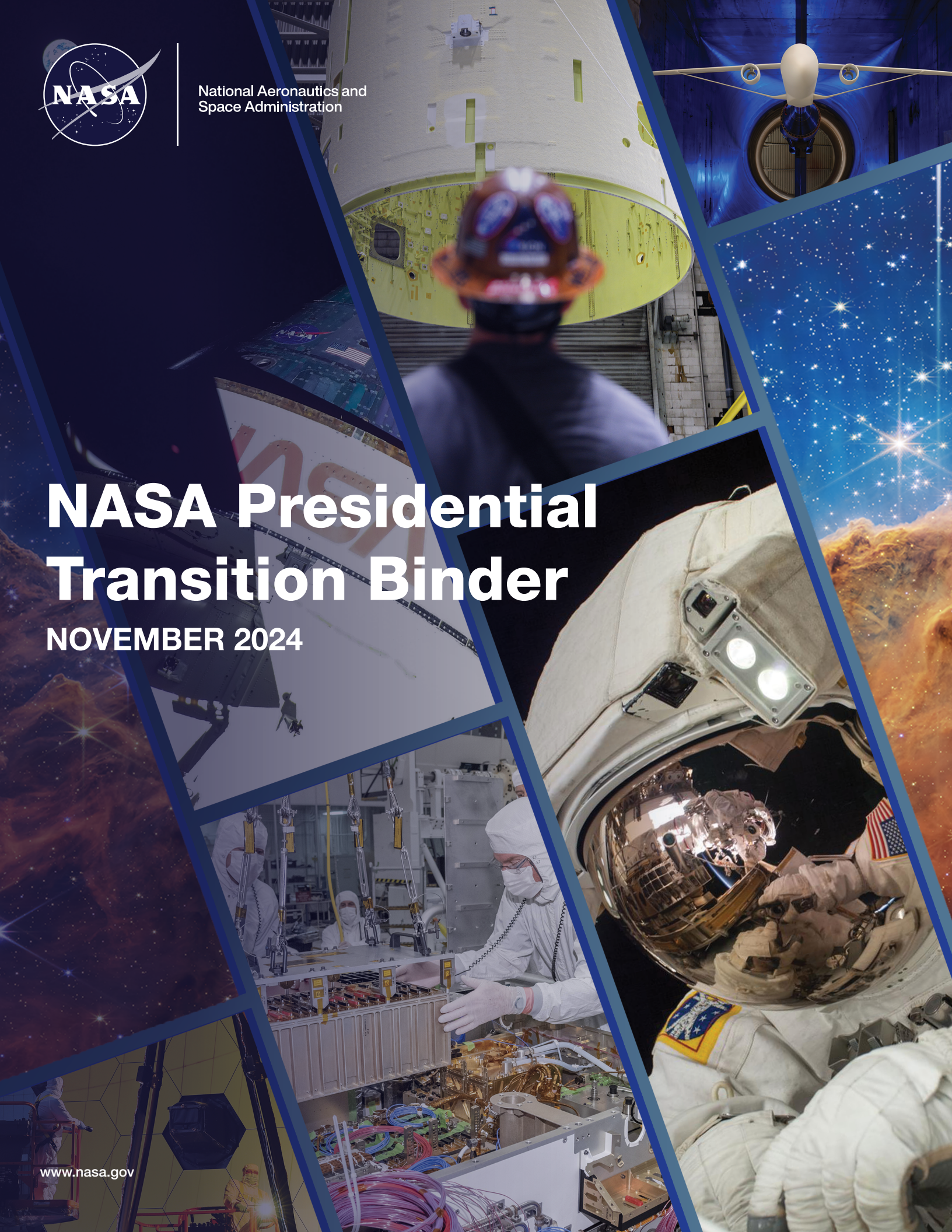

National Aeronautics and Space Administration

NASA Presidential Transition Binder

NOVEMBER 2024

www.nasa.gov

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1.1 Strategic Plan and Agency Leadership Summary

The NASA Strategic Plan: https://www.nasa.gov/ocfo/strategic-plan/

NASA's Vision

Exploring the secrets of the universe for the benefit of all.

NASA's Mission

NASA explores the unknown in air and space, innovates for the benefit of humanity, and inspires the world through discovery.

NASA's Core Values

Safety—NASA's constant attention to safety is the cornerstone upon which we build mission success.

Integrity—NASA is committed to maintaining an environment of trust, built upon honesty, ethical behavior, respect, and candor.

Inclusion—NASA is committed to a culture of diversity, inclusion, and equity, where all employees feel welcome, respected, and engaged.

Teamwork—NASA's most powerful asset for achieving mission success is a multi-disciplinary team of diverse, talented people across all NASA Centers.

Excellence—To achieve the highest standards in engineering, research, operations, and management in support of mission success, NASA is committed to nurturing an organizational culture in which individuals make full use of their time, talent, and opportunities to pursue excellence in conducting all Agency efforts.

01: Strategic Materials

NASA's 2022 Strategic Plan Framework

Four major themes, each characterized by a single word, reflect the focus of NASA's four Strategic Goals:

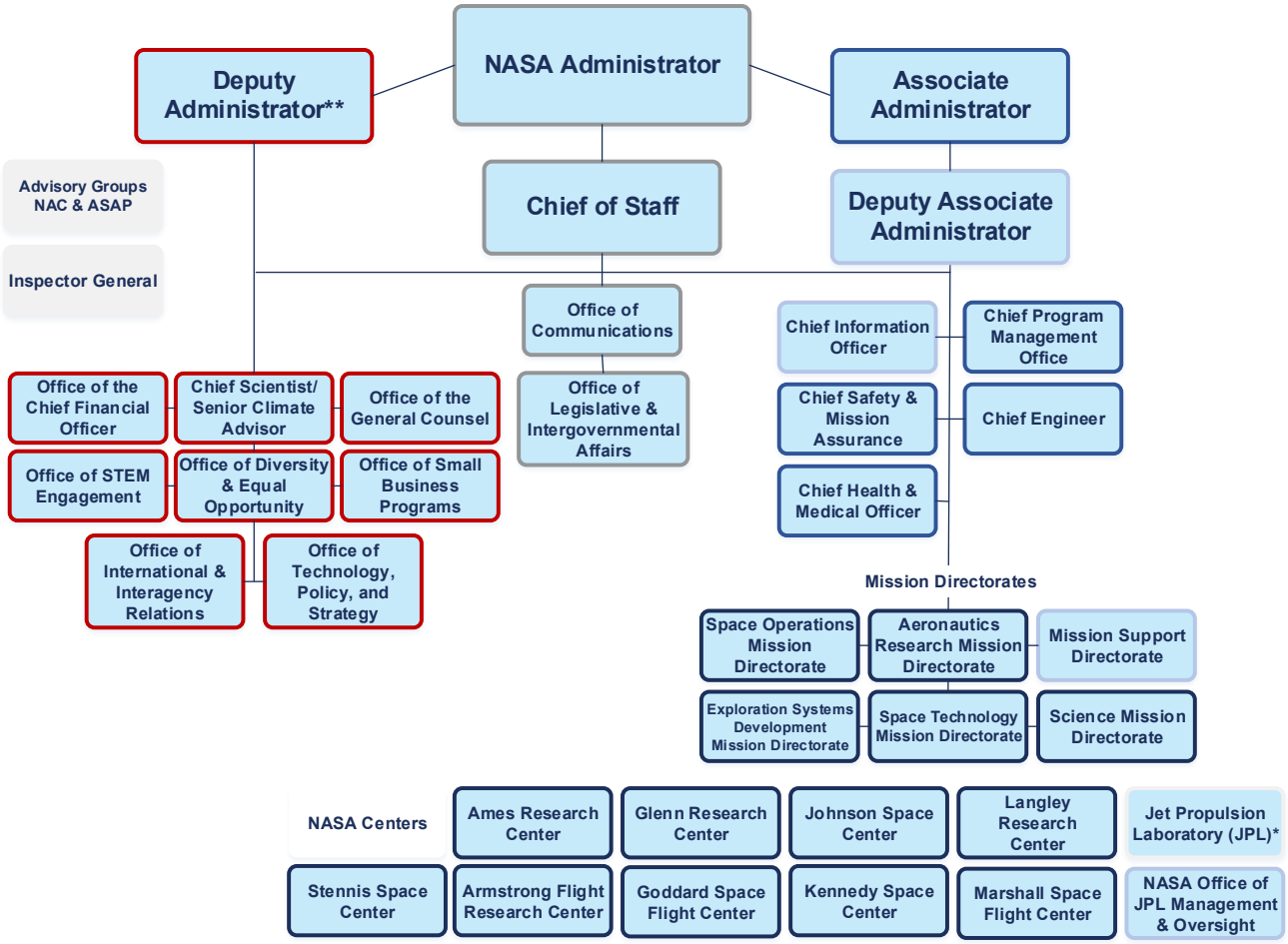
Theme	Goal Statement	Objective Statement
Discover	Expand human knowledge through new scientific discoveries	1.1: Understand the Earth system and its climate
		1.2: Understand the Sun, solar system, and universe
		1.3: Ensure NASA's science data are accessible to all and produce practical benefits to society
Explore	Extend human presence to the Moon and on towards Mars for sustainable long-term exploration, development, and utilization	2.1: Explore the surface of the Moon and deep space
		2.2: Develop a human spaceflight economy enabled by a commercial market
		2.3: Develop capabilities and perform research to safeguard explorers
		2.4: Enhance space access and services
Innovate	Catalyze economic growth and drive innovation to address national challenges	3.1: Innovate and advance transformational space technologies
		3.2: Drive efficient and sustainable aviation
Advance	Enhance capabilities and operations to catalyze current and future mission success	4.1: Attract and develop a talented and diverse workforce
		4.2: Transform mission support capabilities for the next era of aerospace
		4.3: Build the next generation of explorers

01: Strategic Materials

1.1 Strategic Plan and Agency Leadership Summary

NASA Organization

NASA's organization consists of NASA Headquarters in Washington, DC; nine Centers and associated component facilities located around the country; and the Jet Propulsion Laboratory, a federally funded research and development center. NASA Headquarters is organized into an Office of the Administrator, Administrative Staff Offices, and Mission Directorates.



*JPL is a Federally Funded Research and Development Center (FFRDC)
**Designated as Chief Acquisition Officer (CAO)

01: Strategic Materials

Office of the Administrator ("A-Suite")

The Office of the Administrator provides overall leadership, planning, policy direction, management, and coordination for all NASA activities.

Office of the Administrator Leadership

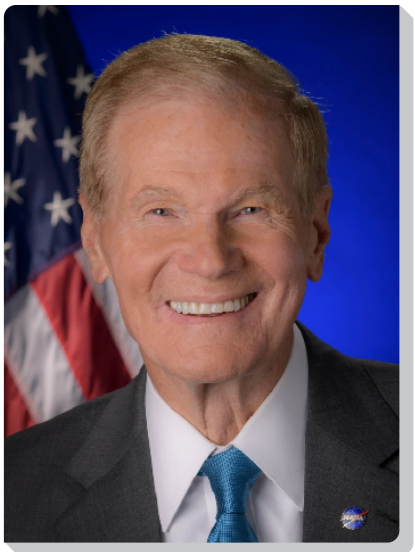
NASA Administrator

The Administrator leads the Agency and is accountable to the President for all aspects of the Agency's mission, including establishing and articulating the Agency's vision, strategy, and priorities and overseeing the successful implementation of all supporting policies, programs, activities, and performance assessments. The Administrator performs all necessary functions to govern NASA operations and exercises the powers vested in NASA by law. The Administrator chairs the Executive Council.

The NASA Administrator is established by statute as a presidentially appointed and Senate-confirmed senior leadership position, which can be filled at the discretion of an incoming administration in accordance with applicable appointment requirements.

Bill Nelson

NASA Administrator



Senator Bill Nelson

Senator Bill Nelson was sworn in as the 14th NASA Administrator on May 3, 2021. Nelson has devoted almost five decades of his life to public service. He represented the state of Florida for 18 years in the U.S. Senate and 12 years in the U.S. House of Representatives. During Nelson's three terms as a U.S. Senator, nearly every piece of space and science law has had his imprint.

In 1986, he trained and flew with the crew of Space Shuttle Columbia for mission STS-61C, the 24th flight of the Space Shuttle. They orbited Earth 98 times over six days, and Nelson conducted 12 medical experiments, including the first American stress test in space on a treadmill and a cancer research experiment sponsored by university researchers.

Extended bio: https://www.nasa.gov/people/nasa-administrator-bill-nelson/

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NASA Deputy Administrator

The Deputy Administrator advises the Administrator on overall leadership, planning, and policy direction for the Agency. The Deputy Administrator performs the duties and exercises the powers delegated by the Administrator. The Deputy Administrator acts for the Administrator in his or her absence by performing all necessary functions to govern NASA operations and exercise the powers vested in NASA by law.

The NASA Deputy Administrator is established by statute as a presidentially appointed and Senate-confirmed senior leadership position, which can be filled at the discretion of an incoming administration in accordance with applicable appointment requirements.

Pam Melroy

NASA Deputy Administrator

Pam Melroy

Col. Pam Melroy (U.S. Air Force, ret.) was sworn in as the NASA Deputy Administrator on June 21, 2021. Melroy was commissioned through the Air Force Reserve Officers' Training Corps program in 1983. As a copilot, aircraft commander, instructor pilot, and test pilot, Melroy logged more than 6,000 flight hours in more than 50 different aircraft before retiring from the Air Force in 2007.

Melroy was selected as an astronaut candidate by NASA in December 1994. Initially assigned to astronaut support duties for launch and landing, she also worked on advanced projects for the Astronaut Office. After serving more than two decades in the Air Force and as a NASA astronaut, Melroy took on a number of leadership roles, including at Lockheed Martin; the Federal Aviation Administration; the Defense Advanced Research Projects Agency; and Nova Systems Pty, Australia; she also served as an advisor to the Australian Space Agency. Additionally, she served as an independent consultant and a member of the National Space Council's Users Advisory Group.

Extended bio: https://www.nasa.gov/people/nasa-deputy-administrator-pam-melroy/

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1.1 Strategic Plan and Agency Leadership Summary

Associate Administrator

The Associate Administrator performs the duties and exercises the powers delegated by the Administrator and acts for the Administrator in the absence of the Administrator and Deputy Administrator. The Associate Administrator is responsible for integrating the technical and programmatic elements of the Agency and oversees the Agency's Centers, Mission Directorates and their programs, and Technical Authorities. Additional responsibilities include overseeing the planning, direction, organization, and control of the day-to-day Agency technical and programmatic operations, including establishing controls over Agency activities and providing a means for evaluating missions. The Associate Administrator chairs the Acquisition Strategy Council, Agency Program Management Council, and Baseline Performance Review.

James Free

NASA Associate Administrator

James Free

Jim Free is NASA's Associate Administrator, the Agency's third-highest-ranking executive and highest-ranking civil servant. Prior to this assignment, Free was Associate Administrator for the Exploration Systems Development Mission Directorate at NASA Headquarters. In that role, Free was responsible for the development of NASA's Moon to Mars architecture, defining and managing the systems development for NASA's Artemis missions and planning for NASA's integrated deep space exploration approach.

Free has served in a variety of roles at NASA since beginning his career in 1990 at NASA's Goddard Space Flight Center in Greenbelt, MD, including working his way up to Center Director at NASA's Glenn Research Center in Cleveland and serving as the Agency's Deputy Associate Administrator for Technical in the Human Exploration and Operations Mission Directorate at NASA Headquarters.

Extended bio: https://www.nasa.gov/people/james-free-2/

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Deputy Associate Administrator

The Deputy Associate Administrator is responsible for integrating the mission support elements of the Agency. The Deputy Associate Administrator oversees the Agency's mission support functions through the Mission Support Directorate, Centers, and appropriate staff offices. The Deputy Associate Administrator chairs the Mission Support Council. The Deputy Associate Administrator also performs the duties and exercises the powers delegated by the Associate Administrator and acts for the Associate Administrator in the absence of the Associate Administrator.

Casey Swails

Deputy Associate Administrator

Casey Swails

As NASA's Deputy Associate Administrator, Casey Swails serves as the deputy and principal advisor to the Associate Administrator for overall day-to-day operations and long-term strategic direction. She establishes the overall strategy, framework, and structure for NASA's integrated mission support portfolio and builds and advances the Agency's industry partnerships. In addition, Swails is leading NASA 2040, the Agency's strategic initiative to ensure that NASA remains the preeminent institution for research, technology, and engineering to lead science, aeronautics, and space exploration for humanity in the year 2040.

Prior to her tenure as Deputy Associate Administrator and with more than 19 years at NASA, Swails has served in a number of senior roles in the Agency, including as Chief of Staff and Senior Advisor to the Associate Administrator. She led the design and creation of the Agencywide Executive Services Division, which manages programs for attracting, retaining, and developing NASA's executive cadre. She also has had substantial involvement working across multiple NASA Centers and with many of the Agency's human spaceflight programs.

Extended bio: https://www.nasa.gov/people/nasa-deputy-associate-administrator-casey-swails/

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Chief of Staff

The Chief of Staff is responsible for coordinating the management and execution of initiatives, programs, and policies in critical areas of concern to the Administrator and ensuring that the strategic goals and objectives established by the Administrator are achieved. The Chief of Staff directs the Office of the Administrator and oversees the Office of the Executive Secretariat.

The Chief of Staff is a Senior Executive Service (SES) position, historically filled via non-career SES appointment, and can be filled at the discretion of an incoming administration in accordance with applicable appointment requirements.

Bale Dalton

NASA Chief of Staff

Bale Dalton

As NASA's Chief of Staff, Bale Dalton is responsible for coordinating the management and execution of initiatives, programs, and policies in critical areas of concern to the NASA Administrator and ensuring that the strategic goals and objectives established by the Administrator are achieved.

Dalton was previously a program director at Air Center Helicopters, Inc., an expeditionary aviation services provider headquartered in Burleson, TX. Dalton also served as military legislative assistant to Nelson in the U.S. Senate and as a foreign affairs officer in the Secretary's Office of Global Partnerships at the Department of State.

Dalton holds a bachelor of science degree in ocean engineering from the U.S. Naval Academy, a master of public policy degree from the Harvard Kennedy School, and a master of business administration degree from the Wharton School of the University of Pennsylvania.

Extended bio: https://www.nasa.gov/people/nasa-chief-of-staff-bale-dalton/

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Key Agency Initiatives

NASA is led by Administrator Bill Nelson and Deputy Administrator Pam Melroy, both nominated and confirmed in 2021. Since that time, they have built on efforts from prior administrations and worked with other A-suite personnel to lead the Agency into a new era of human space exploration and advance its Moon to Mars mission. This includes efforts to work with strategic commercial and international partners, identify and develop needed capabilities, and leverage Agency resources and personnel to achieve mission success. In addition, the Agency is continuing frontline scientific work, conducting strategic planning for the future of low-Earth orbit exploration, pursuing innovative aeronautic projects, and focusing on empowering and enabling the NASA workforce.

NASA also has focused on effective and timely communication of accomplishments and initiatives supporting the Agency's overriding vision—"to explore the secrets of the universe for the benefit of all." Efforts have spanned all media platforms and strategic audiences and include the transformation of NASA TV into a new NASA+ streaming platform, expanding the Agency's messaging capabilities and reach. NASA has advanced partnerships with key stakeholder groups, including students, public and government leaders, international partners, and public audiences, building a comprehensive foundation of support for the Agency and its ongoing work.

NASA is continuing to expand the Artemis Accords, which establish core principles for the civil exploration and use of outer space. Established with eight founding countries in 2020, the Artemis Accords now have been signed by 47 nations, signifying their commitment to peaceful, sustainable, and transparent cooperation in space. The Agency also has worked with international partners, including Canada, Japan, Europe, and the United Arab Emirates, to advance key components of the Moon to Mars effort. It has continued leading-edge work to develop new spacesuits, advance robotics for space exploration, build the Gateway lunar-orbiting outpost, and partner with companies for the development of lunar terrain vehicles.

At all turns, the Agency has focused on making the best use of resources— funding and personnel alike—to advance key missions and position NASA for the future. Likewise, it has worked to make NASA data and technologies accessible to all, continuing the Agency's commitment to innovating for the benefit of humanity. This broad scope of work is most clearly seen through the following key initiative areas:

01: Strategic Materials

1.1 Strategic Plan and Agency Leadership Summary

Lunar and Mars Exploration

The centerpiece of NASA's exploration mission is its Moon to Mars program, which will return humans to the lunar surface for the first time since 1972. The Moon to Mars approach is significantly different from the Apollo program, which focused on stand-alone missions. Through the Artemis campaign, NASA is working with industry, academia, and international partners to return to the Moon in a sustainable way. In addition to long-term exploration at the Moon, the Agency will focus on developing capabilities and technologies needed to conduct missions to Mars and beyond. The Agency celebrated a key first step in the Moon to Mars program with the launch of the Artemis I mission in 2022, conducting a successful uncrewed test flight of the Space Launch System (SLS) rocket, Orion spacecraft, and exploration ground systems. Artemis I provided a wealth of insight into SLS and Orion vehicle performance to inform future mission development. The science payloads and instruments on Artemis I reflected contributions from across the Agency, as well as international partners and partnerships among several universities, industry partners, and other research institutions. NASA is currently scheduled to launch Artemis II in 2025 as the next key step in its exploration program, verifying critical human systems and carrying a crew of four astronauts around the Moon for the first time. Additionally, work on Artemis hardware for subsequent missions is well underway.

In addition, early in 2024, NASA released its 2023 Moon to Mars Architecture Definition Document, another step in the Agency's effort to build and maintain a roadmap integrating strategy, objectives, and capabilities for exploration of the Moon, Mars, and beyond. This is a key product of the Agency's yearly Moon to Mars Architecture Concept Review process in coordination with the exploration community.

The Agency also is continuing work with American companies to deliver science and technology to the lunar surface through the comprehensive Commercial Lunar Payloads Services (CLPS) initiative. In February 2024, the first new science instruments and technology demonstrations were delivered to the lunar surface by Intuitive Machines. The IM-1 mission was the first U.S. spacecraft to land on the Moon's surface after more than 50 years, and the spacecraft landed closest to the lunar South Pole of all spacecraft to date. That company now is slated to land and test a drill, scientific instrument, rover, and rocket-propelled drone in the lunar South Pole region in early 2025. Other American companies are partnered with NASA to deliver future payloads to the Moon as part of CLPS in 2025 and later years.

The Perseverance rover continues exploration of the Mars surface, having already collected a geologically diverse set of samples that could help answer the question of whether Mars once had ancient microbial life. After demonstrating the first powered, controlled flight on

another planet in April 2021, the Ingenuity helicopter completed its 72nd Mars flight in January 2024; in total, it flew more than 128 minutes and 11 miles to far exceed its planned lifespan and requirements. NASA plans to continue such robotic exploration of the solar system in the years ahead.

Low-Earth Orbit Capabilities

In addition to the Moon to Mars initiative, NASA is committed to enabling ongoing commercial activity in low-Earth orbit. The goal of the Commercial Low Earth Orbit Development Program is a public-private partnership to achieve strong low-Earth orbit capabilities that are sustainable, reliable, cost-effective, and safe and that will be available for Agency purchase and use as needed. The strategy allows the Agency to focus on deep space missions while retaining the ability to utilize low-Earth orbit for research and development needs, such as training, research, and hardware testing. Low-Earth orbit capabilities also facilitate satellite imaging of Earth, an important technology for continued study of our home planet.

NASA is supporting the low-Earth orbit effort through various key actions. The operational life of the International Space Station, a valuable tool for microgravity research that impacts all of human life, has been extended through 2030. The space station is approaching a quarter century of continuous crewed activity and remains a cornerstone of space commerce and research. At the same time, the Agency is working to enable the development of commercial space stations for use following the decommissioning of the International Space Station. This will enable ongoing research needed to support deep space missions and continue valuable scientific experimentation and research, such as work contributing to the “moonshot” effort to find a cure for cancer. The Axiom-1 mission in 2022 marked a milestone in this work arena, the first privately funded and operated crewed mission to the International Space Station. In addition, NASA has worked with two commercial companies—SpaceX and Northrop Grumman—to conduct ongoing cargo resupply missions to the International Space Station. SpaceX also is transporting U.S. astronauts to the station, with Boeing working to develop the same capability. NASA also has contracted with SpaceX to build and deliver a spacecraft to safely deorbit the International Space Station post-2030. Such activities not only ensure ongoing access to low-Earth orbit but contribute to the growth of a strong U.S. space economy.

Scientific Missions

NASA’s far-reaching array of scientific missions and research programs also garner top headlines. These science missions, which span airborne, suborbital, and space-based capabilities, reach throughout the solar system, exploring Earth, the Sun, the Moon, Mars, and the broader universe. There are over 80 operational missions and instruments,

including the Parker Solar Probe, which is delivering unparalleled information and understanding of the Sun; the Origins, Spectral Interpretation, Resource Identification, and Security—Regolith Explorer (better known as OSIRIS-REx) mission, which delivered an asteroid sample to Earth in 2023 before being sent on a new exploration mission; and the Europa Clipper space probe, which will conduct a detailed study of the Jupiter moon bearing the same name when it arrives in 2030.

