

## National Aeronautics and Space Administration

### Charter for the Space Environment Sustainability Advisory Board

#### Purpose

This charter establishes the Space Environment Sustainability Advisory Board (SESAB).

#### Applicability/Scope

This charter applies to NASA Headquarters, NASA Centers, Component Facilities, and the Jet Propulsion Laboratory (a Federally Funded Research and Development Center).

The scope of the SESAB is space environment sustainability, including orbital debris environment characterization, mitigation and remediation, conjunction assessment risk analysis, and space traffic coordination for NASA missions.

This charter does not supersede existing authorities or responsibilities. The SESAB will be mindful of the regulatory jurisdictions of other Government agencies (including Federal Aviation Administration, National Oceanic and Atmospheric Administration, Federal Communications Commission, and others).

#### Authority

- a. National Aeronautics and Space Act, as amended, 51 U.S.C. §20113 and §20132.

#### Governing Council Affiliation

None.

#### Functions

The SESAB serves as the integrated body advising the NASA Associate Administrator on space environment sustainability.

NASA currently has various organizations that have responsibilities in this area: Mission Directorates conducting spaceflight missions, Office of the Chief Engineer (OCE) and Office of Safety and Mission Assurance (OSMA) as policy owners and technical authorities, the Conjunction Risk Assessment (CARA) Program Office and Multimission Automated Deepspace Conjunction Assessment Process (MADCAP) to support collision avoidance for robotic missions, Trajectory Operations and Planning Officer (TOPO) to support collision avoidance for human spaceflight, the Orbital Debris Program Office to characterize the orbital debris environment and support debris mitigation, and the Office of Technology, Policy, and Strategy

(OTPS), the Office of International and Interagency Relations (OIIR), and the Launch Services Office (LSO) for inter-governmental policy and coordination.

The SESAB is established to develop and maintain a joint perspective on the state of the environment, effectiveness of mitigation, risks to spaceflight posed by the current and future orbital environment, and to integrate and align NASA's approaches and related capabilities, standards, and processes to address those risks. The SESAB will also identify best practices and share lessons learned. The SESAB will seek to drive consensus and promote efficient conflict resolution across organizations and help interpret and recommend strategic guidance and expectations.

To achieve its purpose, the SESAB will perform the following functions:

**REVIEW:** The SESAB periodically reviews:

- Strategic guidance and expectations from Agency leadership.
- Developments and trends related to the state of the space environment, industry, and regulation as related to NASA mission risk.
- Relevant enterprise risk statements and mitigation plans.
- The state of and investment priorities and proposals for related capabilities maintained and/or used by the Agency.
- NASA's contributions towards the implementation of relevant national policies, directives, and strategies.
- Plans for the revision of NASA standards and oversight processes.
- Best practices, lessons learned, and opportunities to disseminate them.

**RECOMMEND:**

- Recommend to Officials in Charge of member organizations priorities, options, and courses of action within the scope of its charter.
- Recommend to the Associate Administrator courses of action within the scope of its charter.

### Membership

Principal membership consists of the Deputy Associate Administrators or equivalent of the following organizations:

- OSMA
- OCE
- OTPS
- Science Mission Directorate (SMD)
- Exploration Systems Development Mission Directorate (ESDMD)
- Space Operations Mission Directorate (SOMD)
- Space Technology Mission Directorate (STMD)

Principal members will assign alternate members as needed.

Further advisors include representatives from the OIIR, Conjunction Assessment Program Office ((CAPO) including CARA and MADCAP), Orbital Debris Program Office, Johnson Space Center Flight Operations Directorate ((FOD) including FDO/TOPO), and the LSO.

The SESAB is co-chaired by OSMA and OCE, supported by a Secretariat consisting of personnel from those offices.

### Meetings

Meetings will be held semi-annually as a minimum or more frequently at the discretion of the SESAB co-chairs. Agendas will be established based on inputs from the members and a schedule of regular items. The chairs will distribute minutes and actions to members, their Officials-in-Charge, and the NASA Associate Administrator generally within one week of board meetings. Meetings will normally be unclassified but could be held at up to the TS/SCI level if required.

Recommendations will be consensus based; the Co-Chairs serve as facilitators for members.

Documents shared for review or collaboration, actions, and other administrative data will be maintained in a dedicated online repository managed by the Secretariat. Documents should be labeled as “pre-decisional,” “for SESAB internal use only,” and controlled unclassified information (CUI) as appropriate. The SESAB will utilize online collaboration via shared documents when reasonably possible to increase transparency and efficiency.

### Duration

The charter expires four years after signature unless re-authorized and renewed, or terminated, prior to that date. A decision to continue the SESAB will be made annually by the NASA Associate Administrator.

### Assessment

The Co-Chairs will perform assessments of the effectiveness of the SESAB in achieving its purpose set forth in this charter at the NASA Associate Administrator’s request.

### Records

This charter and all records shall be maintained by the SESAB Secretariat.

National Aeronautics and Space Administration

**Office of the Administrator**  
Mary W. Jackson NASA Headquarters  
Washington, DC 20546-0001



September 29, 2022

TO: Officials-in-Charge of Headquarters Offices  
Directors, NASA Centers

FROM: Associate Administrator

SUBJECT: Space Environment Sustainability Advisory Board

Given the rapidly increasing number of spacecraft and other objects in orbit, the safety of NASA's operational spacecraft and longer-term protection of the orbital environments require the Agency's attention to keep risks to spaceflight activities, by NASA and others, to acceptable levels. Accordingly, the Agency invests in ways to protect its missions and the space environment such as orbital debris mitigation and remediation, conjunction assessment, and overall space situational awareness.

NASA's related operational, developmental, policy, and oversight functions are distributed across multiple NASA organizations. On May 24, 2022, I accepted a recommendation to establish the Space Environment Sustainability Advisory Board (SESAB) to serve as the Agency's integrated governing body. The SESAB will advise the implementing organizations and NASA senior leadership by providing a combined perspective across orbital debris, conjunction assessment, and space situational awareness. This construct is formed on an interim basis to fix immediate concerns regarding the coordination between the organizations. This decision is subject to evaluation and potential further changes after a period of operations.

The enclosed SESAB Charter is established to develop and maintain a joint perspective on risks to spaceflight posed by the current and future orbital environment and to integrate and align NASA's strategic approach and related internal capabilities, standards, and processes to address those risks. As an advisory board only, the SESAB will seek to drive consensus and promote efficient conflict resolution across organizations and help interpret strategic guidance and expectations from Agency leadership. I fully endorse the creation and implementation of the SESAB and expect full cooperation from all affected organizations.

Given that the Office of Chief Engineer and the Office of Safety and Mission Assurance own the internal policies and requirements related to space environment sustainability, the deputies

of those organizations will co-chair the SESAB. If you have further questions on the establishment and conduct of the SESAB, please contact Joe Pellicciotti or Frank Groen.

Thank you in advance for your support.

**ROBERT  
CABANA**

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ROBERT CABANA  
Date: 2022.09.29  
16:30:07 -04'00'

Robert D. Cabana

Enclosure