives from Space Technology Mission Directorate (STMD)</i> |  |
| <b>11:20 AM</b> | <i>Break</i>   |  |
| <b>11:40 AM</b> | <b>Panel 2: Discussion with NASA HQ Technology Leadership</b><br>(75min discussion)<br><b>Moderator:</b> <i>Gen. Les Lyles, Committee Member</i><br><b>Panelists:</b> <i>Mr. A.C. Charania, Chief Technology Officer, NASA HQ</i><br><i>Dr. Bhavya Lal, Assoc. Administrator for Technology, Policy, and Strategy, NASA HQ</i><br><i>Dr. Douglas Terrier, Assoc. Center Director for Strategy, NASA Johnson Space Center</i>   |  |
| <b>1:00 PM</b>  | <i>Break</i>   |  |

**2:00 PM Panel 3: Discussion with Technology Experts Outside of NASA**

(90min discussion)

**Moderator:** *Dr. Edward Crawley, Committee Member*

**Panelists:** *Dr. Bobby Braun, Head, Space Exploration Sector, Johns Hopkins U.*

*Dr. David W. Miller, Professor, Aeronautics and Astronautics, Massachusetts Institute of Technology*

*Dr. Mason Peck, Director, NASA NY Space Grant Consortium, Cornell U.*

3:30 PM *Meeting Adjourns*

**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.

**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.