Other operational missions include the James Webb Space Telescope. Launched in late 2021, the Webb telescope studies both nearby planets and the evolution and composition of the broader universe. In 2022, NASA completed a successful Double Asteroid Redirection Test to assess the potential for deflecting asteroids before they could impact Earth. Closer to home, NASA also launched the Plankton, Aerosol, Cloud, ocean Ecosystem (PACE) science mission in early 2024, allowing researchers to study microscopic life in the ocean and particles in the air, advancing understanding of issues including ocean/atmosphere interactions, fisheries' health, harmful algal blooms, air pollutions, and wildfire smoke. PACE joins NASA's fleet of missions, including CubeSats and instruments on the International Space Station, studying various aspects of our changing planet. NASA has taken steps to ensure that information from such missions is accessible to decision makers in key areas of Earth science, as well as the general public. The Agency opened its first Earth Information Center (EIC) in 2023, which allows visitors to see how our home planet is changing and gives decision makers information to develop the tools they need to understand, adapt, and respond to those changes. A second EIC opened at the Smithsonian Natural History Museum in 2024. Visitors can access information and insights in areas such as agriculture, energy, sea level rise, health and air quality, and wildfires. These centers demonstrate how viewing Earth from space can improve lives in the face of natural disasters and environmental challenges.

Aeronautics

NASA is about more than space exploration, as its full name implies—the first "A" stands for "Aeronautics." As NASA leadership emphasizes, "NASA is with you when you fly." The Agency supports a wide range of aviation projects and initiatives designed to improve air travel and make it more sustainable. The NASA Aeronautics Research Mission Directorate is focused on working with U.S. industry and government to transform aviation in four key flight-related areas: ultra-efficient commercial airliners, advanced air mobility, future airspace and safety, and high-speed commercial flight.

NASA's Electrified Powertrain Flight Demonstration project seeks to advance hybrid electric aircraft propulsion, with flight tests expected to begin in 2026. The Agency's 2025 Gateways to Blue Skies competition focuses on agriculture-related aviation, with collegiate teams

developing concepts for novel aviation systems that can support future agriculture efforts. In 2023, the Agency entered a Funded Space Act Agreement to build, test, and fly an X-66 full-scale demonstrator aircraft designed to validate new fuel-efficient designs and green technologies. The Agency also began the Advanced Capabilities for Emergency Response Operations project to use drones and advanced aviation communication technologies to improve wildland fire management operations. Meanwhile, the Quesst mission is working to enable commercial, supersonic travel over land by reducing loud sonic booms to a gentle thump. The supersonic X-59 aircraft is set for its first flight in 2025, providing research that could change the face of air travel for all. NASA also is providing data and research for the development and safe operation of air taxis and drones, leading a sustainable Flight National Partnership with other Federal agencies to accelerate sustainable aviation technologies, and working with the Federal Aviation Administration and others to transform air traffic management systems and flight safety. Foundational research is enabling new aircraft designs and operations, as well as supporting the Agency's exploration and science missions.

Artificial Intelligence (AI)

NASA has been safely using AI for decades to plan and schedule missions for planetary rovers, analyze satellite datasets, diagnose and detect anomalies, and more. NASA is currently using AI to support missions and research projects across the Agency, analyze data to reveal trends and patterns, and develop systems capable of supporting spacecraft and aircraft autonomously. AI tools can automate time-consuming processes like program and project reviews, allowing NASA to streamline decision making, save resources, and leverage the full potential of its workforce.

Future Capabilities

In addition to current achievements and missions, the Agency is preparing for the future. An Agencywide NASA 2040 initiative is focused on ensuring that resources and processes are in place for NASA to remain the preeminent institution for research, technology, and engineering in order to lead science, aeronautics, and space exploration for the benefit of humanity. The initiative is focused on key areas, including infrastructure, technology, people, budget, structure, mission, and process. Workforce development and empowerment is a key focus of the Agency's strategic planning for the future, and NASA is taking proactive steps to attract and retain a diverse and innovative workforce of the best and brightest. It also is working to ensure that policies and processes are in place to fully empower the NASA workforce for mission collaboration and success. The impact of such efforts is shown in the Agency's continued standing— for 12 consecutive years—at the top of the annual Best Places to Work in the Federal Government list, designed to gauge employee

engagement and satisfaction across the Federal workplace. NASA also is working to ensure full participation of those beyond the workforce in the Agency and its missions. In 2022, the Agency released an Equity Action Plan to ensure fair, impartial access and representation for all who seek to join in the Agency's work. As Administrator Nelson has stated, "The goal is to make limitless the potential of all Americans" to support and contribute to the Nation's space program and efforts.

1.2 Workforce

NASA is proud to have been named by the Partnership for Public Service as the "Best Place to Work" in the Federal Government (among large agencies) for the 12th year in a row. This honor reflects NASA's strong mission, project focus, and annual results from the Federal Employee Viewpoint Survey (FEVS). NASA has developed a positive work culture with a high level of employee engagement through deliberate, proactive initiatives over time based on responding to the FEVS feedback.

While NASA is committed to creating an environment where employees feel engaged and motivated to create innovative ideas, the Agency is also dedicated to ensuring that it has the best and brightest minds from across the United States. We are actively exploring creative ways to recruit the next generation of NASA employees, particularly in competitive science, technology, engineering, and mathematics (STEM) fields, because nearly one-quarter of the workforce is retirement-eligible. To help in our recruiting, NASA has also developed a new Employee Value Proposition (EVP) with four interdependent core elements. The EVP is NASA's promise to the employee on what they will gain in their time at the Agency. At NASA, we, the employer, will

- challenge you with our unique and groundbreaking **mission**;
- support you as a **person** and value your well-being;
- engage you in diverse and passionate **teams;** and
- enable you to **grow**, adapt, and explore.

The table and graphics below provide additional insights and statistics on the current NASA workforce.

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⋮···► 1.2 Workforce

NASA CIVIL SERVICE WORKFORCE BY THE NUMBERS				
	Civil Servant Head Count	Average Age	Average Years of NASA Service	Percent Retirement Eligible
Ames Research Center	1,325	50.2	14.4	27%
Armstrong Flight Research Center	551	47.3	12.1	19%
Glenn Research Center	1,469	46.8	15.4	25%
Goddard Space Flight Center	3,183	49.1	15.5	23%
Johnson Space Center	3,225	46.8	15.3	19%
Kennedy Space Center	2,097	46.2	13.9	19%
Langley Research Center	1,852	48.8	16.0	27%
Marshall Space Flight Center	2,345	47.3	15.1	22%
Stennis Space Center	284	49.0	13.8	21%
Headquarters	1,741	50.2	14.6	23%
NASA Shared Services Center	210	48.6	8.5	9%
Office of Inspector General	179	45.8	9.8	16%
Total	***18,461***	***48.0***	***14.8***	***22%***

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NASA Civil Service Workforce at a Glance

18,461
Civil Service Headcount

16.7 (Federal)
14.8 (NASA)
Avg. Years of Service

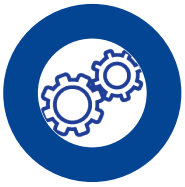
48.0
Employee Avg. Age

22%
(4,122)
Retirement Eligible

3%
(604)
Students

12.4%
(2,286)
Remote Workers

50%
Master's Degree
or Higher



64%
Scientific or
Engineering Positions

13.4
Avg. General
Schedule Grade

37%
Female

32%
Identify as Minority
or Multiracial

11%
Veterans

1.3 Agency Governance and Governing Councils

NASA maintains a number of chartered, formal governing councils for the purposes of making informed, documented decisions on key strategic, programmatic, and institutional questions. The configuration of NASA's strategic management system, including its governance framework, is documented in NASA Policy Directive (NPD) 1000.0C, with council charters documented in NPD 1000.3E. Governance councils are managed by the Office of the Executive Secretariat, which reports to the NASA Chief of Staff. The primary councils are supported by special-purpose boards and reviews. The monthly Baseline Performance Review (BPR) implements routine, integrated performance management of all major Agency mission and institutional programs and projects.

The table below shows the Agency's current governing councils and summarizes the chair and scope for each.

Council	Chair	Scope (Per Charters)
Executive Council (EC)	Administrator	Decisions: • Agency strategy • Agency governance • Agency budget • Stakeholder management
Acquisition Strategy Council (ASC)	Associate Administrator	Decisions: • Agency acquisition strategy decisions • Certain partnerships • Center roles, workforce assignment, acquisition policy, supplier management
Agency Program Management Council (APMC)	Associate Administrator	Decisions: • Mission execution (Key Decision Points [KDPs]) • Technical capabilities • Special risks
Mission Support Council (MSC)	Deputy Associate Administrator	Decisions: • Mission support strategy • Mission support program execution • Major capital investments/divestments

1.4 Upcoming NASA Milestones and External Events—Public Dates

Below are the publicly listed dates of high-profile activities/events/milestones in 2024 and 2025. Internal planning, target, and pre-decisional dates are not listed below as they are not official and public yet. This list is maintained by the Office of Communications and is regularly updated as appropriate. This list is current as of November 1, 2024.

2024

- **Firefly Aerospace CLPS Flight:** Suite of 10 science investigations and technology demonstrations delivered to a non-polar region of the Moon's surface as part of a Commercial Lunar Payload Services delivery. Landing takes place in the following weeks.
- **Intuitive Machines' CLPS Flight (IM-2 Lunar South Pole Mission):** NASA's PRIME-1 drill delivered to the Moon's surface as part of a Commercial Lunar Payload Services delivery. Landing takes place in the following weeks.
    - **Lunar Trailblazer (launching with Intuitive Machines' CLPS Flight IM-2):** A small satellite mission to understand the lunar water cycle.
- **U.S. Spacewalk 91 Aboard International Space Station—under evaluation:** Details about which NASA astronauts will conduct the spacewalk and their tasks are TBD.

2025

- **NASA Day of Remembrance—January 23:** In honor of the members of the NASA family who lost their lives while furthering the cause of exploration and discovery for the benefit all, the Agency will host its annual Day of Remembrance.
- **X-59:**
    - **First Flight:** The first flight of the X-59 aircraft will take place out of Lockheed flight facilities in Palmdale, CA.
    - **First (loud) Supersonic Flight:** The X-59 aircraft will make its first supersonic test flight. Note: This will not be the first quiet supersonic demonstration. Due to altitude and flight conditions, the X-59 may make a sonic boom during the flight.
    - **First Quiet Supersonic Flight—no earlier than January 2025:** The X-59 aircraft will conduct the historic first demonstration of its supersonic flight capability.
- **NISAR Launch—early 2025:** The NASA-ISRO Synthetic Aperture Radar (NISAR) is an Earth-observing satellite that will provide essential information about the movement of our planet's land and ice surfaces. Launching from India, NISAR is the first-ever

collaborative Earth-observing mission between NASA and the Indian Space Research Organisation (ISRO).

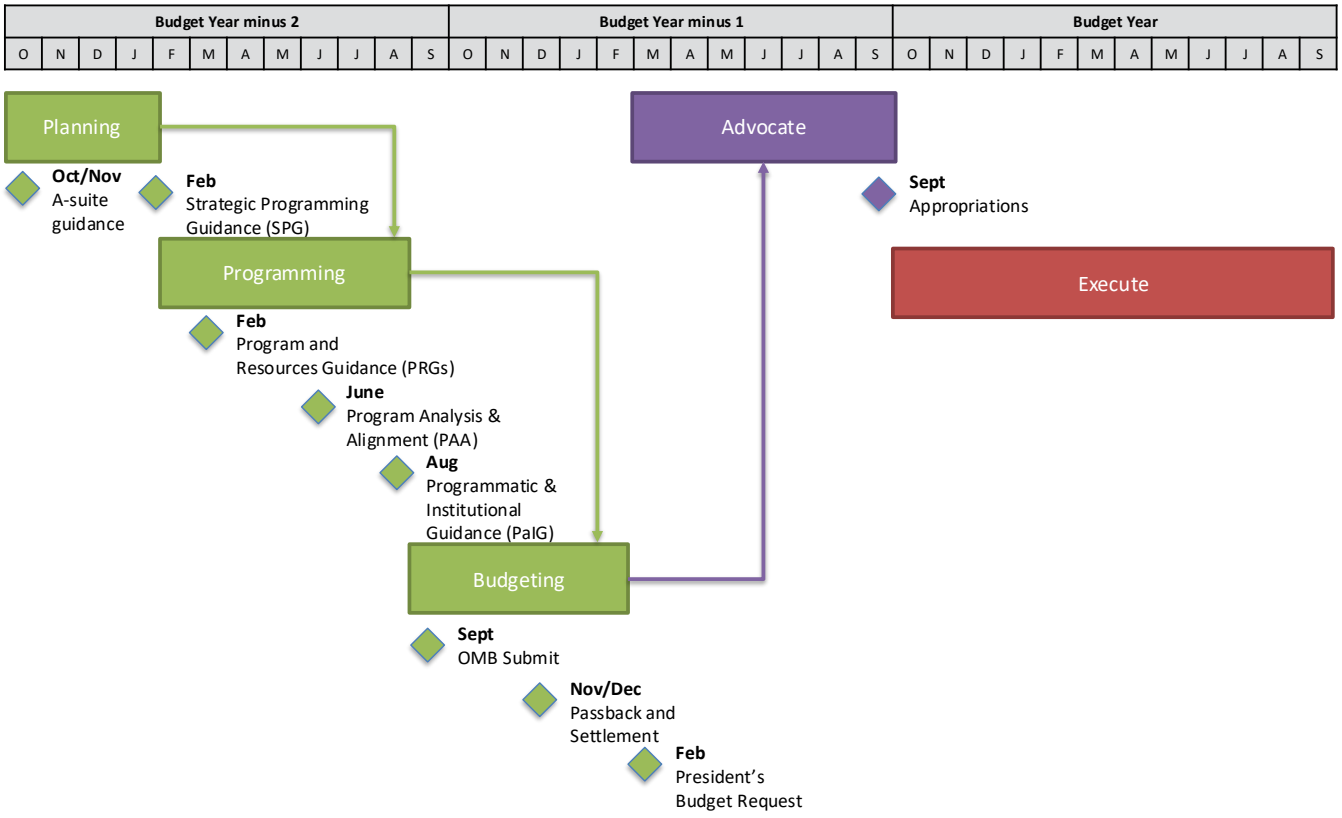
- **NASA's SpaceX Crew-10 Launch—no earlier than February 2025:** Crew-10 is targeted to launch from Florida to the International Space Station.
- **NASA's SpaceX Crew-9 Return—shortly after Crew 10's arrival at the International Space Station:** Crew-9 is targeted to return to Earth from the International Space Station to a splashdown off the Florida coast.
- **SPHEREx Launch—by April 2025:** Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ices Explorer (SPHEREx), launching from California, is a space telescope that will provide the first all-sky spectral survey. It will collect data on more than 450 million galaxies along with 100 million stars in the Milky Way, to explore the origins of the universe.
- **Sierra Space's Dream Chaser (DCC-1) Launch—no earlier than May 2025:** Inaugural launch (from Florida) and mission of the Dream Chaser spaceplane as part of NASA's commercial resupply for the International Space Station.
- **Escape and Plasma Acceleration and Dynamics Explorers (ESCAPADE) Mission Launch—no earlier than spring 2025:** Two ESCAPADE spacecraft will launch from Florida on Blue Origin's New Glenn rocket to study the transfer of solar wind energy and momentum through Mars's unique hybrid magnetosphere.
- **Axiom Mission 4 (Ax-4) Launch—no earlier than spring 2025:** Fourth private astronaut mission to the International Space Station with a launch from Florida.
- **NASA's SpaceX Crew-11 Launch—no earlier than July 2025:** Crew-11 is targeted to launch from Florida to the International Space Station.
- **Artemis II Launch/Mission—September 2025:** The first test flight with astronauts aboard the Space Launch System rocket and Orion spacecraft on an approximately 10-day mission around the Moon.
- **IMAP Launch:** The Interstellar Mapping and Acceleration Probe (IMAP), launching from Florida, will help researchers better understand the boundary of the heliosphere, a sort of magnetic bubble surrounding and protecting our solar system.
- **Boeing Starliner-1:** Will aim to demonstrate Starliner's ability to achieve NASA certification and safely fly regular crewed missions to the space station, pending evaluation of Boeing's Crew Flight Test.

02: NASA Budget

2.1 NASA Budget Overview

NASA's budget formulation is one of the Agency's central processes. The development of NASA's budget plan and the application of budget authority to achieve the Agency's objectives are carried out through a four-stage Planning, Programming, Budgeting, and Execution process, referred to as PPBE. The PPBE process integrates and formalizes what will and will not be done by the Agency for a given time period. Requirements for budget formulation are included in NASA Procedural Requirements (NPR) 9420.1A.

PPBE Cycle



Planning: The continuous process of assessment and adjustment of NASA's goals and objectives.

Programming: A bottom-up process to gather data and raise issues regarding the resources necessary to accomplish the mission, with prioritization decisions.

02: NASA Budget

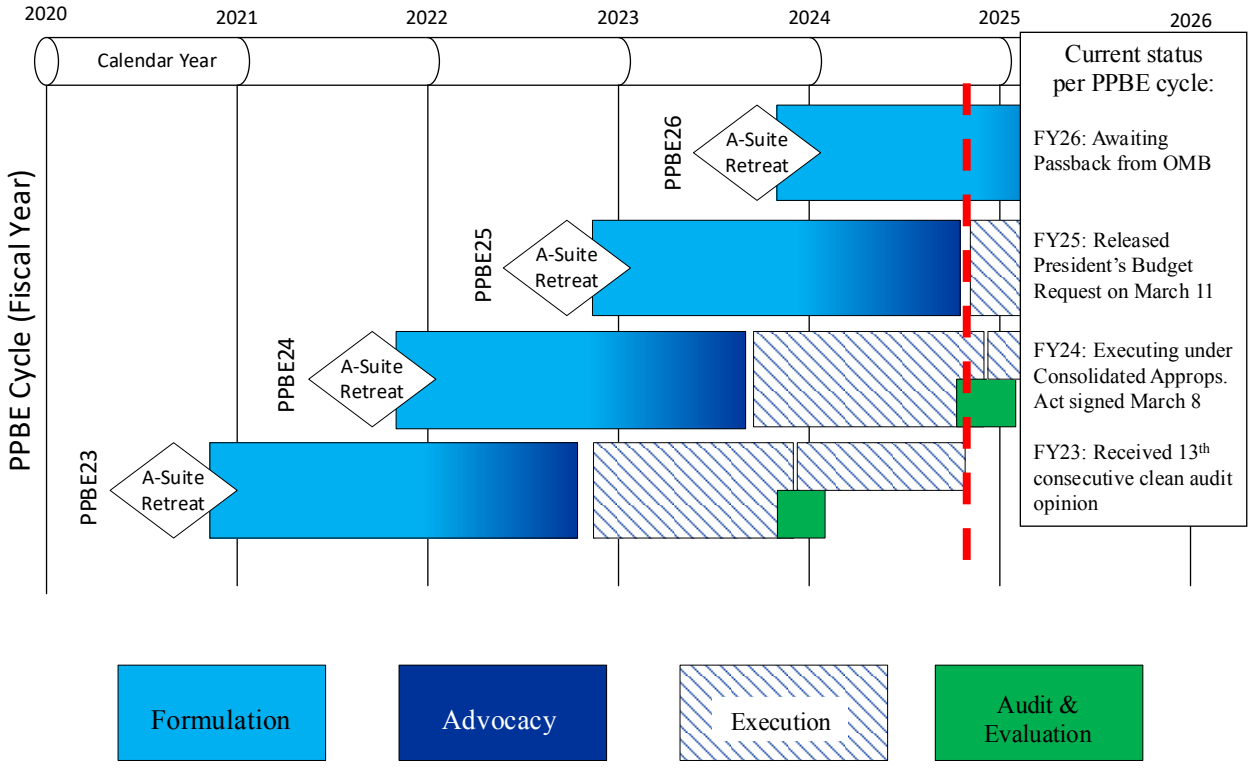
2.1 NASA Budget Overview

Budgeting: The process of aligning resources against priorities and presenting Agency decisions to the White House Office of Management and Budget (OMB) in the OMB Submission. OMB assesses the submission in the context of overall administration policy and the requirements of other agencies and then responds to NASA (in a document called a "passback") with OMB's adjustments to the Agency's submission. After a period of negotiations in which NASA and OMB come to agreement on a final administration position, NASA publishes its Agency Congressional Justification and advocates on behalf of the President's Budget Request.

Execution: The process of spending, recording, monitoring, and controlling budget authority to conduct NASA's work once funds have been appropriated. This includes establishing, adjusting, and gaining the approval of the Appropriations Committees on the Agency's operating plans.

Current Budget Status

NASA typically deals with four budget cycles at any one time. The figure below illustrates the current status of NASA's PPBE cycle for fiscal year (FY) 2023–26, demonstrating how multiple budgets are in play at any given time, at varying levels of maturity in the PPBE process.



02: NASA Budget

Recent NASA Budget Request

NASA's Congressional Justification for FY 2025, part of the President's Budget Request to Congress, may be found at https://www.nasa.gov/budgets-plans-and-reports/. The table below shows the account-level details for both NASA's actual FY 2024 appropriations and its FY 2025 budget request (with the full five-year runout).

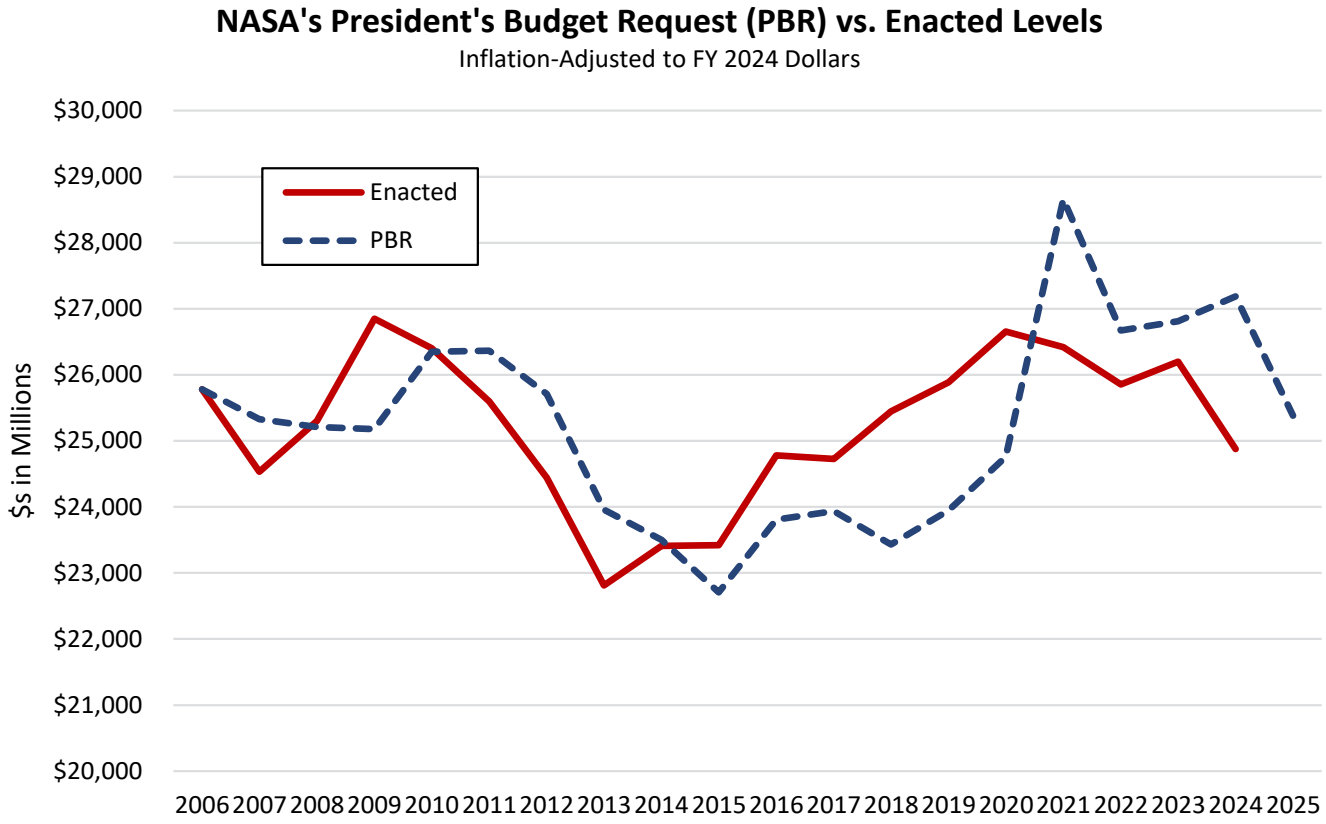
NASA's FY 2024 Enacted Budget and FY 2025 President's Budget Request

Account ($ in Millions)	FY 2024 Enacted	FY 2025 PRESIDENT'S BUDGET REQUEST				
		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
Deep Space Exploration Systems	$7,649.8	$7,618.2	$7,803.7	$7,959.8	$8,119.0	$8,281.4
Space Operations	$4,222.1	$4,389.7	$4,497.6	$4,587.6	$4,679.4	$4,773.0
Space Technology	$1,100.0	$1,181.8	$1,205.4	$1,229.5	$1,254.1	$1,279.2
Science	$7,326.2	$7,565.7	$7,717.0	$7,717.0	$8,028.7	$8,189.3
Aeronautics	$935.0	$965.8	$985.1	$1,004.8	$1,024.9	$1,045.4
STEM Engagement	$143.0	$143.5	$146.4	$149.3	$152.3	$155.3
Safety, Security, and Mission Services	$3,133.5	$3,044.4	$3,105.3	$3,167.4	$3,230.7	$3,295.3
Construction and Environmental Compliance and Restoration	$322.3	$424.1	$379.3	$386.9	$394.6	$402.5
Inspector General	$47.6	$50.5	$51.5	$52.5	$53.6	$54.7
NASA Total	***$24,879.5***	***$25,383.7***	***$25,891.3***	***$26,409.1***	***$26,937.3***	***$27,476.1***

02: NASA Budget

2.1 NASA Budget Overview

A summary of recent annual appropriations outcomes for NASA, compared with the President's request level, is provided in the figure below:



2.2 Office of the Chief Financial Officer Transition Milestones

1. Budget
    a. PPBE26 Agency Budget Submission to OMB—**Due Date: September 9, 2024**
    b. PPBE26 Passback—**Due Date: Approximately November 30, 2024 (tentative)**
    c. FY 2026 NASA Congressional Justification publication—**Due Date: February 3, 2025 (with President's Budget Request) (tentative)**
2. Performance Reporting
    a. Draft FY 2026 Annual Evaluation Plan to OMB — **Due Date: September 9, 2024**
    b. Draft Strategic Review Summary of Progress to OMB — **Due Date**: **September 9, 2024**
    c. Draft FY 2025–26 Annual Performance Plan to OMB — **Due Date: September 9, 2024**
    d. Update 2025–26 Annual Performance Plan after passback for publishing—**Due Date: February 3, 2025 (with Congressional Justification)**
3. Strategic Plan: Strategic Planning kickoff at Executive Council—**Due Date: February 2025**
4. Financial System FY 2024 Close as required under Bureau of Fiscal Services—Treasury—**Due Date: September 30, 2024**
5. Financial System FY 2025 Opening as required under Bureau of Fiscal Services—Treasury—**Due Date: October 1, 2024**
6. Agency Financial Report as required by Chief Financial Officers Act of 1990 with guidance promulgated by Office of Management and Budget circular A-136—**Due Date: Mid-November 2024**
    a. Mission Performance
    b. FY 2024 Financial Statement Audit (conducted by Office of Inspector General)
    c. Management Representation Letter
    d. Improper Payments Program
    e. Statement of Assurance required by Office of Management and Budget circular A-123

03: Congressional Relations

NASA has been the beneficiary of broad, bipartisan congressional support since its establishment in 1958. NASA supporters in Congress are often part of delegations representing states in which NASA's nine Centers are located, while authorization and appropriations chairs and ranking members often assume roles of national leaders for investment in NASA space and aeronautics. There are four primary congressional committees that oversee NASA—the House Committee on Science, Space, and Technology; the Senate Committee on Commerce, Science, and Transportation; and the House and Senate Committees on Appropriations—which are summarized in the following subsections.

3.1 Appropriations

The House and Senate Committees on Appropriations are responsible for writing annual bills that allocate discretionary Treasury funds for operations and activities of Federal agencies, and under Article 1 of the Constitution, appropriations measures are to originate in the House of Representatives. All discretionary programs in the Federal Government require an appropriation every year. The Committees on Appropriations work on regular appropriations bills that must be signed into law by October 1, the start of the fiscal year, to fund the operations of the Federal Government.

When appropriations bills are not passed by the start of the fiscal year, the Appropriations Committees of both chambers produce a Continuing Resolution (CR). A CR is legislation that prevents agencies from shutting down by keeping them running at the previous year's funding level. When Subcommittee bills do not individually proceed to enactment, omnibus appropriation bills that incorporate multiple Subcommittee bills may be enacted.

House Committee on Appropriations

More information: https://appropriations.house.gov/

The House Committee on Appropriations has broad responsibility for appropriating funds for executive branch departments/agencies and the legislative branch. The Rules of the U.S. House of Representatives define the Committee's jurisdiction as "appropriation of the revenue for the support of the Government" (and related powers to rescind and transfer funds). The Committee's 12 Subcommittees are aligned with responsibility for specific departments and agencies. The House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies (CJS) has jurisdiction over NASA.

House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies—Jurisdiction

The House Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies (CJS) provides funding for the Department of Commerce, the Department of Justice, the Office of Science and Technology Policy, NASA, the National Science Foundation, and several related commissions and agencies. The annual CJS appropriations bill is one of the larger domestic appropriations bills, totaling $69.9 billion in FY 2024.

The CJS Subcommittee reviews the President's budget request for each department/agency and hears department/agency officials' testimony. Typically, the Subcommittee holds one hearing per year on the respective department/agency budget request, and Subcommittee staff members engage in detailed review of the request through multiple briefings by department/agency officials. The Subcommittee drafts annual appropriations bills that include funding for each department/agency under its jurisdiction. When an annual appropriations bill has been enacted, departments/agencies are required to submit "spend plans," pursuant to statutory direction, to the House and Senate Committees on Appropriations, to reflect the manner in which the department/agency is executing the appropriation, including proposed reprogrammings, which require Committee concurrence. As necessary, the Subcommittee drafts supplemental appropriations bills for emergency expenses during a fiscal year.

Senate Committee on Appropriations

More information: https://www.appropriations.senate.gov/

The Senate Committee on Appropriations, like its House counterpart, is responsible for writing annual bills that allocate Treasury funds for operations and activities of Federal agencies, and it has 12 Subcommittees, aligned with the House, with responsibility for executive branch agencies and the legislative branch. The Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies (CJS) has jurisdiction over NASA.

03: Congressional Relations

Senate Appropriations Subcommittee on Commerce, Justice, Science, and Related Agencies—Jurisdiction

The Senate Appropriations CJS Subcommittee has a jurisdiction and charter that mirror those of the House Appropriations CJS Subcommittee. The CJS Subcommittee reviews the President's budget request for each department/agency and hears department/agency officials' testimony. Typically, the Subcommittee holds one hearing per year on the respective department/agency budget request, and Subcommittee staff engage in detailed review of the request through multiple briefings by department/agency officials. The Subcommittee drafts annual appropriations bills that include funding for each department/agency under its jurisdiction. When an annual appropriations bill has been enacted, departments/agencies are required to submit "spend plans," pursuant to statutory direction, to the House and Senate Committees on Appropriations, to reflect the manner in which the department/agency is executing the appropriation, including proposed reprogrammings, which require Committee concurrence. As necessary, the Subcommittee drafts supplemental appropriations bills for emergency expenses during a fiscal year.

3.2 Authorization

The Authorization Committees set policy for agencies and execute congressional oversight of agency programs and plans. Authorization bills establish, continue, or modify Federal programs and are intended to precede the appropriations process. Authorization bills also frequently update congressional reporting requirements. While NASA authorization legislation is not typically enacted on an annual basis, such authorization legislation sets out policy that reflects broad consensus, most recently with the NASA Authorization Act of 2022 (https://www.congress.gov/117/plaws/publ167/PLAW-117publ167.pdf), included as Sec. 10801 of the CHIPS and Science Act), establishing guidelines for human space exploration, science, aeronautics, and technology.

Senate Committee on Commerce, Science, and Transportation

More information: https://www.commerce.senate.gov/

The Committee is composed of six Subcommittees, which together oversee the large range of issues under its jurisdiction. These issues include communications, highways, aviation, rail, shipping, transportation security, the Merchant Marine, the U.S. Coast Guard (USCG), oceans, fisheries, climate change, disasters, science, space, interstate commerce, tourism, consumer issues, economic development, technology, competitiveness, product safety, and insurance. The Committee oversees NASA, the National Science Foundation (NSF), and the National Oceanic and Atmospheric Administration (NOAA) and the National Institute of Standards and Technology (NIST) (both within the Department of Commerce), as well as the U.S. Coast Guard, and considers and confirms presidential appointments.

Subcommittee on Aviation and Space

The Senate Subcommittee with oversight jurisdiction over NASA is the Subcommittee on Aviation and Space. The Subcommittee has jurisdiction over technology, engineering, astronautical, and aeronautical research and development (R&D); national and civil space policy; civil aviation research, development, and demonstration; and aviation safety and protection of consumers. The subcommittee also conducts oversight on the Federal Aviation Administration (FAA) and the civil aviation and civil space policy functions of the Department of Transportation, Department of Commerce, and National Space Council within the Executive Office of the President.

House Committee on Science, Space, and Technology

More information: https://science.house.gov/

The Committee has jurisdiction over most Federal, non-defense, scientific R&D, including programs at NASA, the Department of Energy, the Environmental Protection Agency, the National Science Foundation, the FAA, NOAA (including the National Weather Service), the Federal Emergency Management Agency, the U.S. Geological Survey, the National Space Council, and the White House Office of Science and Technology Policy. The Committee's strong interest in how Federal R&D sustains U.S. international competitiveness and economic health dates back to its creation in 1958. Initially centered on space exploration, its jurisdiction now includes civil aviation, energy (including commercial

applications), the environment, scientific research, science scholarships, marine research, and standardization of weights and measures through NIST. The Committee has five Subcommittees.

Subcommittee on Space and Aeronautics

The House Subcommittee with oversight jurisdiction over NASA is the Subcommittee on Space and Aeronautics. The Subcommittee has legislative jurisdiction and general oversight and investigative authority on all matters relating to astronautical and aeronautical research and development, including national space policy; exploration of, access to, and use of space; suborbital access and applications; NASA and its contractor- and Government-operated labs; space commercialization; international space cooperation; the National Space Council; space applications, space communications, and related matters; Earth remote sensing policy; civil aviation and FAA research, development, and demonstration; and space law.

04: NASA Mission Directorates

NASA is organized into five Mission Directorates (Aeronautics Research, Exploration Systems Development, Science, Space Operations, and Space Technology), which oversee NASA's programs and projects, and the Mission Support Directorate, which provides institutional support to enable mission objectives. The following sections describe their purpose, organizational structure, and leadership.

4.1 Aeronautics Research Mission Directorate

Mission

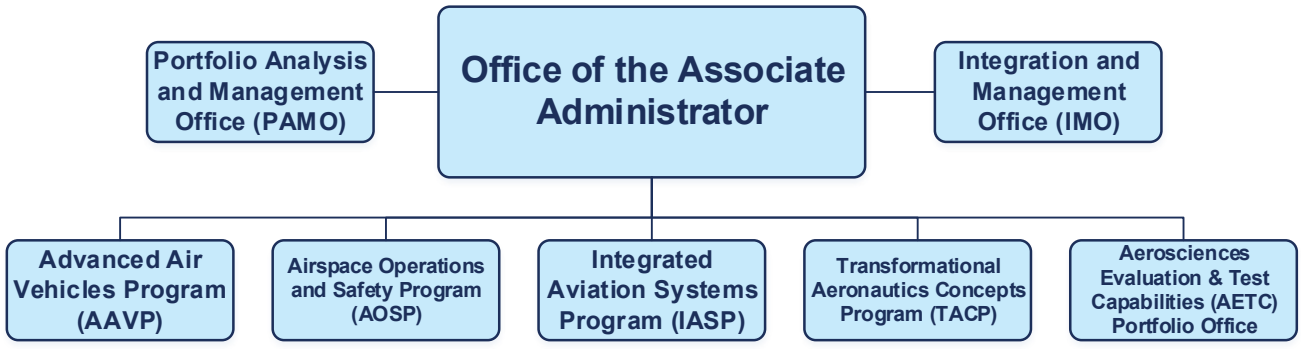
The Aeronautics Research Mission Directorate (ARMD) leads the Nation's aviation community in research to maintain and advance American leadership in aviation. ARMD is working to improve efficiency and reduce the noise and emissions of commercial aircraft; advance the safety, capacity, and efficiency of air transportation; and enhance aviation as an economic engine. In addition, NASA's aeronautics research serves a vital role in supporting NASA's human and robotic space exploration activities.

More information: https://www.nasa.gov/directorates/armd/

Organizational Structure

The ARMD organizational chart shows the Headquarters structure, including portfolio elements designated as programs, as well as supporting functional offices.

Aeronautics Research Mission Directorate



04: NASA Mission Directorates

4.1 Aeronautics Research Mission Directorate

ARMD program descriptions are noted below:

Advanced Air Vehicles Program (AAVP): AAVP studies, evaluates, and develops technologies and capabilities for new aircraft systems and also explores far-future concepts that hold promise for revolutionary air-travel improvements.

(https://www.nasa.gov/directorates/armd/aavp/)

Airspace Operations and Safety Program (AOSP): AOSP works with the Federal Aviation Administration (FAA), industry, and academic partners to conceive and develop Next Generation Air Transportation System (NextGen) technologies to further improve the safety of current and future aircraft.

(https://www.nasa.gov/directorates/armd/aosp/)

Integrated Aviation Systems Program (IASP): IASP conducts flight-oriented research and demonstrations to establish a level of maturity that enables these technologies to transition to the aviation community for the benefit of the Nation and the U.S. flying public.

(https://www.nasa.gov/directorates/armd/iasp/)

Transformative Aeronautics Concepts Program (TACP): TACP solicits and encourages revolutionary concepts, creates the environment for researchers to experiment with new ideas, performs ground and small-scale flight tests, allows failures and learns from them, and drives rapid turnover into potential future concepts to enable aviation transformation.

(https://www.nasa.gov/directorates/armd/tacp/)

Aerosciences Evaluation and Test Capabilities (AETC) Portfolio Office: This project executes strategic efforts to preserve and enhance NASA's versatile and comprehensive portfolio of ground-test aeronautics research capabilities, including subsonic, transonic, supersonic, and hypersonic wind tunnels and propulsion test facilities.

(https://www.nasa.gov/directorates/armd/aetc/)

04: NASA Mission Directorates

ARMD Headquarters Leadership

Robert A. Pearce, Associate Administrator

Aeronautics Research Mission Directorate

Robert A. Pearce

Robert A. Pearce was named NASA's Associate Administrator for ARMD in December 2019. Pearce manages the Agency's aeronautics research portfolio and guides its strategic direction, including research in quiet supersonic flight over land, urban air mobility, autonomy, highly efficient advanced air vehicle concepts, electrified aircraft propulsion, advanced materials, airspace operations and safety, integration and flight demonstrations of aviation systems, and the nurturing and development of transformative concepts for aviation.

Pearce served as acting Associate Administrator from August 2019 until his appointment as Associate Administrator. Prior to that, he was ARMD's Deputy Associate Administrator for strategy, where he led aeronautics research mission strategic planning to guide the content, strategic progress, and relevance of ARMD's research portfolio. He also led the review and evaluation of ARMD's budget and approval process.

Extended bio: https://www.nasa.gov/people/robert-a-pearce/

ARMD leadership team: https://www.nasa.gov/directorates/armd/aeronautics-leadership/

4.2 Exploration Systems Development Mission Directorate

Mission

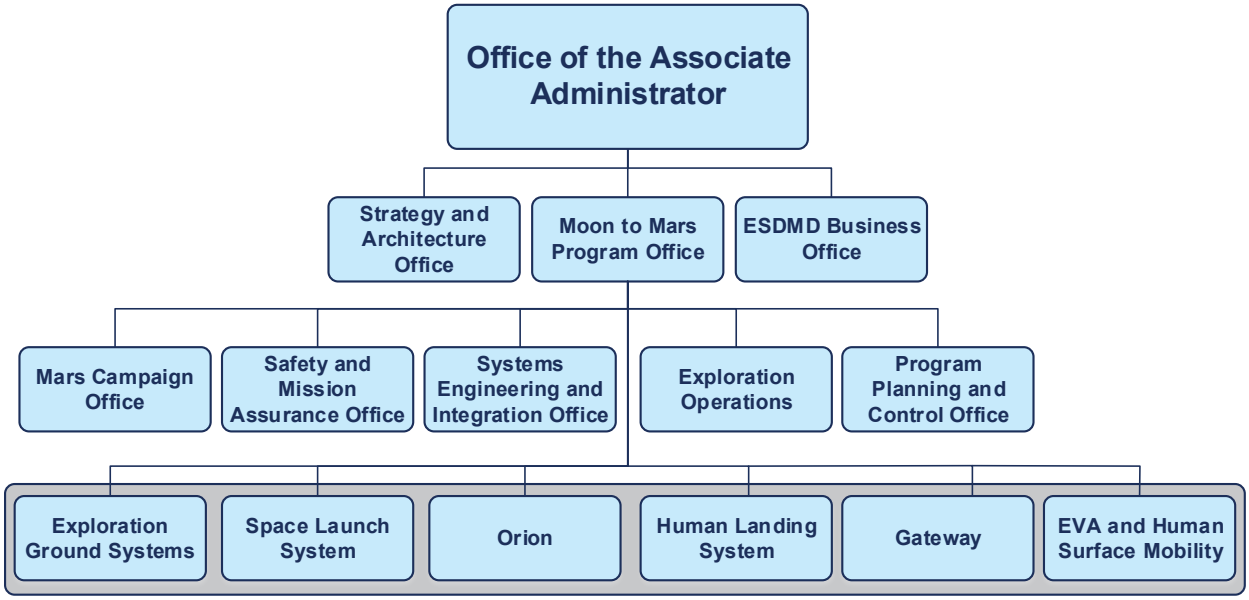
The Exploration Systems Development Mission Directorate (ESDMD) defines and manages systems development for programs critical to NASA's Artemis campaign and planning for NASA's Moon to Mars exploration approach. ESDMD manages the human exploration system development for lunar orbital, lunar surface, and Mars exploration.

More information: https://www.nasa.gov/exploration-systems-development-mission-directorate/

Organizational Structure

The ESDMD organizational chart shows the Headquarters structure, including portfolio elements designated as divisions, as well as supporting functional offices.

Exploration Systems Development Mission Directorate



04: NASA Mission Directorates

4.2 Exploration Systems Development Mission Directorate

Strategy and Architecture Office (SAO): The SAO is responsible for pre-formulation of exploration architectures, guiding technical aspects of Agency decisions about exploration element–level performance and functionality, aligned to Agency goals and international and commercial partnerships. SAO leads the Agency annual Architecture Concept Review cycle, in which NASA refines the exploration architecture that guides its efforts to return astronauts to the Moon, establish an ongoing lunar presence, and land humans on Mars.

Moon to Mars Program Office: NASA established the Moon to Mars Program Office within ESDMD to focus on hardware development, mission integration, and risk management functions for programs critical to the Agency's exploration approach. The Moon to Mars Program Office oversees the development of the Space Launch System (SLS) rocket, Orion spacecraft, supporting ground systems, human landing systems, spacesuits, Gateway, and more related to deep space exploration. It provides key program integration functions within its Mars Campaign, Exploration Operations, Safety and Mission Assurance, System Engineering and Integration, and Program Planning and Control offices, and it develops hardware systems for human lunar return through the following programs:

Exploration Ground Systems (EGS): The EGS Program is responsible for developing and operating the systems and facilities necessary to process, integrate, transport, and launch NASA's SLS rocket, Orion spacecraft, and any co-manifested SLS payloads for Artemis missions, as well as for integrating Orion landing recovery.

(https://www.nasa.gov/humans-in-space/exploration-ground-systems/)

Space Launch System (SLS): The SLS Program is developing the human-rated launch system capable of sending the crewed Orion spacecraft and cargo to the Moon; SLS is used in each of the Artemis missions.

(https://www.nasa.gov/humans-in-space/space-launch-system/)

Orion: The Orion Program manages, develops, and builds the spacecraft that will carry crew to deep space, sustaining the crew during space travel, providing emergency abort capability, and providing safe reentry from deep space return velocities for Artemis missions.

(https://www.nasa.gov/humans-in-space/orion-spacecraft/)

04: NASA Mission Directorates

4.2 Exploration Systems Development Mission Directorate

Human Landing System (HLS): HLS utilizes commercial partnerships to develop and jointly deploy the integrated lunar landing system that will transport crew to and from the lunar surface and enable lunar surface exploration missions. HLS enables a diverse and robust lander capability via the development and integration of multiple different lunar landing systems into the Artemis missions.

(https://www.nasa.gov/humans-in-space/human-landing-system/)

Gateway: Gateway is a platform that will orbit the Moon; support orbital activities, science, and Orion and lunar lander docking and transfer; and serve as a key enabling access point to a diverse set of surface landing opportunities. Gateway is a spacecraft with the ability to maneuver to different orbits via solar electric propulsion (SEP) and will be a testbed for early Mars transport vehicle development, as well as provide additional crew capabilities and flexibility in the cislunar environment. Gateway will initially consist of a Power and Propulsion Element (PPE) and the Habitation and Logistics Outpost (HALO), with later configurations to include at least two modules and other contributions from NASA's international partners.

(https://www.nasa.gov/gateway-space-station-news/)

Extravehicular Activity (xEVA) and Human Surface Mobility (HSM) Program (EHP): EHP is formulating the systems that NASA will use to explore the surface of the Moon, including spacewalking and crewed surface activities, the Lunar Terrain Vehicle (LTV), pressurized crewed rover systems, and related mobility technology development and partnerships.

(https://www.nasa.gov/extravehicular-activity-and-human-surface-mobility/)

ESDMD Headquarters Leadership

Catherine Koerner

Associate Administrator for Exploration Systems Development

Catherine Koerner

Catherine Koerner is responsible for the development of NASA's Moon to Mars architecture, defining and managing the systems development for Artemis missions, and planning for integrated deep space exploration approach.

Koerner was formerly the Deputy Associate Administrator for the Mission Directorate, providing leadership and management of human spaceflight development and operations related to NASA's Moon and Mars exploration goals. She was responsible for establishing and defining future space exploration architectures while overseeing the development of new space transportation systems and supporting capabilities that are critical for human-led deep space exploration and scientific research. Prior to her position at NASA Headquarters, Koerner was NASA's Orion Program Manager at NASA's Johnson Space Center in Houston, where she was responsible for oversight of the design, development, and testing of the Orion spacecraft. Before leading the Orion Program, Koerner served as the Director of the Human Health and Performance Directorate, focusing on enhancing crew health and performance and mitigating risks associated with human spaceflight.

Extended bio: https://www.nasa.gov/people/catherine-koerner-associate-administrator-for-exploration-systems-development/

ESDMD leadership team: https://www.nasa.gov/exploration-systems-development-mission-directorate/

4.3 Mission Support Directorate

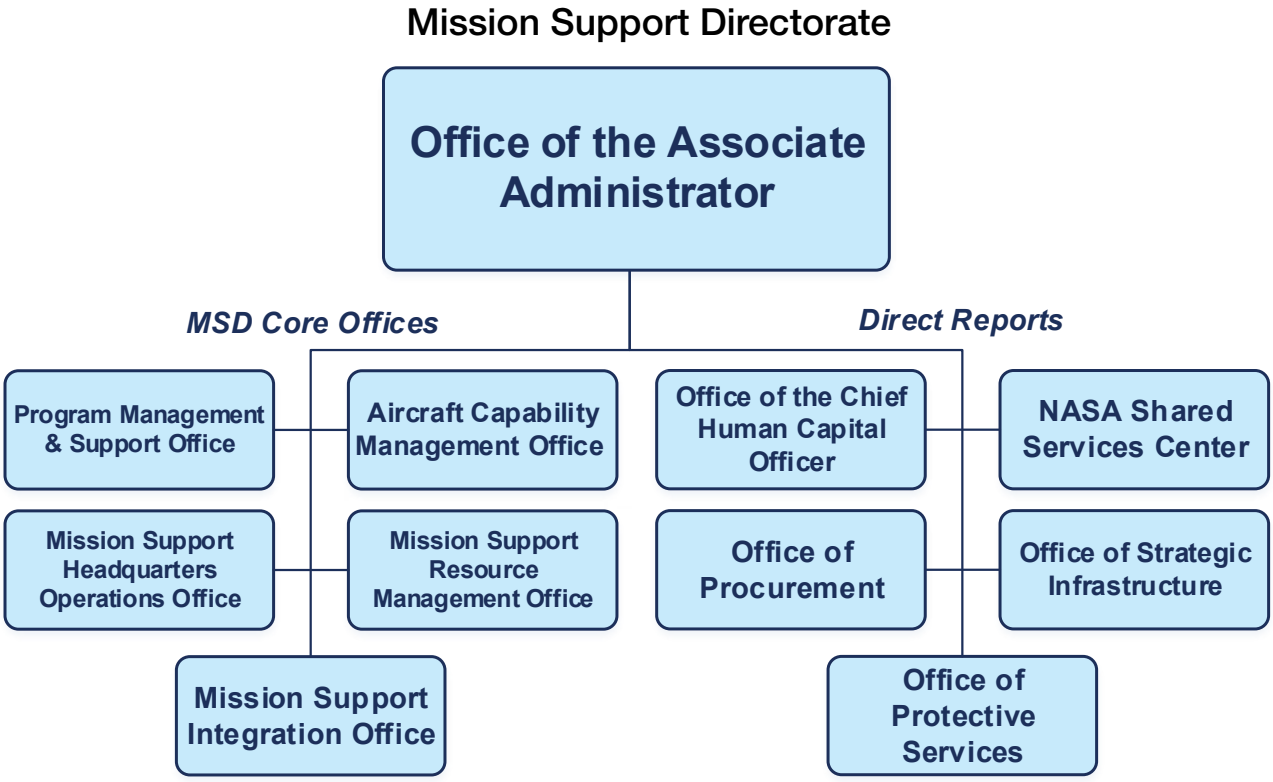
Mission

The Mission Support Directorate (MSD) provides effective and efficient institutional support to enable the Agency to successfully accomplish its missions. It focuses on reducing institutional risk to NASA's current and future missions by improving processes, stimulating efficiency, and providing consistency and uniformity across institutional capabilities and services. MSD also ensures that mission support budget resources are employed strategically and with an Agency-wide perspective.

More information: https://www.nasa.gov/msd/

Organizational Structure

The MSD organizational chart shows the Headquarters structure.



04: NASA Mission Directorates

4.3 Mission Support Directorate

MSD direct report office descriptions are noted below:

Office of the Chief Human Capital Officer: This office provides the full spectrum of human capital services to NASA's employees and supervisors, and it is responsible for developing and aligning NASA civil service workforce strategies, programs, policies, and processes with the Agency's mission, strategic goals, and desired performance outcomes.

Office of Strategic Infrastructure: The Office of Strategic Infrastructure provides executive and functional leadership, policy, institutional authority, and oversight for Agency infrastructure, including facilities engineering and asset management, real property management, environmental management, logistics management, and space environments testing management.

(https://www.nasa.gov/osi/)

Office of Procurement: The Office of Procurement provides executive leadership, policy direction, and functional management of procurement activities (excluding financial assistance activities and Space Act Agreements) for the entire Agency.

(https://www.nasa.gov/procurement/)

Office of Protective Services: This office provides secure access to intelligence and information essential to mission success, fire services, and emergency management at all NASA facilities and is the focal point for policy formulation, oversight, coordination, and management of Agency physical security; intelligence; counterintelligence; counterterrorism; emergency management; continuity of operations; fire services; national security; communications security (COMSEC); classified information security; personnel security; identity and credential management; electronic physical access management; insider threat deterrence, detection, and mitigation; operations security (OPSEC); and protective services training programs.

NASA Shared Services Center (NSSC): The NSSC performs integrated administrative functions and transactional activities for NASA in the areas of human resources, information technology, finance, and procurement.

(https://www.nasa.gov/nasa-shared-services-center/)

MSD Headquarters Leadership

Robert Gibbs

Associate Administrator, Mission Support Directorate

Robert Gibbs

Robert “Bob” Gibbs was appointed Associate Administrator for the Mission Support Directorate (MSD) in December 2019. Gibbs joined NASA as the Assistant Administrator for the Office of Human Capital Management and NASA’s Chief Human Capital Officer in 2017.

From 2013 to 2017, Gibbs served as the Chief Human Capital Officer at the Department of Energy, where he was responsible for implementing agency-wide efforts on shared services, accountability, engagement, and human capital transformation. Gibbs is a retired naval officer, and, prior to becoming a member of the Senior Executive Service, he completed the nuclear training pipeline and served at sea on board the USS Daniel Webster, the USS Henry L. Stimson, and the USS Simon Bolivar, completing numerous strategic deterrent patrols; and ashore at nuclear repair facilities, including the Trident Refit Facility in Bangor, ME, and the Washington and Naval Reactors Headquarters in Washington, DC’s Navy Yard.

Extended bio: https://www.nasa.gov/people/robert-gibbs/

MSD core leadership team: https://www.nasa.gov/msd/msd-leadership/

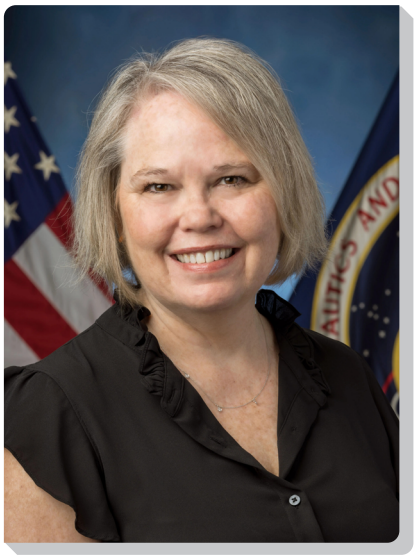
04: NASA Mission Directorates

4.3 Mission Support Directorate

MSD Direct-Report Offices Leadership

Kelly Elliott

Chief Human Capital Officer



Kelly Elliott

Kelly Elliott was selected as NASA's Chief Human Capital Officer in 2023 and is responsible for leading the human capital practices that support NASA's workforce of more than 18,000 employees. She has more than 30 years of experience in consulting, finance, and human resources.

From 2019 to 2023, Elliott was Director of the Business Operations Division in NASA's Office of the Chief Human Capital Officer. From 2017 to 2019, Elliott served as Deputy Director of Human Resources at Johnson Space Center in Houston, TX. Elliott joined NASA in 2004 as a human resources manager at Johnson. Prior to joining NASA, Elliott spent 15 years in industry focusing on organizational change. Her work includes auditing and acquisition in financial services, transformation in higher education, management consulting for both independent and large consulting organizations, and technology development for a human resources outsourcing company.

Extended bio: https://www.nasa.gov/people/kelly-elliott-chief-human-capital-officer/

Karla Smith Jackson

Assistant Administrator for Procurement

Karla Smith Jackson

Karla Smith Jackson is the Senior Procurement Executive, Deputy Chief Acquisition Officer, and Assistant Administrator for the Office of Procurement. In this role, she provides senior executive leadership and oversight of NASA's procurement functions, policies, and initiatives.

A seasoned acquisition professional with over 30 years of experience, Smith Jackson previously served as the Acting Director for Acquisition at the Missile Defense Agency (MDA). Smith Jackson began her Federal service career in 1991 as an Acquisition Management intern at the Defense Threat Reduction Agency, formerly the Defense Nuclear Agency.

After graduation, Smith Jackson joined the Ballistic Missile Defense Organization, which later became the MDA, holding several different positions during her tenure. She then went on to serve as the Director for Acquisition Policy and Legislation in the Office of the Chief Procurement Officer at the Department of Homeland Security.

Extended bio: https://www.nasa.gov/people/karla-smith-jackson/

Charles Lombard

Assistant Administrator for Protective Services

Charles Lombard

Charles “Chuck” Lombard was selected as the Assistant Administrator for Protective Services at NASA in August 2024. He is responsible for the overall management, direction, and coordination of NASA’s Office of Protective Services.

Prior to his selection, Lombard had been serving as the Deputy Assistant Administrator since 2014. Previously, he served as the Director of the Security Management Division at NASA Headquarters. He also served as the Emergency Manager at NASA’s Goddard Space Flight Center. Prior to his civil service career, which began in July 2006, Lombard was senior vice president for a protective services contractor serving several agencies and multiple contracts.

Extended bio: https://www.nasa.gov/people/charles-lombard/

Dr. Joel R. Carney

Assistant Administrator for the Office of Strategic Infrastructure

Dr. Joel R. Carney

Joel Carney is the Assistant Administrator for the Office of Strategic Infrastructure (OSI). In this role, Carney focuses on NASA’s infrastructure challenges, working with the Mission Directorates and Centers to ensure that mission-critical assets are safe, ready, and reliable. Carney manages over 5,000 facilities and assets in NASA’s portfolio and looks for opportunities to consolidate and revitalize NASA’s infrastructure to meet its evolving technical requirements.

Carney joined NASA in February 2020, when he was appointed the Deputy Associate Administrator for Mission Support Operations in MSD. Prior to joining NASA, Carney was the Principal Technical Manager of the Research Development Test and Evaluation Department at the Naval Surface Warfare Center Indian Head Division (NSWC IHD). Carney began his career at NSWC IHD in 2002 as a research scientist.

Extended bio: https://www.nasa.gov/people/dr-joel-r-carney/

Anita Harrell

Executive Director, NASA Shared Services Center

Anita Harrell

Harrell was selected to be the Executive Director of the NASA Shared Services Center (NSSC) in March 2018, and she served as the NSSC's acting Executive Director from April 2017 until her permanent selection. In this role, Harrell provides executive leadership for all of NASA's business and technical shared services, including financial management, human resources, enterprise services, procurement, and Agency business support.

Harrell first joined the NSSC in 2006 as the Human Resources Officer and has since served in multiple roles at the NSSC. Harrell began her Federal career with the Army Corps of Engineers in 1995 and joined NASA as a cooperative education student in 1996.

Extended bio: https://www.nasa.gov/people/anita-harrell/

4.4 Science Mission Directorate

Mission

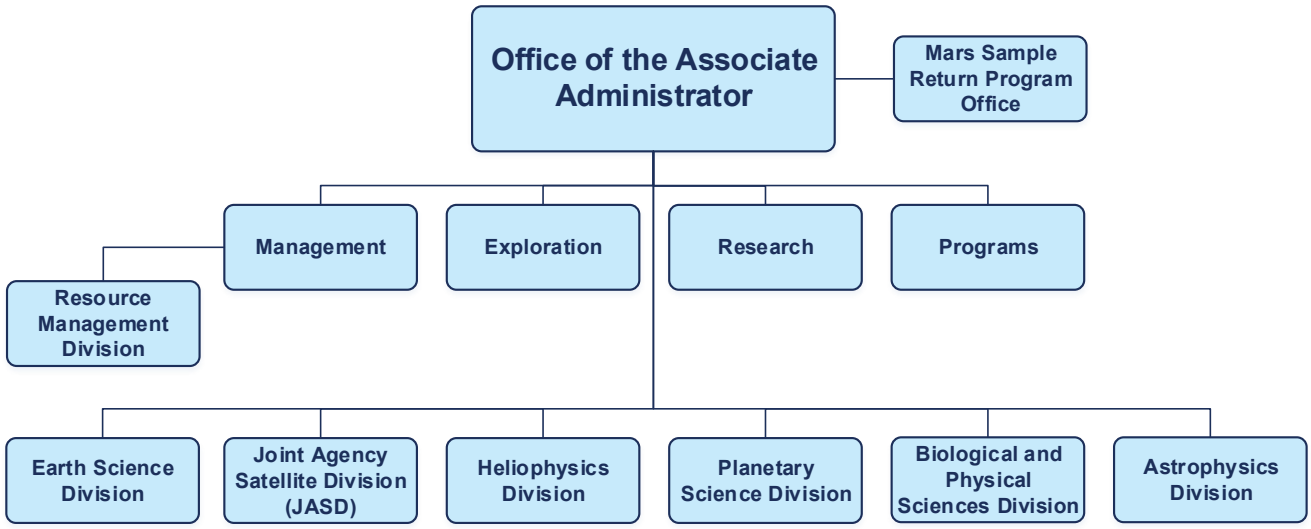
The Science Mission Directorate (SMD) carries out the scientific exploration of Earth and space to expand the frontiers of Earth science, heliophysics, planetary science, astrophysics, and biological and physical sciences. Through a robust fleet of orbiting and landed robotic spacecraft; a suborbital program of sounding rockets, scientific balloons, and research aircraft; and a broad and diverse grants-based research program, SMD provides virtual human access to the farthest reaches of our solar system and beyond, as well as critical information about our home planet and sustained human exploration.

More information: https://science.nasa.gov/

Organizational Structure

The SMD organizational chart shows the Headquarters structure, including portfolio elements designated as divisions, as well as supporting functional offices.

Science Mission Directorate



04: NASA Mission Directorates

4.4 Science Mission Directorate

Descriptions of SMD's technical divisions are below:

Earth Science: The Earth Science Division (ESD) helps us advance scientific understanding of our planet's interconnected systems, from a global scale down to minute processes. ESD designs science and technology, launches airborne and space missions, analyzes the data and observations, and develops ways to put the information to use for societal benefit. This includes providing data that enable decisionmakers to address the most pressing challenges posed by our rapidly changing planet, such as changing agricultural conditions and severe weather challenges, including droughts, tropical storms, and wildfires.

(https://science.nasa.gov/earth/)

Planetary Science: The Planetary Science Division advances scientific knowledge of the origin and history of the solar system, the potential for life elsewhere, and the hazards and resources present as humans explore space. NASA's robotic explorers gather data to help scientists understand how the planets formed, what triggered different evolutionary paths among planets, what processes have occurred and are active, and how Earth became habitable.

(https://science.nasa.gov/planetary-science/)

Heliophysics: The Heliophysics Division studies the Sun and its dynamic influence across our complex, interconnected solar system that includes space, Earth, and other planets. Studying this system not only helps us understand fundamental information about how stars in the universe work, but also helps protect our technology and astronauts in space.

(https://science.nasa.gov/heliophysics/)

Astrophysics: The Astrophysics Division studies the origin, structure, evolution, and destiny of the universe and searches for Earth-like planets. It continues expanding humanity's understanding of how the universe began and evolved, how it works, and whether there are places beyond Earth where life might thrive.

(https://science.nasa.gov/astrophysics/)

Biological and Physical Sciences: The Biological and Physical Sciences Division focuses on using the spaceflight environment to conduct experiments that cannot be conducted on Earth to understand how biological and physical systems respond to spaceflight environments, particularly weightlessness.

(https://science.nasa.gov/biological-physical/)

Joint Agency Satellite Division (JASD): JASD is an organization within SMD with broad crosscutting responsibilities. In partnership with the National Oceanic and Atmospheric Administration (NOAA), JASD manages the development and launch of reimbursable satellite programs, projects, and instruments. This partnership addresses systems to improve weather forecasting, as well as global measurements of the atmosphere and oceans.

(https://science.nasa.gov/about-us/smd-programs/joint-agency-satellite-division/)

SMD Headquarters Leadership

Dr. Nicola "Nicky" Fox

Associate Administrator, Science Mission Directorate

Dr. Nicola "Nicky" Fox

As the Associate Administrator (AA) for the Science Mission Directorate, Dr. Nicola Fox directs over 140 NASA missions to explore the secrets of the universe. Fox creates a balanced portfolio of carefully chosen missions and research goals to enable a deep scientific understanding of Earth, other planets, the Sun, and the universe. These efforts lay the intellectual foundation for the robotic and human expeditions of the future while meeting today's needs for scientific information to address national concerns.

Fox joined NASA in 2018 as SMD's Director of the Heliophysics Division, where she led a world-class team in understanding Earth's most important and life-sustaining star. She oversaw NASA's work to study key space phenomena and improve situational awareness of the very space our astronauts, satellites, and robotic missions travel through as they explore the solar system and beyond. Her portfolio also included NASA's robust space weather research to help the U.S. Government better predict space weather, which can interfere with radio communications, affect Global Positioning System (GPS) accuracy, and even—when extreme—affect electrical grids on the ground.

Extended bio: https://science.nasa.gov/people/nicola-fox/

SMD leadership team: https://science.nasa.gov/about-us/bios

4.5 Space Operations Mission Directorate

Mission

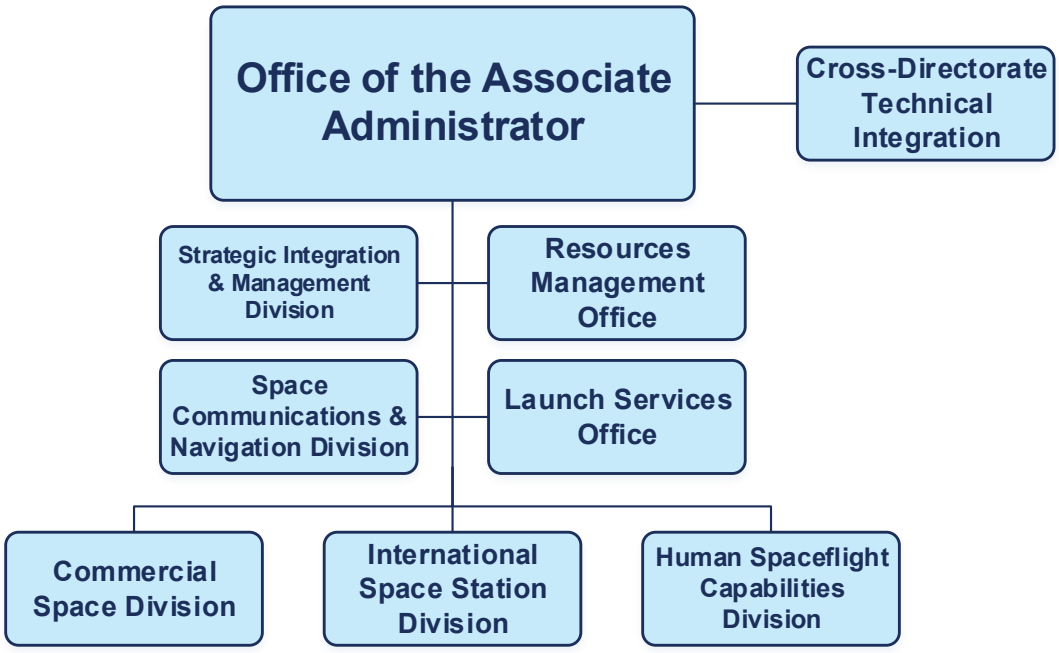
The Space Operations Mission Directorate (SOMD) is responsible for enabling sustained human exploration missions and operations in our solar system. SOMD manages NASA's current and future space operations in low-Earth orbit (LEO), including commercial launch services to the International Space Station (ISS). The directorate develops and operates space transportation systems and performs broad scientific research on orbit. In addition, SOMD is responsible for managing the space transportation services for NASA and NASA-sponsored payloads that require orbital launch, as well as the Agency's space communications and navigation services supporting all of NASA's space systems currently in orbit.

More information: https://www.nasa.gov/reference/space-operations-mission-directorate/

Organizational Structure

The SOMD organizational chart shows the Headquarters structure, including portfolio elements designated as divisions, as well as supporting functional offices.

Space Operations Mission Directorate



04: NASA Mission Directorates

4.5 Space Operations Mission Directorate

SOMD division descriptions are noted below:

Commercial Space Division: The Commercial Space Division is partnering with U.S. private industry to develop and operate safe, reliable, and affordable crew transportation systems capable of carrying humans to and from the International Space Station and other LEO destinations. It is also stimulating the development of commercially owned and operated LEO destinations from which NASA can purchase services to meet enduring LEO human spaceflight and research requirements. These future commercial destinations will play a key role in maintaining NASA's global leadership role in continuous human presence in space as NASA works to ensure a seamless no-gap transition from the International Space Station. This work will ensure that NASA and the United States remain the global partner of choice in space.

(https://www.nasa.gov/humans-in-space/commercial-space/commercial-crew-program/ and https://www.nasa.gov/humans-in-space/commercial-space/)

International Space Station: The ISS enables research and technology developments that benefit human and robotic exploration of destinations beyond LEO and form the basis for developing a commercial market in LEO. The ISS is the blueprint for global cooperation—one that enables a multinational partnership and advances shared goals in space exploration. STEM outreach from the ISS, including such activities as student payloads and live downlinks, reaches hundreds of thousands of students per year, helping to inspire and train the next generation of aerospace and scientific workers.

(https://www.nasa.gov/international-space-station/)

Human Spaceflight Capabilities: The Human Spaceflight Capabilities Division manages the functions of maintaining the health and safety of astronauts in training, during missions, and in post-flight recovery; oversees the quality of flight operations for crewmembers; and ensures the availability of rocket test stands across the Agency.

(https://www.nasa.gov/hrp/ and https://www.nasa.gov/directorates/space-operations/rpt/)

Space Communications and Navigation (SCaN): SCaN provides mission-critical communications and navigation services required by all NASA human and robotic missions and manages NASA's radiofrequency spectrum. SCaN assets are the backbone for every NASA mission, from the ISS in LEO to NASA's probes in interstellar space. SCaN also is NASA's representative for global spectrum management, ensuring that NASA's communications can be conducted without interference.

(https://www.nasa.gov/directorates/space-operations/space-communications-and-navigation-scan-program/)

04: NASA Mission Directorates

Launch Services Program (LSP): LSP provides Agency expertise for commercial space transportation, procures commercial launch services for NASA's robotic spacecraft, certifies commercial launch vehicles, provides space transportation policy expertise, conducts launch vehicle technical assessments, and provides advisory support to the Commercial Resupply Services and Commercial Crew Programs.

(https://www.nasa.gov/kennedy/launch-services-program/)

Space Sustainability: NASA is in the process of standing up a Space Sustainability function within SOMD, which will be responsible for integrating the many diverse efforts across the Agency that support space sustainability but have not always been well integrated. This combined function will provide science and technology leadership on space sustainability, support equitable access to space now and in the future, and ensure that NASA's missions maintain or enhance space sustainability.

SOMD Headquarters Leadership

Kenneth Bowersox

Associate Administrator for Space Operations

Kenneth Bowersox

Before being appointed to his current position, Kenneth Bowersox served as Deputy Associate Administrator for the Space Operations Mission Directorate. Bowersox also served as the Interim Chair of the NASA Advisory Council from June 2016 to January 2017. He is a retired U.S. naval aviator with over 19 years of experience at NASA.

Selected to the astronaut corps in 1987, Bowersox has flown five times on NASA's Space Shuttle, serving as pilot, commander, and mission specialist, and once on a Roscosmos Soyuz, where he served as the flight engineer during descent. During his five orbital missions, Bowersox has logged over 211 days in space, including five and a half months aboard the International Space Station, where he was the mission commander of the 6th expedition. He was also a crewmember for the first two Hubble Space Telescope repair flights and two United States microgravity laboratory flights.

Extended bio: https://www.nasa.gov/people/kenneth-bowersox/

SOMD leadership team: https://www.nasa.gov/directorates/space-operations/

4.6 Space Technology Mission Directorate

Mission

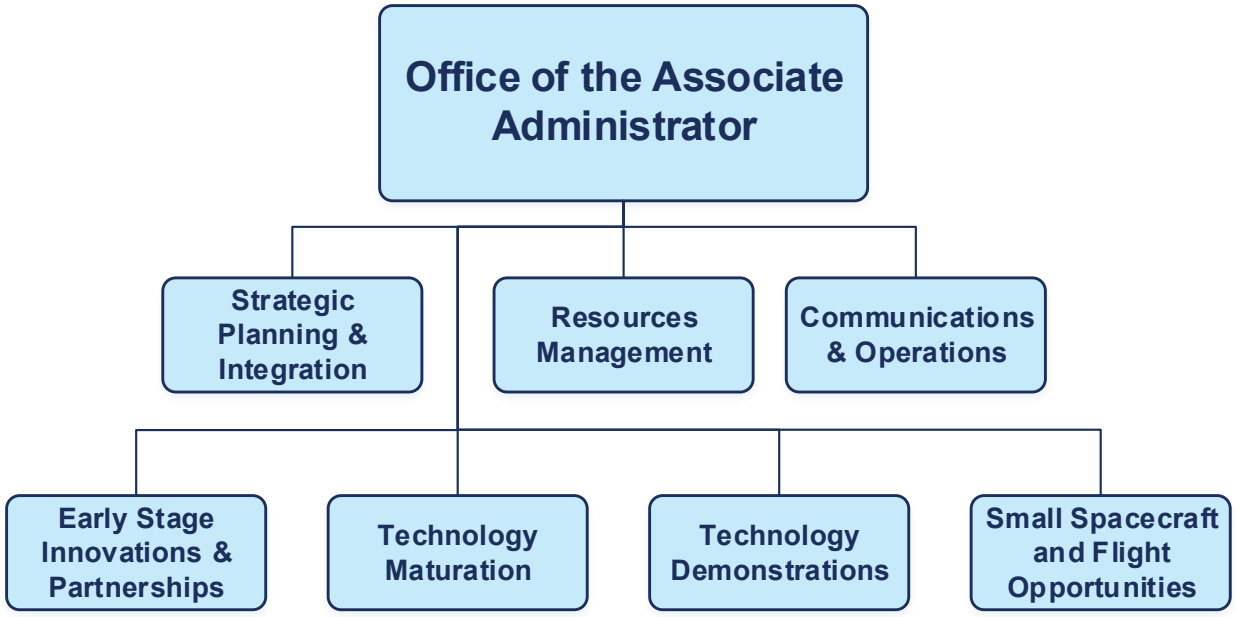
The Space Technology Mission Directorate (STMD) serves as the national technology base for civil space. It develops and demonstrates high-payoff technologies with the intent to infuse them into current and future NASA missions. This organization employs a competition-based model with a portfolio approach spanning a range of discipline areas and technology readiness levels to advance technologies for the benefit of NASA, the aerospace industry, and other Government agencies, as well as to address national needs. It engages in high-risk, high-reward investment activities across the technology development spectrum.

More information: https://www.nasa.gov/space-technology-mission-directorate/

Organizational Structure

The STMD organizational chart shows the Headquarters structure, including portfolio elements with designated supporting programs, as well as supporting functional offices.

Space Technology Mission Directorate



04: NASA Mission Directorates

4.6 Space Technology Mission Directorate

STMD Portfolio and Program descriptions are noted below:

Early Stage Innovations and Partnerships (ESIP): The Early Stage Innovations and Partnerships portfolio empowers a community of innovators in aerospace research and transformative technology ventures to enable NASA's mission and invigorate the Nation's economic future. This portfolio supports concept studies, applied research, and early technology developments that germinate revolutionary ideas, expand innovation, and transform future capabilities. ESIP manages the following programs for the Agency: The Center Innovation Fund *(https://www.nasa.gov/center-innovation-fund/)*; NASA Innovative Advanced Concepts *(https://www.nasa.gov/stmd-the-nasa-innovative-advanced-concepts-niac/)*; Prizes, Challenges, and Crowdsourcing *(https://www.nasa.gov/prizes-challenges-and-crowdsourcing/)*; Small Business Innovation Research (SBIR); Small Business Technology Transfer (STTR) *(https://www.nasa.gov/sbir_sttr/)*; Space Technology Research Grants *(https://www.nasa.gov/space-technology-research-grants/)*; and Technology Transfer and Spinoff *(https://www.nasa.gov/technology-transfer-spinoffs/)*.

Technology Maturation: The Technology Maturation portfolio provides transformative and crosscutting technologies that contribute to U.S. leadership in space technology and support NASA missions. The portfolio is developing a global lunar utilization infrastructure for sustained operations on the lunar surface. The technology maturation portfolio manages the Game Changing Development program *(https://www.nasa.gov/stmd-game-changing-development/)* and the Lunar Surface Innovation Initiative *(https://www.nasa.gov/space-technology-mission-directorate/lunar-surface-innovation-initiative/)*.

Technology Demonstration: The Technology Demonstrations portfolio matures crosscutting, system-level technologies. The portfolio manages the Technology Demonstration Mission program, which manages projects that bridge the gap between development and mission infusion by advancing new technologies and transitioning those capabilities to NASA missions, industry, and other Government agencies. Chosen technologies are thoroughly ground- and flight-tested in relevant operating environments—reducing risks to future flight missions, gaining operational heritage, and continuing NASA's long history as a technological leader.

(https://www.nasa.gov/tdm/)

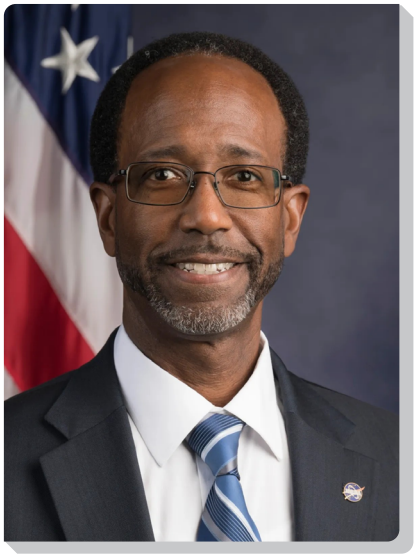
Small Spacecraft and Flight Opportunities: The Small Spacecraft and Flight Opportunities portfolio supports disruptive technology innovation and the execution of unique missions to accelerate space exploration, discovery, and the expansion of space commerce. The portfolio's speed, flexibility, and access to a wide array of commercial suborbital and orbital capabilities provide opportunities to rapidly address technology gaps and emerging needs.

(https://www.nasa.gov/smallspacecraft/ and https://www.nasa.gov/stmd-flight-opportunities/)

STMD Headquarters Leadership

Clayton Turner

Acting Associate Administrator for Space Technology



Clayton Turner

As Acting Associate Administrator for the Space Technology Mission Directorate, Clayton Turner oversees executive leadership, strategic planning, and overall management of all technology maturation and demonstration programs executed from the Directorate, enabling critical space-focused technologies that deliver today and help create tomorrow.

Turner served as the Director of NASA's Langley Research Center in Hampton, VA, from 2019 to 2024. He led a diverse group of civil servant and contractor scientists, researchers, engineers, and support staff, who worked to make revolutionary improvements to aviation, expand understanding of Earth's atmosphere, develop new technologies for space exploration, and contribute to NASA's broader exploration mission. Turner has served the Agency for more than 30 years. He has held several roles at NASA Langley, including systems engineer, Chief Engineer, Engineering Director, Associate Center Director, and Deputy Center Director.

Extended bio: https://www.nasa.gov/people/clayton-p-turner-director-nasas-langley-research-center/

STMD leadership team: https://www.nasa.gov/about-stmd/

05: NASA Functional Offices

5.1 Office of the Chief Financial Officer

The Office of the Chief Financial Officer (OCFO) provides leadership for the strategic planning, performance reporting, budget analysis, justification, control, and reporting of all Agency fiscal resources; develops the Agency's detailed strategic plan and performance reports; leads the Agency's planning, programming, budgeting, and execution process; oversees all financial management activities relating to the programs and operations of the Agency; and monitors and reports on the financial execution of the Agency budget. OCFO manages the Agency's budget and financial operations, directs the preparation and submission of annual financial and budgetary reports, and coordinates Agency financial management activities with other Federal agencies. OCFO was established in accordance with the Chief Financial Officers Act of 1990 (CFO Act), Public Law 101-576.

OCFO has four deputy Chief Financial Officer (CFO) positions—the Deputy CFO, the Deputy CFO for Appropriations, the Deputy CFO for Strategic Insights and Budget, and the Deputy CFO for Finance. Each NASA Center has a CFO with their own staff, who report to the Deputy CFO. OCFO at Headquarters is made up of several offices and divisions: the Business Management Office, Enterprise Resource Office, Financial Management Division, Quality Assurance Division, Agency Financial Systems Office, Policy Division, and Strategic Insights and Budget organization.

More information: https://www.nasa.gov/ocfo/

OCFO Leadership

The Chief Financial Officer is established by statute as a presidentially appointed and Senate-confirmed senior leadership position, which can be filled at the discretion of an incoming administration in accordance with applicable appointment requirements.

OCFO leadership team: https://www.nasa.gov/ocfo/ocfo-leadership/

05: NASA Functional Offices

5.1 Office of the Chief Financial Officer

Margaret Vo Schaus

CFO

Margaret Vo Schaus

Margaret Vo Schaus was confirmed by the U.S. Senate on July 30, 2021, to serve as NASA's CFO. Prior to this appointment, Schaus was a career member of the Senior Executive Service. She has held numerous leadership roles within science and engineering organizations with responsibility for advancing research, development, and demonstration programs; financial management; and business operations. She has served in positions at the departments of Defense, Energy, and Treasury and at the U.S. Government Accountability Office. Schaus has been recognized with several awards, including the Office of the Secretary of Defense's Exceptional Civilian Service Award, the Department of Energy's Distinguished Career Service Award, and the Secretary of Energy's Honor Award.

Extended bio: https://www.nasa.gov/people/chief-financial-officer-margaret-vo-schaus/

5.2 Office of the Chief Information Officer

The Office of the Chief Information Officer (OCIO) provides leadership, planning, policy direction, and oversight for the management of NASA information and all NASA information technology (IT) in accordance with the responsibilities required by law. The Chief Information Officer (CIO) is the principal advisor to the Administrator and other senior officials on matters pertaining to information technology, the NASA Enterprise Architecture, IT security, records management, paperwork reduction, and privacy.

More information: https://www.nasa.gov/ocio/

The NASA OCIO is composed of an Enterprise Business Management Office and three divisions:

- The Strategy Division works with all OCIO divisions, service lines, and Agency-level offices, as well as each Center OCIO organization, to manage OCIO's business, strategy, and customer engagement efforts in alignment with NASA's IT Strategic Plan.
- The Cybersecurity and Privacy Division (CSPD) develops, implements, and maintains security strategy, requirements, and policy that align NASA's enterprise security programs, investments, and capabilities by delivering enterprise security services to improve the Agency's information and information technology security posture.
- The Operations Division is responsible for program and project management, the IT service portfolio, and the delivery and execution of NASA's IT services. The Operations Division delivers enterprise and local capabilities in workplace and collaboration, cloud and computing, applications and platforms, data and analytics, and network and communications across the Agency.

Each Center has a Center CIO who reports to the NASA CIO to manage IT strategically, consistent with the NASA CIO's Agency strategy for IT, leveraging enterprise-wide services to the maximum extent. As part of enterprise management, Center CIO budgets and the Center CIO workforce were realigned under the Agency CIO. Each Center CIO is responsible for the day-to-day management of the CIO work taking place at their Center.

In addition, OCIO encompasses Digital Transformation, which uses digital technologies to develop and improve an organization's processes, products, or capabilities; data and artificial intelligence (AI), which help support missions and research projects across the Agency, analyze data to reveal trends and patterns, and develop systems capable of supporting spacecraft and aircraft autonomously; and Agency Business Solutions, which oversees and directs the technical planning, development, testing, and fielding of changes, enhancements, and updates to end-of-life IT systems.

Protection of Mission Assets

NASA's IT enables mission capabilities while strengthening NASA's ability to protect our systems and data. Partnering with NASA's stakeholders is essential to success. These inter-dependent efforts include the following:

1. Implementing consistent protections at the boundary of NASA's network and using a common Virtual Private Network to access internal NASA systems remotely.
2. Simplifying how employees access NASA applications and systems while ensuring that authorized individuals have the appropriate access.
3. Ensuring that only authorized devices connect to NASA's internal networks and improving overall management and security of mobile devices.
4. Improving (remote) collaboration, email, and underlying identity and directory capabilities while strengthening NASA's cybersecurity posture.
5. Implementing enhanced enterprise-wide cybersecurity logging capability that will significantly improve cybersecurity visibility, incident monitoring, and response.
6. Maturing cybersecurity risk management by identifying and educating key cybersecurity personnel across NASA to serve as cybersecurity risk management resources.
7. Managing the software used across NASA, including installed and cloud-based applications, to strengthen application cybersecurity as well as to enable efficient procurement and proactive life-cycle management of these assets.
8. Implementing a NASA enterprise cybersecurity contract to apply flexible, efficient, and effective resources to support NASA's missions, simplify burdensome processes, improve fiscal management, and ensure that enterprise IT services are sustainably executed and integrated.

Federal Information Technology Acquisition Reform Act

The Federal Information Technology Acquisition Reform Act (FITARA) made significant changes to the ways the U.S. Federal Government buys and manages computer technology when it became law in 2014 by

1. enhancing CIO authority;

2. enhancing transparency and improving risk management in IT investments;

3. mandating portfolio reviews;

4. expanding training and use of IT cadres;

5. mandating Federal Data Center Consolidation Initiatives (FDCCIs), more recently known as the Data Center Optimization Initiative (DCOI);

6. maximizing the benefit of the Federal Strategic Sourcing Initiative; and

7. eliminating duplication and waste in information technology acquisition—reducing duplicative systems, examining software licensing options, making the business case for acquisition, and consolidating data centers.

NASA's FITARA score has improved significantly since the issuance of its 1st Scorecard in November 2015, when the Agency received an F. In September 2024, NASA's 18th Scorecard received its first overall rating of A, with A's in all five categories: Modernizing Government Technology, Transition off Networx, Agency CIO Authority Enhancements, CIO Investment Evaluation, and Cloud Computing. NASA met or exceeded the Government average in every category and made significant progress in the area of Cloud Computing.

OCIO Leadership

Jeff Seaton

Chief Information Officer

Jeff Seaton

Jeffrey "Jeff" Seaton is NASA's CIO. Seaton was named CIO in January 2021. Prior to his appointment, Seaton had served as acting CIO since May 2020 and as deputy CIO before that. Seaton came to NASA Headquarters from NASA's Langley Research Center, where he was Chief Information Officer from 2011 to 2018. During that time, he was also a member of the NASA Langley Senior Staff and the Agency's CIO Executive Council. Seaton led transformative change efforts in both the Langley and CIO enterprise across the Agency to increase the effectiveness and accountability of the services provided by the organization.

Seaton began his career with NASA in 1991 as a research engineer designing robotic systems for use in space-based applications. He also conducted research in the field of computer vision techniques applied to the control of robots. Seaton was a member of NASA's 2008 Senior Executive Service Candidate Development Program and served as Langley's Chief Technology Officer and Deputy Chief Information Officer prior to becoming CIO.

Extended bio: https://www.nasa.gov/people/nasa-chief-information-officer-jeff-seaton/

05: NASA Functional Offices

5.2 Office of the Chief Information Officer

Dave Salvagnini

Chief Artificial Intelligence Officer

Dave Salvagnini

Effective in May 2024, David “Dave” Salvagnini was named as the Agency’s first Chief AI Officer, an expansion of Salvagnini’s role as the Chief Data Officer. In his expanded capacity, Salvagnini is continuing NASA’s collaboration with other Government agencies, academic institutions, industry partners, and other experts to ensure that the Agency is on the cutting edge of AI technology.

Salvagnini joined NASA in June 2023 after more than 20 years working in technology leadership in the intelligence community. Prior to his role at NASA, he served the Office of the Director of National Intelligence as director of the architecture and integration group and chief architect. Salvagnini also worked in a variety of roles leading enterprise-level IT research and development, engineering, and operations advancing data, IT, and artificial intelligence programs. Salvagnini served in the Air Force for 21 years, retiring in May 2005 as a communications and computer systems officer.

Extended bio: https://www.nasa.gov/people/david-salvagnini/

5.3 Office of Communications

The National Aeronautics and Space Act, 51 U.S.C. § 20112(a), requires NASA to "provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof." The Office of Communications (OCOMM) helps fulfill this requirement with an integrated Agency-wide communications program to effectively explain the objectives, benefits, and challenges of NASA's mission, programs, activities, and functions to the general public, target audiences, and other stakeholders, including NASA employees.

The Agency's communications programs are broad and diverse. They involve integrated efforts by OCOMM in news and media engagement; digital services and products (including streaming services, websites such as www.nasa.gov, social media accounts, and podcasts); public engagement activities and events; exhibits; speaking engagements; and non-technical publications. OCOMM also oversees the Agency's history and information services, including the Freedom of Information Act (FOIA) requests and library programs. OCOMM ensures timely, effective, and accurate communications through close collaboration with Mission Directorates, Field Centers, and Mission Support Organizations.

Release of information at NASA is made in a timely, equitable, accurate, and complete manner, per 14 CFR Part 1213.

NASA News and Events: https://www.nasa.gov/news/

NASA Social Media Flagship Accounts: https://www.nasa.gov/social-media/

NASA+ (NASA's On-Demand Streaming Service): https://plus.nasa.gov/

OCOMM Leadership

The Associate Administrator for OCOMM is a Senior Executive Service (SES) position, historically filled via non-career SES appointment, and can be filled at the discretion of an incoming administration in accordance with applicable appointment requirements.

Marc Etkind

Associate Administrator for Communications

Marc Etkind

Marc Etkind joined NASA on January 25, 2021, with more than two decades of experience in development, production, content strategy, and management for science-based programming organizations. Etkind directs internal and external communications for NASA and serves as a senior advisor to Agency leaders. He is responsible for managing an Agency-wide staff of more than 200 that implements all aspects of NASA's external and internal communications.

Previously, Etkind served as general manager for the Science Channel, part of Discovery Inc., a position he began in 2015. In that capacity, he was responsible for all aspects of development, production,brand strategy, and day-to-day operations for the network.

Extended bio: https://www.nasa.gov/people/nasa-associate-administrator-for-communications-marc-etkind/

5.4 Office of the Chief Scientist

The Office of the Chief Scientist (OCS) represents all the scientific endeavors in the Agency, ensuring that they are aligned with and fulfill the administration's science objectives. OCS advises and advocates on behalf of the NASA Administrator on matters concerning Agency-wide science policy and programs in the context of broader Government science agendas, and it works closely with the White House Office of Science and Technology Policy and other Government agencies. OCS also coordinates with representatives of the NASA Mission Directorates, Field Centers, and Advisory Committees on the content and objectives of the Agency's science research and exploration portfolio.

In addition, OCS represents the Agency's strategic science objectives and accomplishments to the national and international science community—including other Government agencies, scientific organizations, industry, academia, and the public—serving as a primary external interface regarding science issues and results on behalf of the Administrator. OCS encourages and fosters science integration and cooperation across the Agency so that NASA funds only the most exemplary and meritorious science to enable NASA to achieve its mission. Currently, the Chief Scientist also holds the role of NASA's Senior Climate Advisor and reports to the NASA Deputy Administrator.

More information: https://www.nasa.gov/ocs/

OCS Leadership

Dr. Katherine Calvin

Chief Scientist and Senior Climate Advisor

Dr. Katherine Calvin

Dr. Kate Calvin was named as NASA's Chief Scientist and Senior Climate Advisor in January 2022. Calvin advises Agency leadership on the Agency's science programs and science-related strategic planning and investments. As Senior Climate Advisor, she provides insights and recommendations for the Agency's climate-related science, technology, and infrastructure programs. Calvin serves in this capacity under the Intergovernmental Personnel Act Mobility Program.

Since 2008, Calvin has been an Earth scientist at the Pacific Northwest National Laboratory's Joint Global Change Research Institute (JGCRI) in College Park, MD. She worked in JGCRI's Global Change Analysis Model, a system for exploring and analyzing the relationships between human and Earth systems in the context of global climate change. She also worked on the Department of Energy's Energy Exascale Earth System Model, a system for analyzing the past, present, and future state of the Earth system. Calvin has co-authored over 150 publications.

Extended bio: https://www.nasa.gov/people/dr-katherine-calvin/

5.5 Office of Diversity and Equal Opportunity

The Office of Diversity and Equal Opportunity (ODEO) is responsible for developing and aligning NASA equal opportunity; civil rights compliance; and diversity strategies, programs, policies, and processes consistent with the Agency's mission, strategic goals, and performance outcomes. ODEO establishes Agencywide policies on diversity and equal employment opportunity (EEO) and defines strategies, program objectives, and top-level requirements; ensures statutory, regulatory, and fiduciary compliance with internal and external equal opportunity laws; provides technical assistance, training, and advocacy to promote an open and inclusive workplace; ensures consistency of approach to improve functional performance across the Agency; and monitors diversity and equal opportunity program performance.

ODEO Core Functions

- Diversity and inclusion policies and program management, including special-emphasis program management and coordination of employee resource groups
- EEO complaints management, processing, adjudication, and compliance
- Anti-Harassment Program policy development, coordination, and compliance
- Alternative Dispute Resolution (ADR) Program
- Diversity and EEO compliance and reporting (including No FEAR Act, Affirmative Employment, etc.)
- Equal Opportunity Program complaint management, processing, and compliance
- External civil rights compliance (Title VI and Title IX)
- Agency diversity- and equal opportunity–related data and analytics
- Reasonable Accommodations Program management
- Leadership and management functions (including business operations and administrative support)

More information: https://www.nasa.gov/odeo/

ODEO Leadership

Elaine Ho

Associate Administrator for Diversity and Equal Opportunity

Elaine Ho

Elaine Ho provides executive and transformative leadership over diversity and equal opportunity policy and programs for the entire NASA workforce. Ho leads the strategy and execution of NASA's external civil rights programs; NASA's Diversity Strategic Plan; cross-agency workforce and program data and analytics; and Agency-wide anti-harassment, reasonable accommodation, EEO complaints, and conflict resolution programs.

Ho is a longtime public servant who has remained connected to diversity and equal opportunity throughout her career. Most recently at NASA, she served as the Deputy Associate Administrator for NASA's Office of STEM Engagement, responsible for leading and managing a wide-ranging portfolio of projects and initiatives that benefit students, universities, and educational institutions across the country.

Extended bio: https://www.nasa.gov/odeo/office-of-the-associate-administrator/

5.6 Office of the General Counsel

The Office of the General Counsel (OGC) provides Agency-wide legal and strategic advice across a full spectrum of legal disciplines to further NASA's mission. With legal leadership at Headquarters and at all NASA Field Installations across the country, OGC supports the Agency by identifying, mitigating, and defending against risks to the Agency. OGC works with the U.S. Department of Justice in representing the Agency before Federal courts and acts as the Agency's representative in administrative forums where appropriate, such as the U.S. Patent and Trademark Office.

OGC at NASA Headquarters generally covers the following practice areas: contracts/acquisitions law, commercial law (e.g., Space Act Agreements), intellectual property law, international and space law, and general law, which includes ethics. Each NASA Center also has a Chief Counsel who reports to OGC at NASA Headquarters. As of the end of FY 2024, there are approximately 42 attorneys at NASA Headquarters and 145 attorneys across the Centers.

OGC Leadership

Iris Lan

NASA General Counsel

Iris Lan serves as NASA's chief legal officer and oversees its team of attorneys responsible for all aspects of NASA's legal affairs.

Before this appointment, Lan was an Associate Deputy Attorney General at the U.S. Department of Justice (career Senior Executive Service), with responsibilities over the Nation's 93 U.S. attorneys and the department's Executive Office for U.S. Attorneys.

Extended bio: https://www.nasa.gov/people/nasa-general-counsel-iris-lan/

Iris Lan

5.7 Office of International and Interagency Relations

The Office of International and Interagency Relations (OIIR) provides executive leadership and coordination for all NASA international and interagency activities and partnerships. OIIR serves as the principal Agency liaison with the National Security Council; the National Space Council; the Office of Science and Technology Policy (OSTP); and the Departments of Commerce, Defense, Energy, State, and Transportation, among others. OIIR also directs NASA's international relations; negotiates cooperative and reimbursable agreements with foreign space partners; manages interagency engagements and agreements; serves as the Agency liaison with the United Nations; provides management oversight and staff support to NASA's advisory committees, commissions, and panels; and manages the NASA Export Control Program and policy regarding foreign travel by NASA employees.

OIIR has six divisions: the Advisory Committee Management Division, the Aeronautics and Cross-Agency Support Division, the Export Control and Interagency Liaison Division, the Human Exploration and Operations Division, the Resources Management Division, and the Science Division. OIIR also maintains three liaison offices in Asia, Europe, and Russia.

More information: https://www.nasa.gov/oiir/

OIIR Leadership

Karen Feldstein

Associate Administrator for International and Interagency Relations

Karen Feldstein

A career-long leader in cultivating NASA's external relations with domestic and international partners to further NASA and U.S. Government objectives, Karen Feldstein is responsible for executive leadership and direction of NASA's international and interagency coordination, activities, and partnerships. Prior to her current role, she served as the Deputy Associate Administrator starting in 2016.

Previously, as Director of the Science Division in OIIR, Feldstein coordinated NASA's largest international portfolio and led NASA's engagements in Asia, the Middle East, Africa, and Latin America. Feldstein has also served as Deputy Director of OIIR's Space Operations Division, responsible for relations with Russia; as Executive Director of the NASA Advisory Council; and as NASA's European Representative in Paris, France. She was elected a member of the Council on Foreign Relations in 2023.

Extended bio: https://www.nasa.gov/people/associate-administrator-for-international-and-interagency-relations-karen-feldstein/

5.8 Office of Legislative and Intergovernmental Affairs

The Office of Legislative and Intergovernmental Affairs (OLIA) provides executive leadership, direction, and coordination for all communications and relationships related to legislative issues between NASA and the U.S. Congress, state and local elected officials and governments, and space-related associations and citizen groups.

OLIA has three divisions: the Legislative Liaison Division, the Legislative Reference and Analysis Division, and the Outreach and Intergovernmental Affairs Division. OLIA also has not less than one Center Legislative Officer at each NASA Center. OLIA interfaces with all Members of Congress as well as NASA's Authorization Committees; appropriations are handled out of the Office of the Chief Financial Officer (OCFO), under the Deputy CFO for Appropriations.

In addition, OLIA

- serves as the principal advisor to the Office of the Administrator and provides consultation to NASA officials Agency-wide concerning all matters involving relations with the U.S. Congress and state and local elected officials and governments;
- establishes and maintains liaisons with Members of Congress, their staff, and support organizations; the Executive Office of the President and other departments and agencies; and state and local elected officials and government offices on legislative matters;
- serves as a focal point for communication between NASA entities and Congress by ensuring appropriate OLIA representation at congressional engagements, maintaining a repository of engagement documents, and archiving records of communications with Congress;
- arranges for representation by NASA at congressional hearings, investigations, and other legislative meetings affecting NASA; briefs officials representing NASA on the legislative aspects of their appearances; and reviews statements and other materials to be presented to ensure that they reflect the Administration's and NASA's management policies and objectives;
- participates in setting up guest operations at NASA launches and events for elected officials;
- ensures compliance by NASA with congressional reporting requirements and coordinates the clearance of legislative matters, proposed outside NASA, with other elements of the executive branch; and

- establishes and maintains liaisons with representatives of space-related industry, trade associations, think tanks, and nonprofits/nongovernmental organizations (NGOs) regarding legislative matters.

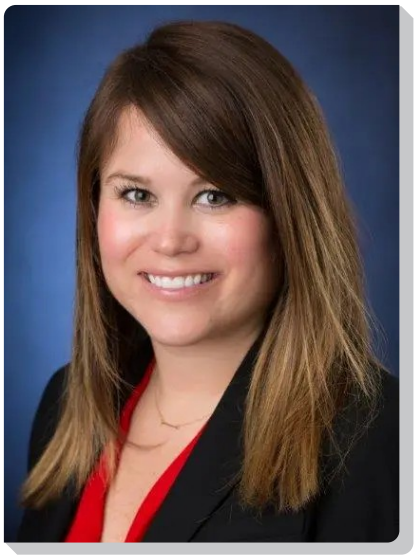
More information: https://www.nasa.gov/organizations/olia/

OLIA Leadership

The Associate Administrator for OLIA is a Senior Executive Service (SES) position, historically filled via non-career SES appointment, and can be filled at the discretion of an incoming administration in accordance with applicable appointment requirements.

Alicia Brown

Associate Administrator for OLIA



Alicia Brown

Alicia Brown joined NASA on January 27, 2021, with extensive experience in government and government relations. Brown directs a staff responsible for managing correspondence and requests for information received from the U.S. Congress and handling requests for legislative material, and she serves as a senior advisor to Agency leaders on legislative matters.

Prior to joining NASA, from 2015 to January 2021, Brown served as a professional staff member for the U.S. Senate Committee on Commerce, Science, and Transportation, including the Subcommittee on Aviation and Space and the Subcommittee on Science, Oceans, Fisheries, and Weather. In this role, she helped develop space legislation and performed oversight on policy and programs for multiple agencies, including NASA. Prior to that, she served as government relations manager for Harris Corporation.

Extended bio: https://www.nasa.gov/people/associate-administrator-office-of-legislative-and-intergovernmental-affairs-alicia-brown/

5.9 Office of Small Business Programs

The Office of Small Business Programs (OSBP) provides expertise on the utilization of all categories of innovative small businesses, including minority educational institutions that can deliver technical solutions in support of NASA, and ensures that the Agency complies with all Federal laws, regulations, and policies regarding small and disadvantaged business utilization. OSBP interfaces with the Small Business Administration and submits data for its scorecard rating. OSBP also awards annual Small Business Awards, recognizing industry partner contributions to NASA.

NASA is committed to providing all categories of small businesses with an opportunity to participate in both NASA prime contracts and subcontracts.

OSBP conducts training and outreach for small business owners by creating manuals; hosting Webinars, listening sessions, and virtual and in-person outreach events; maintaining a knowledge portal; and creating other resources. OSBP maintains a small staff at Headquarters and Small Business Specialists at each NASA Center.

More information: https://www.nasa.gov/osbp/

OSBP Leadership

Dwight Deneal

Associate Administrator, Office of Small Business Programs

Dwight Deneal

Dwight Deneal provides executive leadership, policy direction, and management for programs that help ensure that small businesses are given a fair chance to work with the Agency. Having joined NASA in February 2024, Deneal brings to the Agency over a decade of experience leading small business and Federal acquisition programs. Prior to his arrival at NASA, he served as the director for the Defense Logistics Agency's Office of Small Business Programs, where he supervised all small business programs.

Prior to that, Deneal also served as the director for the Small Business and Industry Liaison Programs at the Coast Guard, part of the Department of Homeland Security. Deneal's experience also includes supporting the Department of Health and Human Services, Department of Education, and Department of the Navy.

Extended bio: https://www.nasa.gov/people/dwight-deneal/

05: NASA Functional Offices

5.10 Office of Science, Technology, Engineering, and Mathematics Engagement

The Office of Science, Technology, Engineering, and Mathematics (STEM) Engagement (OSTEM) is committed to engaging students in NASA's mission, with the aim to immerse students in NASA's work and inspire the next generation of explorers. NASA's work in STEM engagement is a collaborative endeavor that encompasses efforts across OSTEM, the Mission Directorates, and the Field Centers. OSTEM sustains its track record of inspiring, attracting, and engaging students through a strategy that supports Federal STEM education priorities and drives Agency efforts to

- attract diverse groups of students to STEM through learning opportunities that spark interest and provide connections to NASA's mission and work;
- create unique opportunities for a diverse set of students to contribute to NASA's work in exploration and discovery; and
- build a diverse future STEM workforce by engaging students in authentic learning experiences with NASA's people, content, and facilities.

As outlined in NASA's STEM Engagement Strategic Implementation Plan, NASA's goal is to continuously improve the integration of its STEM engagement activities to better serve its beneficiaries through four broad priority areas:

1. Advance diversity, equity, inclusion, accessibility, and belonging in NASA's STEM engagement opportunities to broaden participation in STEM.
2. Build and strengthen strategic partnerships and networks to engage students, educators, and educational institutions in NASA's portfolio of STEM engagement opportunities.
3. Create a beneficiary-focused organizational framework of STEM engagement opportunities and resources based on NASA's diverse STEM engagement portfolio.
4. Facilitate evidence-driven, continuous improvement of NASA's STEM engagement portfolio to ensure that NASA's STEM engagement opportunities are responsive to evolving beneficiary needs.

These crosscutting priorities support NASA's STEM engagement efforts as a whole and will enable more effective day-to-day implementation of NASA's suite of STEM engagement opportunities.

More information: https://www.nasa.gov/stem

05: NASA Functional Offices

5.10 Office of Science, Technology, Engineering, and Mathematics Engagement

Office of STEM Engagement Leadership

Mike Kincaid

Associate Administrator, Office of STEM Engagement

Mike Kincaid

As Associate Administrator, Kincaid oversees the strategic direction and leadership of OSTEM, which connects students to NASA's missions. OSTEM engages America's educators, students, and institutions in these unique missions, contributing to NASA's mission success, as well as the Nation's overall STEM education ecosystem.

Kincaid chairs NASA's STEM Board, which integrates, oversees, and assesses NASA's Agency-wide STEM engagement functions and activities. Kincaid also serves as NASA's member of Federal Coordination in STEM (FC-STEM), a multi-agency committee focused on coordinating and enhancing STEM education efforts across the Federal Government.

In addition, Kincaid is NASA's representative on the International Space Education Board (ISEB), leading global collaboration in space education; sharing best practices; and uniting efforts to foster interest in space, science, and technology among students worldwide.

Kincaid has served NASA for more than 37 years. He first joined NASA's Johnson Space Center (JSC) in Houston, TX, as an intern in 1987, and he led JSC organizations in various capacities, including as Director of Education, Deputy Director of Human Resources, and Deputy Chief Financial Officer. Prior to taking his current position, Kincaid was the Director of External Relations at JSC, where his office interacted with stakeholders from across the country.

Extended bio: https://www.nasa.gov/people/mike-kincaid/

5.11 Office of Technology, Policy, and Strategy

The Office of Technology, Policy, and Strategy (OTPS) was established in November 2021 within the Office of the NASA Administrator to work transparently in collaboration across NASA and with the broader space community to provide NASA senior leadership with a trade space of data- and evidence-driven options to inform the most consequential decisions about NASA's future.

OTPS brings together diverse, multidisciplinary experts to provide NASA leadership with analytic, strategic, and decisional insights in the form of quick-turn analyses, memos, and reports. OTPS also conducts numerous activities that include conducting tabletop exercises, hosting informal discussion sessions, participating in chartered interagency working groups, and funding external research opportunities.

Home to NASA's Agency Chief Technologist and Agency Chief Economist, OTPS leverages its core capabilities in the areas of technology, policy, and economics to identify emerging issues and opportunities that are core to how NASA meets its missions and supports strategic national priorities.

More information: https://www.nasa.gov/otps/

OTPS Leadership

Charity Weeden

Associate Administrator for Technology, Policy, and Strategy

Charity Weeden

Charity Weeden is the Associate Administrator leading OTPS. OTPS provides NASA leadership with high-quality, evidence-driven advice on policy issues, strategic planning, and technology investments.

Prior to her appointment as Associate Administrator in September 2023, Weeden served as vice president for global space policy and government relations at Astroscale U.S., a company that addresses orbital sustainability challenges. Before her work at Astroscale, Weeden was senior director of policy at the Satellite Industry Association, coordinating industry consensus on policy and regulatory issues and liaising with the U.S. Government on behalf of its members. She has previously served as a Canadian Embassy staff officer and is a 23-year veteran of the Royal Canadian Air Force.

Extended bio: https://www.nasa.gov/people/charity-weeden/

Alexander MacDonald

Chief Economist

Alexander MacDonald

Alexander MacDonald is the Chief Economist at NASA. He was previously the Senior Economic Advisor in the Office of the Administrator, and he was the founding program executive of NASA's Emerging Space Office within the Office of the Chief Technologist. He is the author and editor of a number of NASA reports, including *Emerging Space: The Evolving Landscape of 21st Century American Spaceflight*, *Public-Private Partnerships for Space Capability Development*, and *Economic Development of Low-Earth Orbit.*

MacDonald is also a former executive staff specialist on commercial space at NASA's Jet Propulsion Laboratory and

a former research faculty member at Carnegie Mellon University, and he has worked for the Universities Space Research Association while at NASA's Ames Research Center, where he worked on small satellite mission designs and served as the Center's first research economist.

Extended bio: https://www.nasa.gov/people/chief-economist-alexander-macdonald/

A.C. Charania

Agency Chief Technologist

A.C. Charania

As Agency Chief Technologist, A.C. Charania serves as principal advisor to NASA's Administrator on technology policy and programs. He leads technology innovation at the Agency and aligns NASA's Agency-wide technology investments with mission needs across its six mission directorates. Charania also oversees technology collaboration with other Federal agencies and the private sector while coordinating with external stakeholders.

Charania's private-sector work includes projects under contract for NASA, the Air Force, and the Defense Advanced Research Projects Agency. His experience spans multiple areas, including launch vehicles, hypersonics, human/robotic exploration, lunar landers, planetary defense, small satellites, and aviation autonomy.

Extended bio: https://www.nasa.gov/people/agency-chief-technologist-a-c-charania/

5.12 Chief Program Management Officer

Situated within the Office of the Administrator, the Chief Program Management Officer (CPMO) is the Agency representative responsible for strengthening NASA's program and project management policies and best practices in support of increasing performance and enabling long-term mission success for NASA. The CPMO works to build a collaborative environment that allows the Agency to foster and strengthen NASA's enterprise-wide oversight, management, and implementation of program management policies and best practices across Headquarters and the Centers. The CPMO also functions as the Agency's designated Program Management Improvement Officer and stewards the Agency's project management policies, including NASA Procedural Requirements (NPR) 7120.5, which governs the management of spaceflight programs and projects, and NPR 7120.8, which covers research and technology development efforts. The CPMO advocates for the Agency's project management community of practice; coordinates efforts to strengthen independent assessment processes that evaluate project health and risk management; partners with other offices to mature acquisition policies and approaches, including contract management and procurement innovation; and ensures that Agency program and project commitments are data-driven and risk-informed.

05: NASA Functional Offices

CPMO Leadership

David Mitchell

NASA Chief Program Management Officer

David Mitchell

David Mitchell was named NASA's CPMO in January 2022. In this role, he is responsible for strengthening the Agency's oversight, management, and implementation of program management policies, processes, and best practices. He began his career in 1984 with the U.S. Navy, testing rocket motor systems and aircrew escape systems. Mitchell transferred to NASA's Goddard Space Flight Center (GSFC) in Greenbelt, MD, in 1987, where he worked on flight projects, including instruments, spacecraft, ground systems, and launch vehicles, for over 30 years prior to joining NASA Headquarters.

Mitchell served as acting Director of GSFC from January 1, 2023, to April 6, 2023. In this position, he focused on ensuring a seamless transition as the Agency worked to fill not only the Center Director position permanently, but also the position of Associate Administrator of NASA's Science Mission Directorate, the work of which is closely intertwined with Goddard's work. Prior to these roles, Mitchell served as Goddard's Director of Flight Projects as well as the Director of the Engineering and Technology Directorate.

Extended bio: https://www.nasa.gov/people/david-mitchell-chief-program-management-officer/

06: NASA's Technical Authorities

NASA has three technical authorities conducting a vital role in NASA's governance to employ checks and balances among key organizations, ensuring that decisions have the benefit of different points of view and are not made in isolation. NASA separates the roles for programmatic and technical authorities to provide an organizational structure that emphasizes the authorities' shared goal of mission success while taking advantage of the different perspectives each brings. Mission Directorates and program and project managers support the Agency's established processes for reviewing technical standards and requirements—for which ownership is maintained by technical authorities.

There are three branches of technical authority—engineering, safety and mission assurance, and health and medical. Technical authority originates with the Administrator and is formally delegated to the NASA Associate Administrator and then to the NASA Chief Engineer for Engineering Technical Authority, the Chief of Safety and Mission Assurance for Safety and Mission Assurance Technical Authority, the Chief Health and Medical Officer for Health and Medical Technical Authority, and then to the Center Directors. Subsequent delegations down from the Center Directors are made to selected individuals at Center organizational levels.

Fundamental Aspects of Technical Authority:

- Provides an independent view of program/project activities.
- Ensures that direction provided to the program or project reflects the view of the Center or, where appropriate, the view of the NASA Technical Authority community.
- Approves changes to and waivers to all Technical Authority responsible requirements.

The Program/Project Manager remains responsible for the safe conduct and successful outcome of the program/project in conformance with governing requirements.

For further details regarding the origin of technical authority, its role in NASA governance, common technical authority roles, and how the three branches of technical authority are implemented, refer to the following:

- NPD 1000.0C—NASA Governance and Strategic Management Handbook
- NPR 7120.5F—NASA Space Flight Program and Project Management Requirements
- NASA Space Flight Program and Project Management Handbook

06: NASA's Technical Authorities

6.1 Office of the Chief Health and Medical Officer/ Health and Medical Technical Authority

The Office of the Chief Health and Medical Officer (OCHMO) is the principal office responsible for the administration of health and medical policy and oversight of related activities at NASA. As a functional area, OCHMO oversees the health and wellness of the entire NASA workforce and provides effective and efficient policies, procedural requirements, technical standards, and programs to ensure the safety, health, and productivity of humans and animals in the global spaceflight and NASA community. OCHMO continuously works to expand the frontiers of health and wellness on Earth and in space.

OCHMO administers NASA's Health and Medical Technical Authority (HMTA), which engages in all crewed programs. The HMTA provides guidance, insight, and oversight while translating health and medical standards into tailored technical requirements for all human-rated programs across the Agency. HMTA ensures that integrated spaceflight systems reflect the most current knowledge on health and medical impacts related to flight, life support, and environmental systems.

OCHMO also manages NASA's Office of Research Assurance (ORA) and Chief Veterinary Office (CVO) to ensure research integrity; the protection of human and animal subjects; and compliance with all relevant Federal regulations and guidelines for NASA's bioethics principles, policies, and practices related to the use of human and animal subjects in research. The CVO also regulates animal activities related to the care and use of animals in space missions.

More information on OCHMO: https://www.nasa.gov/ochmo/

06: NASA's Technical Authorities

6.1 Office of the Chief Health and Medical Officer/Health and Medical Technical Authority

OCHMO Leadership

Dr. J.D. Polk, DO, EdD, MS, MMM, CPE, FACOEP, FAsMA, FEWM

Chief Health and Medical Officer

Dr. J.D. Polk

Dr. J.D. Polk began serving in this position in November 2016.

Polk received his degree in Osteopathic Medicine from the A.T. Still University in Kirksville, MO. He completed his residency in emergency medicine with the Mt. Sinai hospitals via Ohio University and completed his training in aerospace medicine at the University of Texas Medical Branch. He is triple board-certified in both emergency medicine and aerospace medicine. Polk holds an education doctorate in aviation and space (Oklahoma State University), a master of science degree in space studies (American Military University), a master of medical management degree (University of Southern California's Marshall School of Business), and graduate certificates in public health (University of New England) and forensic investigative science (Oklahoma State University). Polk is well-published in the fields of emergency medicine, disaster medicine, space medicine, and medical management.

Extended Bio: https://www.nasa.gov/people/jd-polk/

6.2 Office of the Chief Engineer/Engineering Technical Authority

The Office of the Chief Engineer (OCE) provides policy direction, oversight, and assessment for the NASA engineering and program management communities and serves as principal advisor to the Administrator and other senior officials on matters pertaining to the technical readiness and execution of NASA programs and projects. OCE ensures that NASA's development efforts and mission operations are planned and conducted with a sound engineering basis and with proper controls and management of technical risks. OCE executes the Agency's Engineering Technical Authority (ETA) process and provides independent engineering oversight and guidance.

OCE establishes and maintains engineering policy and technical standards and, through its Mission Resilience and Protection Program, supports spaceflight missions by integrating the consideration of potential threats (including cybersecurity) into systems engineering processes and improving the resilience and protection of systems from the effects of threat actors.

In addition, OCE sponsors the Academy of Program/Project and Engineering Leadership Knowledge Services (APPEL KS) to develop program and project management and systems engineering skills and support critical knowledge sharing across the Agency's technical workforce. OCE also manages the NASA Engineering and Safety Center (NESC), which enables rapid, cross-Agency responses to mission-critical engineering and safety issues and improves the state of practice in critical engineering disciplines.

More information: https://www.nasa.gov/oce/

OCE Leadership

Joseph Pellicciotti

Chief Engineer

Joseph Pellicciotti

Joseph Pellicciotti was named NASA's Chief Engineer in April 2023. In this role, he provides policy direction, oversight, and assessment for the Agency's engineering communities and serves as a principal advisor to the NASA Administrator and other senior officials on matters pertaining to the technical readiness and execution of Agency programs and projects.

Pellicciotti came to NASA in 2001 and, in his time with the Agency, has served in several key positions. Before being named to his current role, he was NASA's Deputy Chief Engineer and previously served as the Chief Engineer in NASA's Science Mission Directorate, where he had technical oversight for more than 40 space science missions in development.

Extended bio: https://www.nasa.gov/people/nasa-chief-engineer-joseph-w-pellicciotti/

06: NASA's Technical Authorities

6.3 Office of Safety and Mission Assurance/Safety and Mission Assurance Technical Authority

The Office of Safety and Mission Assurance (OSMA) provides policy direction, functional oversight, and assessment for all Agency safety, reliability, maintainability, quality engineering and assurance, software assurance, risk management, orbital debris mitigation, nuclear flight safety, aviation safety, and planetary protection activities and serves as a principal advisory resource for the Administrator and other senior officials on matters pertaining to safety and mission success. The program develops technical excellence in these areas and assesses and communicates crosscutting and significant risks to appropriate decision makers.

The Chief of Safety and Mission Assurance is designated as the Safety and Mission Assurance Technical Authority (SMA TA) for NASA. The SMA TA establishes and is responsible for the SMA processes, specifications, rules, and best practices necessary to fulfill safety and programmatic mission assurance performance requirements. SMA TAs are assigned when new programs or projects begin, and their duties include providing input to program or project planning; overseeing proposed technical or process changes or decisions that could increase risks to safety, quality, or reliability; and guiding and advising the management of this risk. Unlike the leaders of other technical authorities, the Chief of SMA is fully empowered to suspend any operation or project activity that presents an unacceptable risk.

OSMA includes the Mission Programs and Assessments Division, Institutional Safety Management Division, Mission Assurance Standards and Capabilities Division, and NASA Safety Center (NSC), as well as the Independent Verification and Validation (IV&V) program.

NASA recently established the role of the Agency Risk Management Officer (ARMO). Situated within OSMA, the ARMO promotes risk leadership in the pursuit of NASA's strategic goals through the development of concepts, policies, procedures, and implementation strategies. The ARMO leads a growing and collaborative community of practice that is focused on strengthening risk analysis and assessment practices.

More information: https://sma.nasa.gov/

06: NASA's Technical Authorities

OSMA Leadership

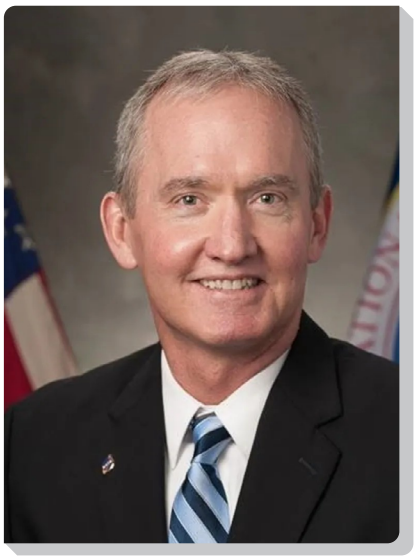
W. Russ DeLoach

Chief of Safety and Mission Assurance

W. Russ DeLoach is NASA's Chief of Safety and Mission Assurance. Appointed to this role in January 2021, DeLoach is responsible for the development, implementation, and oversight of SMA policies and procedures for all NASA programs.

Prior to this assignment, DeLoach served as the SMA director at NASA's Johnson Space Center. DeLoach began his NASA career in 1987.

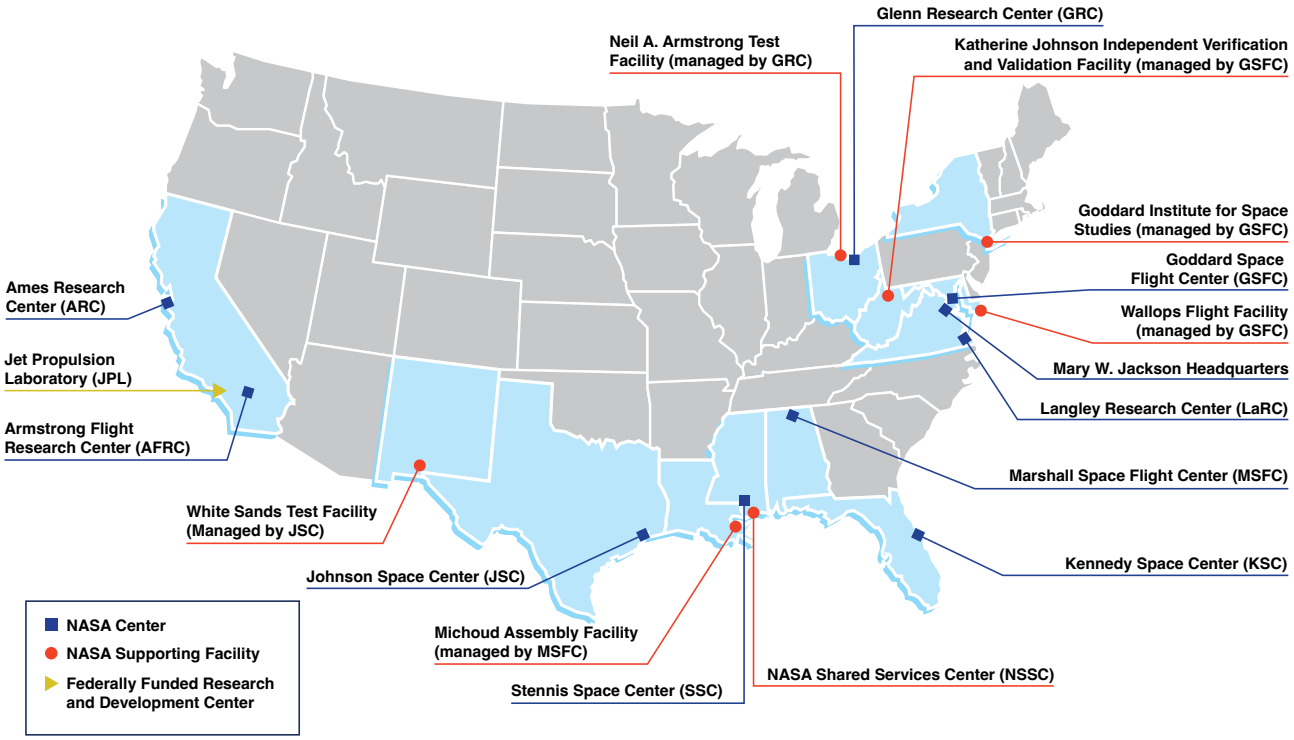
Extended bio: https://www.nasa.gov/people/chief-of-safety-and-mission-assurance-w-russ-deloach/



W. Russ DeLoach

07: NASA Center Profiles

NASA owns and manages numerous Centers and other facilities distributed across the United States, as denoted in the map below. Each Field Installation maintains a unique set of core capabilities and assets that enable NASA's missions in human spaceflight, Earth and space sciences, aeronautics, and space technology. In addition to the Government-owned and -operated locations, NASA manages the Jet Propulsion Laboratory, a federally funded research and development center.



7.1 Ames Research Center

Location: Moffett Field, CA
Founded: December 20, 1939
People: 3,200+

Description of Center

Ames Research Center (ARC or Ames) is located at Moffett Field, California, in the heart of the dynamic Silicon Valley. Ames assets include the Solar System Exploration Research Virtual Institute (SSERVI); the NASA Aeronautics Research Institute (NARI); the Mars Climate Modeling Center (MCMC); the Small Spacecraft Systems Virtual Institute (S3VI); and the NASA Research Park, a world-class, shared-use research and development and education campus comprising approximately 20 onsite partners working together on innovative solutions to science and technology challenges. ARC serves as host to other Federal, military, and civilian organizations, such as the California Air National Guard.

ARC has unique facilities, including the world's largest wind tunnel; NASA's primary Arc Jet complex, which simulates the extreme conditions of atmospheric entry; two of the Nation's most capable supercomputers (Pleiades and Electra); the Vertical Motion Simulator, which is the Nation's largest flight simulator; the Unitary Plan Wind Tunnel; and a Mars wind tunnel.

More information: https://www.nasa.gov/ames/

Mission Statement

ARC enables exploration through selected developments, innovative technologies, and interdisciplinary scientific discovery. ARC provides leadership in astrobiology, small satellites, technologies for crew exploration vehicles, the search for habitable planets, supercomputing, intelligent/adaptive systems, advanced thermal protection, and airborne astronomy. ARC develops tools for a safer, more efficient national airspace and unique partnerships benefiting NASA's mission.

List of Core Functions

- Air Traffic Management
- Entry Systems
- Supercomputing
- Intelligent/Adaptive Systems
- Cost-effective Space Missions
- Aerosciences
- Astrobiology and Life Sciences
- Space and Earth Sciences

07: NASA Center Profiles

Center Leadership

Dr. Eugene Tu

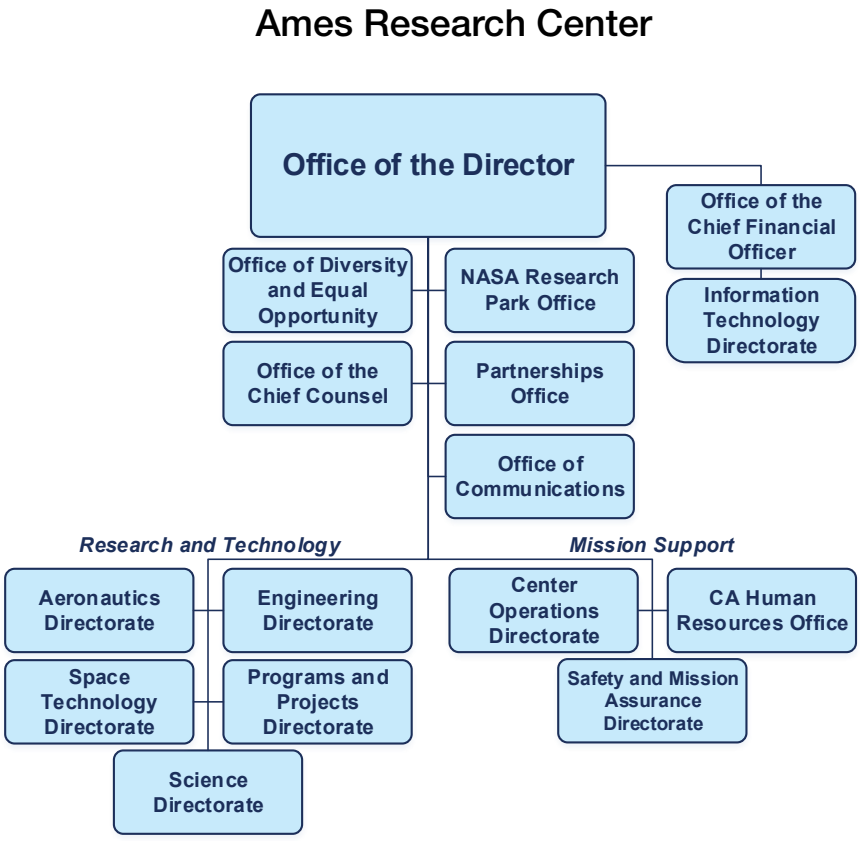
ARC Director

Dr. Eugene Tu

Dr. Eugene L. Tu is the Center Director at Ames Research Center. Tu was most recently Director of Exploration Technology at Ames, a position he held from November 2005 until his selection as Ames Center Director in May 2015. There, he led four technology research and development divisions. Tu began his career as a research scientist conducting computational fluid dynamics research. After progressing through various research and managerial positions in such fields as computational aerodynamics, information technology, and high-performance computing and communications, he became Director of Exploration Technology in 2005. Tu earned his bachelor's degree in mechanical engineering from the University of California, Berkeley, in 1988, and both his master's degree and doctorate from Stanford University.

Extended bio: https://www.nasa.gov/people/ames-eugene-tu/

Center Organization



7.2 Neil A. Armstrong Flight Research Center

Location: Edwards, CA
Founded: 1946
People: 1,100+

Description of Center

Armstrong Flight Research Center (AFRC or Armstrong) is NASA's primary Center for atmospheric flight research and operations. AFRC is situated on approximately 830 acres within the confines of Edwards Air Force Base in California, permitting AFRC to conduct the full range of aeronautical flight research while maximizing the safe operation and recovery of one-of-a-kind flight vehicles.

For more than 75 years, research at Armstrong has led to major advancements and breakthroughs in the design and capabilities of state-of-the-art civil and military aircraft. Armstrong demonstrates America's leadership in aeronautics, Earth and space science, and aerospace technology as the Center seeks to revolutionize aviation, add to humanity's knowledge of the universe, and contribute to the understanding and protection of Earth.

More information: https://www.nasa.gov/armstrong/

Mission Statement

AFRC's mission is to be the leader in high-risk atmospheric flight research, leveraging our expertise to advance technology and science for the benefit of NASA and the Nation. AFRC develops and validates aeronautical concepts using flight vehicles, payloads, and advanced instrumentation; delivers scientific payloads to critical locations in Earth's atmosphere around the globe; and validates advanced space exploration concepts.

List of Core Functions

- Research and Engineering—Aerodynamics and Propulsion, Aerostructures, Dynamics and Controls, Sensors and Systems Development, Systems Engineering and Integration, Vehicle Integration and Instrumentation
- Flight Operations—Aircrew, Aircraft Maintenance, Operations Engineering
- Simulation Engineering
- Technology Development
- Dryden Aeronautical Test Range
- Flight Loads Laboratory

Center Leadership

Bradley C. Flick

AFRC Director

Bradley C. Flick

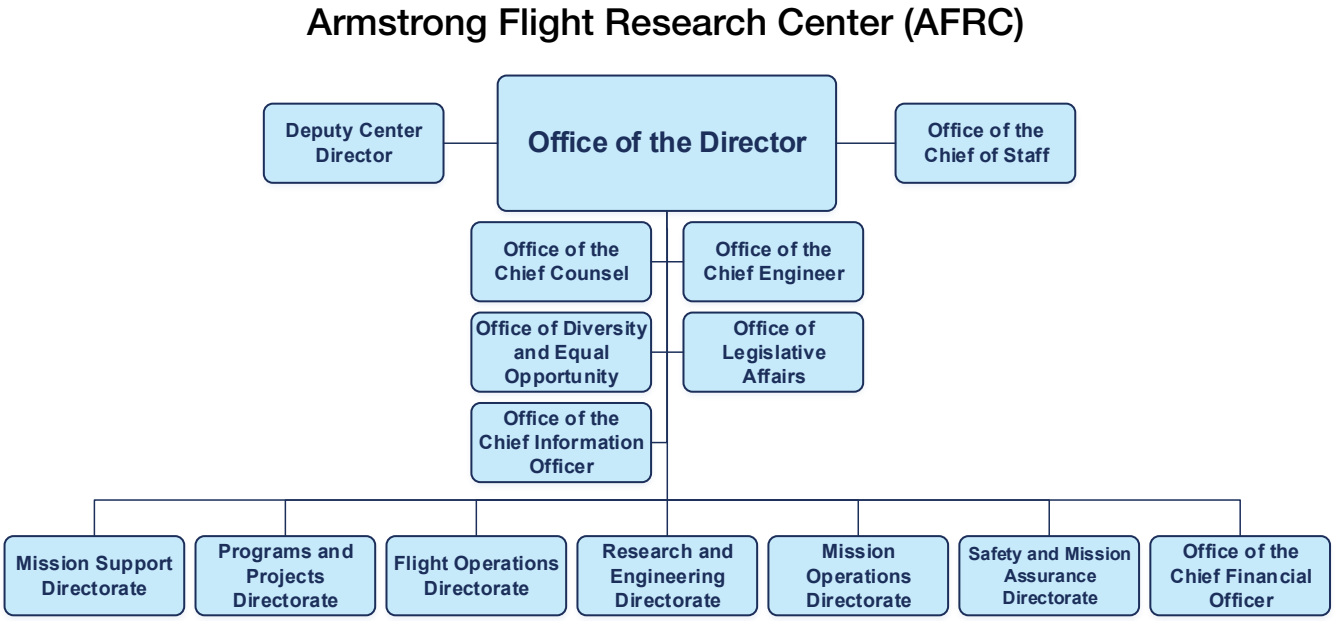
Bradley C. Flick was appointed as Armstrong's Center Director on December 5, 2022, after serving as Acting Center Director since July 2022. Previously, Flick was the Deputy Center Director and Director for Research and Engineering, responsible for the technical and administrative management of the Research and Engineering Directorate's engineering workforce.

Flick served as Armstrong's Center Chief Engineer from October 2005 to September 2009, providing independent technical guidance and oversight to flight projects. Flick began his career at Dryden Flight Research Center (AFRC's previous name) in 1986 as a flight systems engineer. In 1988, he transferred to the Operations Engineering Branch, with a lead role in the development of several experimental systems. Flick received a bachelor of science degree in electrical and computer engineering in 1986 from Clarkson University in Potsdam, NY, and a master of engineering in engineering management in 1997 from Rochester Institute of Technology in New York.

Extended bio: https://www.nasa.gov/people/bradley-c-flick/

07: NASA Center Profiles

Center Organization



7.3 John H. Glenn Research Center

Location: Cleveland, OH
Founded: 1941
People: 3,200+

Description of Center

John H. Glenn Research Center (GRC or Glenn), located at Lewis Field in Cleveland, OH, designs, develops, and tests innovative technology to revolutionize air travel, advance space exploration, and improve life on Earth. Glenn supports all of the Agency's missions and major programs. Located near Cleveland Hopkins International Airport, Lewis Field is situated on 307 acres of land and contains more than 100 buildings. The world-class facilities at Lewis Field include wind tunnels, drop towers, and vacuum chambers.

NASA's Neil Armstrong Test Facility, affiliated with NASA Glenn, is located 50 miles west of Cleveland in Sandusky, OH, on 6,400 acres of land. It has large, unique facilities that simulate the environment of space. The NASA Electric Aircraft Testbed is also located at the Armstrong Test Facility. Both locations bring NASA, military, academic, and private industry customers to Ohio to perform aerospace research and testing.

More information: https://www.nasa.gov/glenn/

Mission Statement

Glenn Research Center develops critical spaceflight systems and technologies to advance the exploration of our solar system and beyond while maintaining leadership in aeronautics. In partnership with U.S. industries, universities, and other government institutions, research and development efforts focus on advancements in air-breathing propulsion, in-space propulsion and cryogenic fluids management, communications technology, and power systems. GRC technology research includes energy storage and power conversion, advanced materials for extreme environments, and physical sciences. Glenn also specializes in ground-based simulation and testing of extreme flight environments.

07: NASA Center Profiles

7.3 John H. Glenn Research Center

List of Core Functions

- Air-Breathing Propulsion (Jet Engines)
- Communications
- In-Space Propulsion and Cryogenic Fluids Management
- Power, Energy Storage, and Energy Conversion
- Materials and Structures for Extreme Environments
- Physical Sciences and Biomedical Technologies in Space

Center Leadership

Dr. James A. Kenyon

GRC Director

Dr. James A Kenyon

Dr. James A. Kenyon is the Director of GRC. He is responsible for planning, organizing, and directing the activities required to accomplish the missions assigned to the Center.

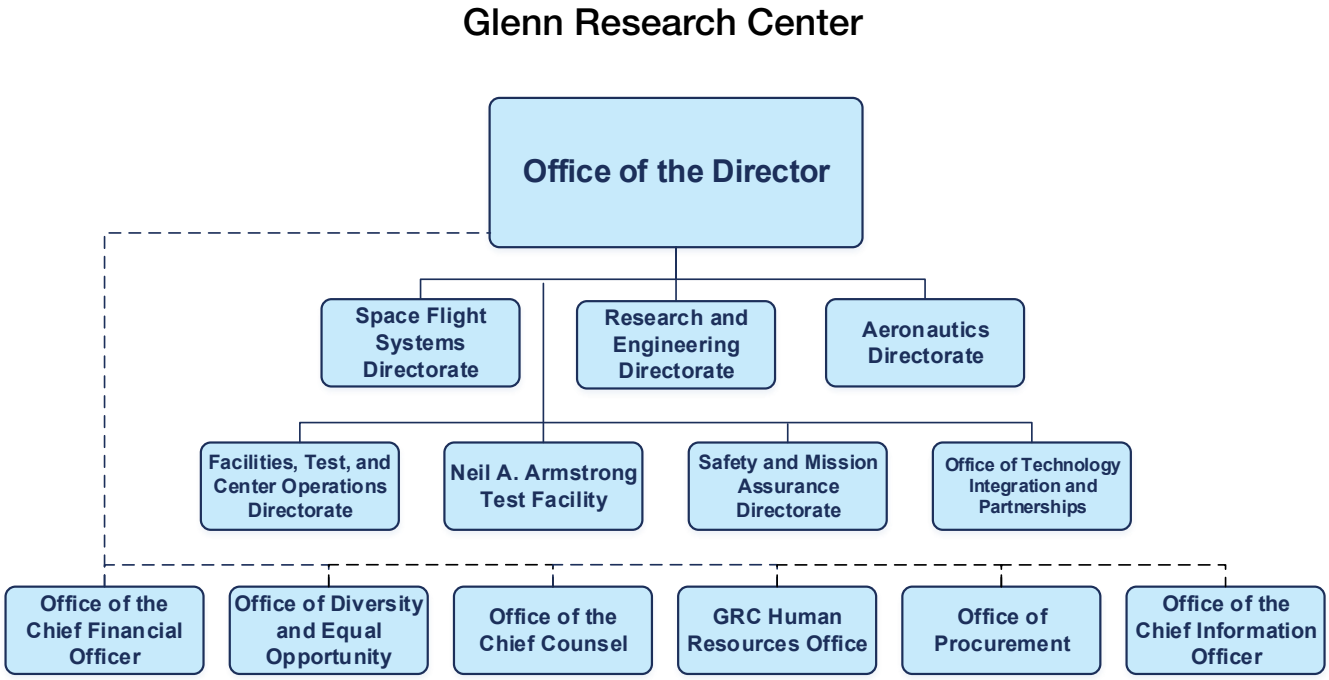
Prior to becoming Glenn's Director, Kenyon served as Director of the Advanced Air Vehicles Program in the Aeronautics Research Mission Directorate at NASA Headquarters in Washington, DC.

Prior to joining NASA, Kenyon worked with Pratt & Whitney, where he held key leadership roles in business development, program management, and engineering, including serving as executive director of advanced programs and technology. Kenyon joined Pratt & Whitney after 17 years as a civilian in the Department of Defense, including six years in the Office of the Secretary of Defense.

Extended bio: https://www.nasa.gov/people/biography-dr-james-a-kenyon/

07: NASA Center Profiles

Center Organization



7.4 Goddard Space Flight Center

Location: Greenbelt, MD
Founded: May 1, 1959
People: 9,200+

Description of Center

NASA's Goddard Space Flight Center (GSFC or Goddard) in Greenbelt, MD, is home to the Nation's largest organization of scientists, engineers, and technologists who build, launch, and operate spacecraft systems, instruments, and cutting-edge technology to study Earth, the Sun, our solar system, and the universe. Goddard's installations include the Wallops Flight Facility (WFF), Katherine Johnson Independent Verification and Validation (IV&V) Facility, Goddard Institute for Space Studies (GISS), Columbia Scientific Balloon Facility (CSBF), and White Sands Complex (WSC).

More information: https://www.nasa.gov/goddard/

Component Facilities

The Wallops Flight Facility, located on Virginia's Eastern Shore, is the principal facility for the management of NASA's suborbital research program, providing launch and test range services to meet NASA, Department of Defense, and commercial-sector needs. Wallops launches low-cost, versatile suborbital platforms and orbital rockets in support of Earth and space science research. The Wallops range is seeing growth in commercial launch activity through the Virginia Spaceport Authority on NASA's Wallops Island.

The Katherine Johnson Independent Verification and Validation Facility is located in Fairmont, WV. Focused on the success of NASA's highest-profile missions, the IV&V program applies engineering best practices to ensure that safety- and mission-critical systems and software will operate reliably, safely, and securely.

The Goddard Institute for Space Studies, located in New York City, is a component laboratory of Goddard's Earth Sciences Division. They specialize in space-based observations to provide a critical perspective for monitoring global climate and developing an understanding of Earth systems.

The Columbia Scientific Balloon Facility, a NASA-owned, contractor-operated facility, is located in Palestine, TX, conducting NASA's scientific balloon payload integration and test, launch, and mission operations worldwide. CSBF conducts frequent scientific balloon launches in support of NASA science, technology, and educational investigations.

07: NASA Center Profiles

7.4 Goddard Space Flight Center

The White Sands Complex in Las Cruces, NM, is a vital part of NASA's Space Network, providing the connection for data gathered by NASA satellites to be sent to Earth. Antenna dishes at the WSC are just part of NASA's ground-based ways of "talking" to spacecraft and collecting their data. The White Sands Complex is part of a global network that allows NASA to relay data from space to support a diverse set of launch vehicles, robotic missions, and human spaceflight exploration activities.

Mission Statement

As NASA's largest science center, Goddard advances the Agency's mission by seeking to understand Earth and to explore the universe through a robust program of scientific research in Earth science, astrophysics, heliophysics, and planetary science. Goddard leads scientific research and builds, launches, and operates scientific instruments, spacecraft, and information systems. As a spaceflight center, Goddard utilizes its core technical and programmatic expertise and facility capabilities to execute a broad range of flight missions and field campaigns, providing a safe, reliable, and secure infrastructure for access to space.

List of Core Functions

- Astrophysics
- Earth Science
- Heliophysics
- Planetary Science
- Communications and Navigation
- Crosscutting Technology and Capabilities
- Suborbital Platforms and Range Services
- End-to-End Project Management and Mission Systems Engineering

07: NASA Center Profiles

7.4 Goddard Space Flight Center

Center Leadership

Dr. Mackenzie Lystrup

GSFC Director

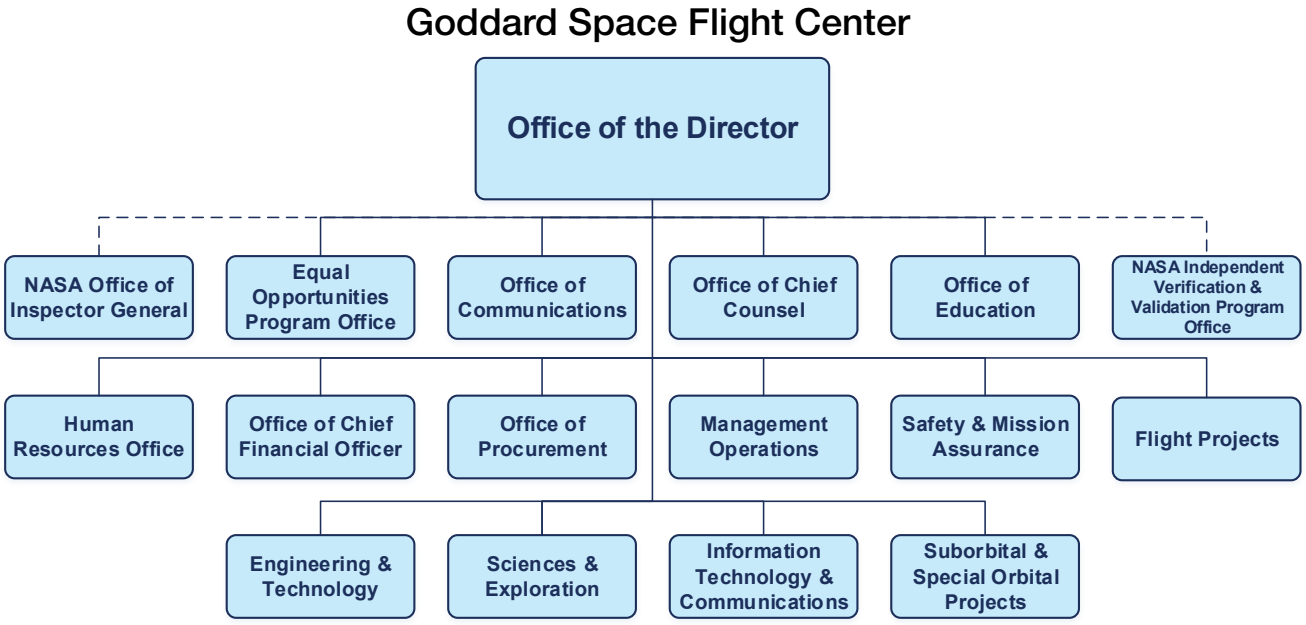
Dr. Mackenzie Lystrup

Dr. Makenzie B. Lystrup is the Director of Goddard Space Flight Center, guiding the direction and management of one of NASA's major Field Installations. Prior to joining NASA, Lystrup was vice president and general manager of the Civil Space Strategic Business Unit at Ball Aerospace (now called Space & Mission Systems, a subsidiary of BAE Systems). In that role, she was responsible for the company's portfolio of civil space systems spanning all science fields, operational weather, and Earth observation, as well as advanced technologies development objectives.

Lystrup holds a bachelor's degree in physics from Portland State University and attended graduate school at University College London, earning a doctorate in astrophysics.

Extended bio: https://www.nasa.gov/people/dr-makenzie-lystrup-center-director-goddard-space-flight-center/

Center Organization



7.5 Lyndon B. Johnson Space Center

Location: Houston, TX
Founded: November 1, 1961
People: 11,000+

Description of Center

Johnson Space Center (JSC or Johnson) is NASA's Center for human space exploration operations; program management; and spacecraft design, development, testing, and evaluation. JSC opened in 1963 in the Clear Lake area of Houston, TX, on 1,600 acres of land donated through Rice University. Additional aircraft and testing assets are located a few miles away at Ellington Field (228 acres reserved for military and NASA use).

JSC also manages the White Sands Test Facility (WSTF) near Las Cruces, NM. Established in 1963 on the White Sands Missile Range, it is a unique resource for testing and evaluating hazardous materials, spaceflight components, and in-space rocket propulsion systems.

Among the notable facilities at JSC are the Mission Control Center, the Neutral Buoyancy Laboratory, the Spaceflight Vehicle Mockup Facility, the Thermal Vacuum Test Complex, the Human Health and Performance Laboratory, and the Astromaterials Curation Facility. Additionally, JSC is home to the astronaut corps.

More information: https://www.nasa.gov/johnson/

Mission Statement

JSC's mission is to lead NASA's human space exploration, with an emphasis on operating low-Earth orbit platforms and developing deep space missions. JSC manages the International Space Station Program, the Orion Program, the Gateway Program, the Extravehicular Activity and Human Surface Mobility Program, the Commercial Low Earth Orbit Development Program, and the Human Research Program; additionally, the Center partners with Kennedy Space Center to manage the Commercial Crew Program. Through both program management and technology development activities, JSC manages a wide range of innovative partnerships with international, commercial, academic, and U.S. Government entities.

07: NASA Center Profiles

7.5 Lyndon B. Johnson Space Center

List of Core Functions

- Human Spaceflight
- Mission Planning and Execution
- Human and Spacecraft Subsystems
- Exploration Research and Science
- Spaceflight Environments and Testing
- Space Systems Supporting Human Exploration

Center Leadership

Vanessa E. Wyche

JSC Director

Vanessa E. Wyche

Vanessa E. Wyche is the Director of NASA's Johnson Space Center, responsible for a broad range of human spaceflight activities, including development and operation of human spacecraft, NASA astronaut selection and training, and mission control.

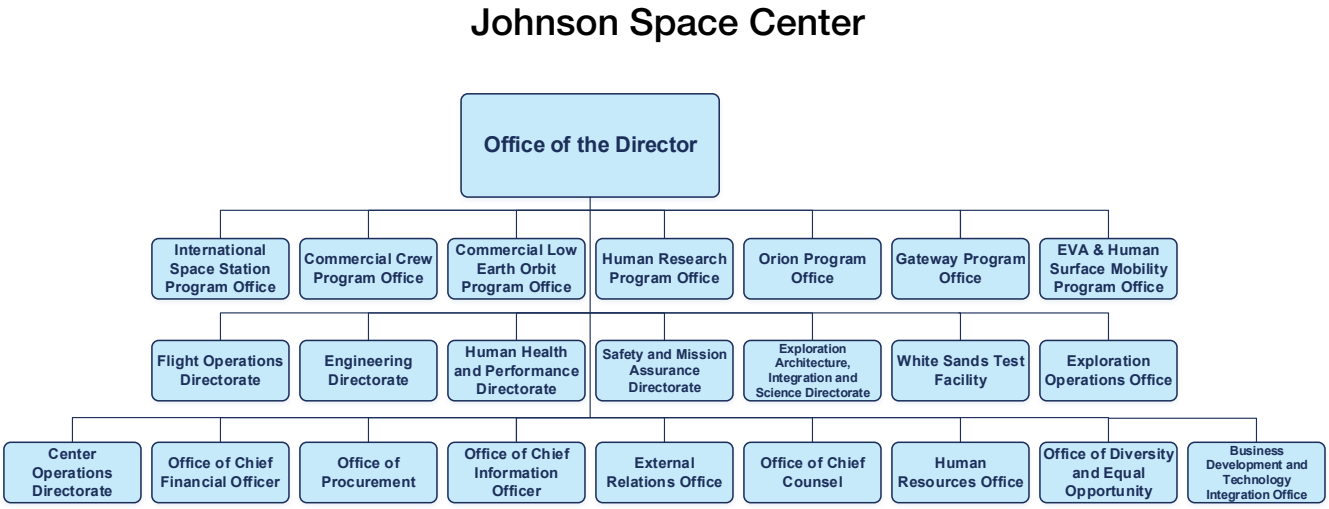
Wyche previously served as Deputy Director at Johnson for three years beginning in 2018. Other key leadership positions include assistant and acting Deputy Director of Johnson, Director of the Exploration Integration and Science Directorate, Flight Manager of several missions of the retired Space Shuttle Program, and Executive Officer in the Office of the NASA Administrator. Before joining NASA in 1989, Wyche worked for the Food and Drug Administration in Washington, DC.

Extended bio: https://www.nasa.gov/people/vanessa-e-wyche/

07: NASA Center Profiles

7.5 Lyndon B. Johnson Space Center

Center Organization



7.6 John F. Kennedy Space Center

Location: Kennedy Space Center, FL
Founded: July 1,1962
People: 10,000+

Description of Center

Kennedy Space Center (KSC or Kennedy) is located along Florida's east central coast, in an area known as the Space Coast. KSC is the world's premier spaceport, with more than 100 partners and over 250 agreements with commercial, academic, and government partners. The presence of commercial companies at KSC is larger than ever before, enabling us to embark on a new era of space exploration. Although Kennedy is the Agency's main launch site, the Center also is home to facilities that research and develop innovative solutions that government and commercial space ventures need for working and living on the surfaces of the Moon and other bodies in our solar system. KSC has more than 50 years of experience in the design, development, and operation of payload/spacecraft processing and launch systems used to support human spaceflight and robotic missions.

More information: https://www.nasa.gov/kennedy/

Mission Statement

KSC provides continuous access to space through creativity and innovation. It is responsible for the preflight processing, launch, and recovery of the Agency's human-rated spacecraft and launch vehicles; the assembly, integration, and processing of International Space Station (ISS) elements and flight experiments; the acquisition and management of commercial launch services and capabilities for Agency spacecraft and deep space logistics services; and leadership in the development of a commercial crew transportation system for access to and from low-Earth orbit. KSC leads the development of ground systems operations and integration capabilities supporting human-rated spacecraft and launch vehicles.

07: NASA Center Profiles

7.6 Kennedy Space Center

List of Core Functions

- Acquisition of Commercial Launch Services
- Certification of New Commercial Launch Vehicles
- Launch Vehicle and Spacecraft Processing, Servicing, Maintenance, Command, Control, Telemetry, Launch, Landing, and Recovery Operations
- Payload and Flight Science Experiment Processing, Assembly, Integration, and Testing
- Flight and Ground Systems and Supporting Testing and Integration Infrastructure
- Research; Testing and Technology Development; and Demonstration for Space Biology, Advanced Flight Systems, and Transformational Technologies
- Operating, managing, and evolving a national spaceport

Center Leadership

Janet Petro

KSC Director

Janet Petro

Janet Petro was named the 11th Director of Kennedy Space Center on June 30, 2021. She had been serving as acting Director since May 2021. Prior to being named Director, Petro had served as Kennedy's Deputy Director since April 2007, where she shared responsibility with the Center Director in managing the Kennedy team of civil service and contractor employees, determining and implementing Center policy, and managing and executing Kennedy missions and Agency program responsibilities.

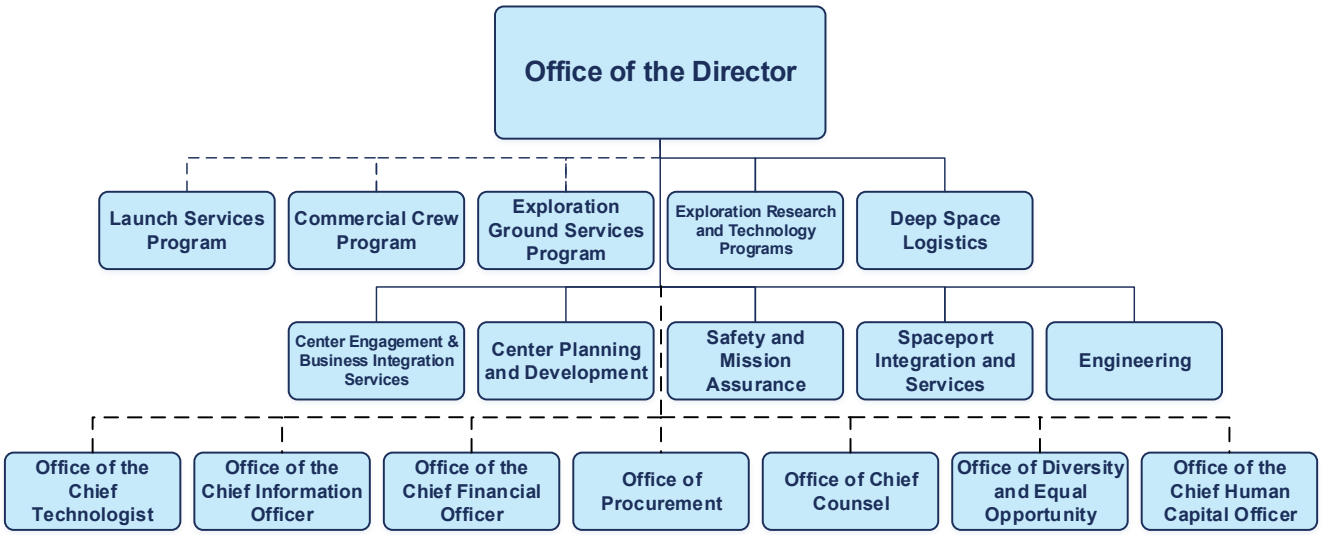
Prior to joining NASA, Petro served in various management positions for Science Applications International Corp. and McDonnell Douglas Aerospace Corp. Petro began her professional career as a commissioned officer in the U.S. Army after graduating in 1981 from the U.S. Military Academy at West Point, NY, with a bachelor of science degree in engineering. Petro also holds a master of science degree in business administration from Boston University's Metropolitan College.

Extended bio: https://www.nasa.gov/people/janet-e-petro

07: NASA Center Profiles

Center Organization

Kennedy Space Center



7.7 Langley Research Center

Location: Hampton, VA
Founded: July 17,1917
People: 3,400+

Description of Center

Langley Research Center (LaRC or Langley), located in Hampton, VA, spans approximately 764 acres and directly borders the Air Force Joint Base Langley-Eustis. Langley's facilities enable space exploration, aeronautics, and science, allowing researchers to conduct experimentation, testing, and validation from concept to demonstration in a relevant environment to advance next-generation aerospace technologies. The Center has nearly 200 facilities, including wind tunnels, laboratories, and energy-efficient office space. Also located at Langley is the NASA Engineering and Safety Center (NESC), which performs independent testing, analysis, and assessments of NASA's high-risk projects to ensure safety and mission success.

Langley is home to several aeroscience ground test facilities, including the National Transonic Facility, the Transonic Dynamics Tunnel, the 20-Foot Vertical Spin Tunnel, the 8-Foot High Temperature Tunnel, the 14- by 22-Foot Subsonic Wind Tunnel, the Combined Loads Test System (COLTS), and the Langley Aerothermodynamics Laboratory. The Flight Dynamics Research Facility, with completion expected in 2025, will be the first new NASA wind tunnel in 40 years. These facilities enable testing across the speed regimes of flight, from subsonic to hypersonic.

More information: https://www.nasa.gov/langley/

Mission Statement

Langley is revolutionizing aviation, expanding our understanding of Earth's atmosphere, and developing innovative technology for space exploration. Langley is recognized as a leader in systems innovation for expanding air mobility, exploring space, and characterizing Earth's changing climate. Langley's work spans fundamental research to mission development and operations with a focus on the next generation of cutting-edge capabilities and improvements in performance and cost. Langley's on-site facilities enable space exploration, aeronautics, and science to conduct experimentation, testing, and validation from concept to demonstration in a relevant environment needed to advance aerospace technologies.

07: NASA Center Profiles

7.7 Langley Research Center

List of Core Functions

- Advanced materials and structural systems
- Aerosciences
- Atmospheric Characterization
- Entry, Descent, Landing
- Intelligent Flight Systems
- System Analysis and Concepts

Center Leadership

Dawn M. Schaible

Acting LaRC Director

Dawn M. Schaible

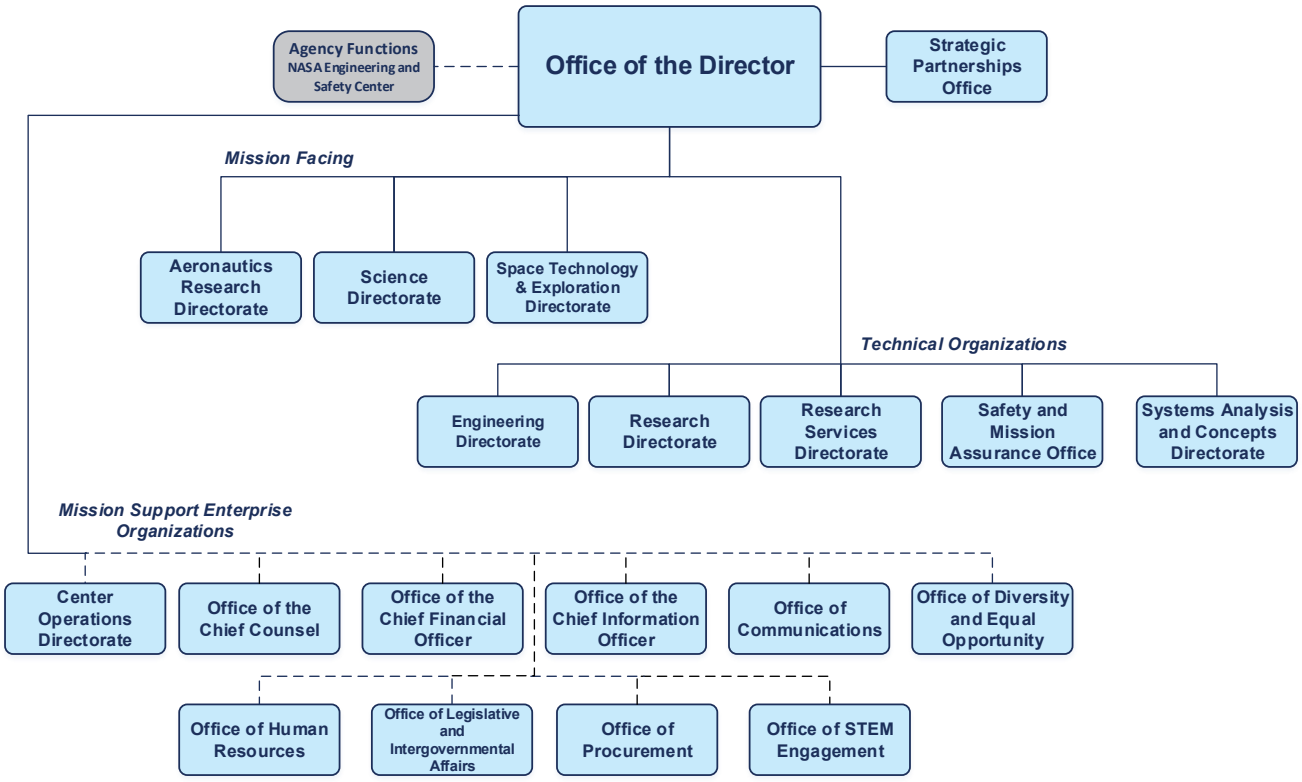
Dawn Schaible is currently serving as acting Director of Langley Research Center. Prior to this assignment, Schaible was the Deputy Director of NASA's Glenn Research Center in Cleveland. Before becoming Glenn's Deputy Director, Schaible served as Director of the NASA Langley Research Center Engineering Directorate, which provides advanced technology and flight system development in support of the Center's goals.

Schaible previously served as the manager of the Systems Engineering Office for the NASA Engineering and Safety Center, which was established in 2003 following the Space Shuttle Columbia accident. As a founding member, she helped to establish the organization and processes to conduct independent assessments of critical, high-risk issues. Schaible began her career with NASA at Kennedy Space Center in 1987, where she held a number of lead engineering and management positions for the Space Shuttle and International Space Station Programs.

Extended bio: https://www.nasa.gov/people/biography-dawn-m-schaible/

Center Organization

Langley Research Center



7.8 George C. Marshall Space Flight Center

Location: Huntsville, AL
Founded: July 1, 1960
People: 7,000+

Description of Center

NASA's Marshall Space Flight Center (MSFC or Marshall) in Huntsville, AL, provides expertise, capabilities, and facilities that shape nearly every facet of the Nation's ongoing missions of human exploration, science, and technology advancement. Marshall drives innovation through advanced transportation systems, habitation systems, human and cargo landers, lunar and Mars surface systems technology development, science and mission operations, and cutting-edge science instruments and applications. Marshall leads the development of the Space Launch System, the Nation's launch vehicle; the Human Landing System, responsible for returning humans to the surface of the Moon; and other critical elements and technologies essential for human space exploration and science missions. Marshall maintains a broad spectrum of design, development, and testing expertise in critical capability areas such as cryogenic fluid management, chemical and nuclear propulsion, environmental control and life-support systems, advanced materials and manufacturing, flight software, and payload operations.

More information: https://www.nasa.gov/marshall/

Large-Scale Manufacturing Facility

Marshall's Michoud Assembly Facility is a component facility of Marshall, located in New Orleans, LA. Elements of all current and future Artemis missions—including the Space Launch System rocket's core stage, exploration upper stage, and Orion crew modules—are in production at Michoud. With 43 acres of manufacturing space under one roof, Michoud is one of the largest such facilities in the world, earning the title "America's Rocket Factory." Michoud is home to the National Center for Advanced Manufacturing, a partnership with the State of Louisiana, Louisiana State University in Baton Rouge, and the University of New Orleans.

07: NASA Center Profiles

7.8 George C. Marshall Space Flight Center

Mission Statement

Marshall provides leadership to a diverse portfolio of programs and projects enabled by strategic partnerships while also serving as a technical solutions provider for both NASA and our partners, harnessing our deep technical expertise to drive innovation, reduce costs, and accelerate our space exploration goals.

List of Core Functions

- Advanced Space Transportation
- Lander Systems
- Habitation Systems
- Moon and Mars Surface Technologies and Systems
- Science Payload and Mission Operations
- Payload and Instrument Development

Center Leadership

Joseph Pelfrey

MSFC Director

Joseph Pelfrey

Joseph Pelfrey is the Director of Marshall. He leads Marshall's broad portfolio of human spaceflight, science, and technology development efforts, which touches nearly every mission NASA pursues. Pelfrey previously served as Deputy Center Director since his appointment to the position in April 2022.

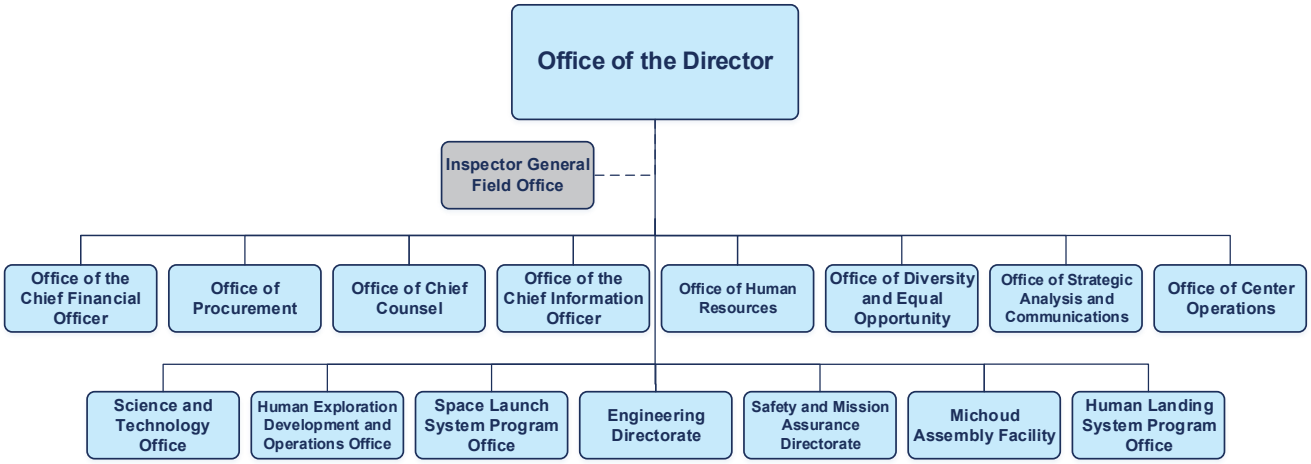
Throughout his NASA career, Pelfrey has served in multiple technical leadership positions at Marshall. He began his career as an industry partner, supporting development of space station payload hardware, and joined Marshall full-time in 2004 as an aerospace engineer in the Science and Mission Systems Office. He went on to serve in various leadership roles within NASA's International Space Station Program, the Ares Program, the Space Launch System Program, Marshall Engineering, and the Human Exploration Development and Operations Office. Pelfrey received a bachelor's degree in aerospace engineering from Auburn University in 2000.

Extended bio: https://www.nasa.gov/people/joseph-pelfrey/

07: NASA Center Profiles

Center Organization

Marshall Space Flight Center



7.9 John C. Stennis Space Center

Location: Stennis Space Center, MS
Founded: October 25, 1961
People: 1,600+
Including Federal City: 5,200+

Description of Center

NASA's John C. Stennis Space Center (SSC or Stennis) in south Mississippi operates as the Agency's primary, and America's largest, rocket propulsion test site, serving the Nation and commercial sector with unique capabilities and expertise.

Stennis operates as a unique Federal city, home to more than 50 Federal, state, academic, and private organizations, as well as numerous technology-based companies. Institutional operational costs are shared among resident agencies, making it more cost-effective for tenants to accomplish their respective missions.

Stennis is also home to the NASA Shared Services Center (NSSC), which performs integrated administrative functions and transactional activities for NASA in the areas of human resources, information technology, finance, and procurement. Consolidation, standardization, and automation allow the NSSC to increase operational efficiency and improve overall customer service. The NSSC is primarily staffed through contractor support, not Federal employees.

More information: https://www.nasa.gov/stennis/

Mission Statement

Stennis accelerates the exploration and commercialization of space, innovates to benefit NASA and industry, and leverages assets to stimulate the economy and enhance national security.

List of Core Functions

- Propulsion Testing
- Autonomous Systems
- Range and Airspace Operations
- Federal City Management
- NASA Shared Services Center

07: NASA Center Profiles

Center Leadership

John W. Bailey Jr.

SSC Director

John W. Bailey Jr.

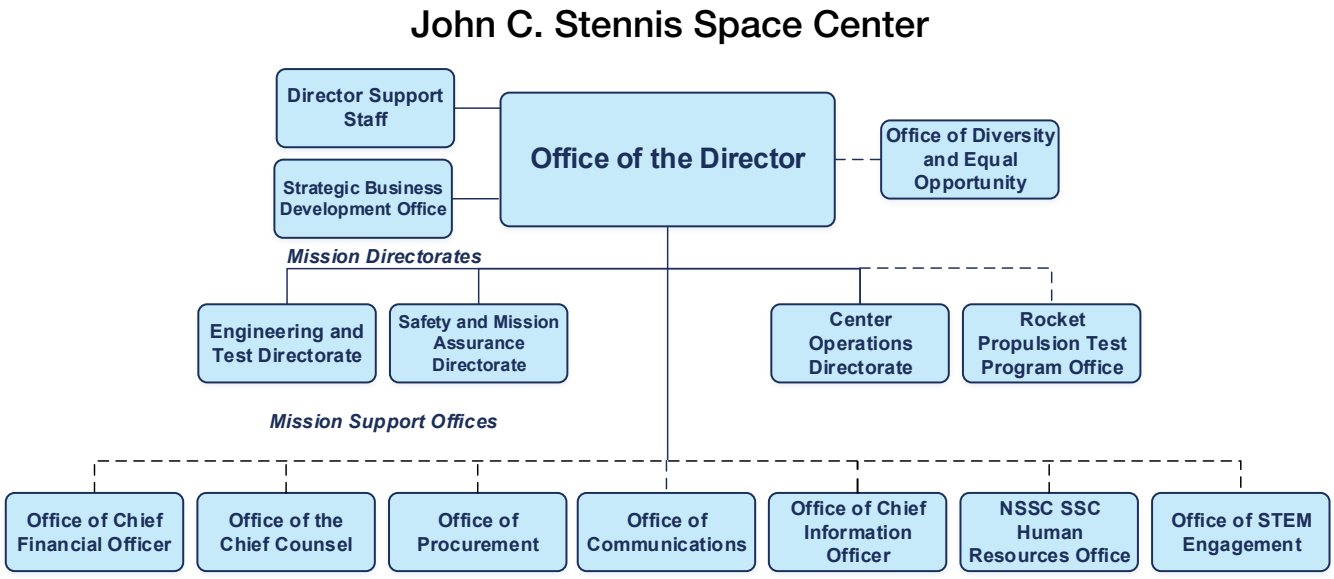
John Bailey serves as Director of Stennis Space Center, a position he has held since April 2024. In that role, Bailey provides executive leadership, overall direction, and management of the Center.

Prior to being named Center Director, Bailey served as Deputy Director and previously served as Associate Director of Stennis, providing leadership and managing the institutional capabilities that support Federal city operations and NASA's rocket propulsion testing capabilities at SSC.

Bailey began his career with the U.S. Air Force. Bringing his leadership expertise to NASA in 1999, Bailey served in various roles, managing and leading technical and non-technical organizations and supervising employees with a wide variety of skills and backgrounds.

Extended bio: https://www.nasa.gov/people/john-w-bailey-jr/

Center Organization



7.10 Federally Funded Research and Development Center: NASA's Jet Propulsion Laboratory

NASA is the sponsor of a federally funded research and development center (FFRDC) known as the Jet Propulsion Laboratory (JPL) in Pasadena, CA. The FFRDC has been managed and operated for NASA through a contract with a private university, the California Institute of Technology (Caltech), since 1958.

The Laboratory

JPL's Government-owned, contractor-operated principal facilities are located on 167 acres in La Cañada Flintridge, CA, adjacent to Pasadena. Unique key facilities include a 25-foot thermal vacuum chamber with solar capability, a 12,000-square-foot class-10K clean room for the integration and testing of spacecraft, and a simulated outdoor Martian landscape (Mars Yard) used to test robotic prototypes, plus on-Lab capabilities to fabricate sensors for instruments, as well as full fabrication capability of electrical and mechanical systems for NASA spacecraft.

Component Facilities: The Deep Space Network

The Deep Space Network (DSN) encompasses antenna complexes strategically placed on three continents, including the communications stations in Madrid, Spain; Canberra, Australia; and the Goldstone Complex near Barstow, CA. The DSN is the largest and most sensitive scientific telecommunications system in the world; it also performs radio and radar astronomy observations for the exploration of the solar system and the universe. JPL is responsible for operating the DSN for NASA.

More information: https://www.jpl.nasa.gov/

List of Core Functions

The Jet Propulsion Laboratory's core capabilities include, but are not limited to, highly complex or first-in-kind NASA deep space exploration and science missions and instruments, including mission concept development, design, project management, systems engineering, and mission operations, particularly for those missions requiring the following:

07: NASA Center Profiles

7.10 Federally Funded Research and Development Center: NASA's Jet Propulsion Laboratory

- Deep Space Communication and Navigation
- Integration of Radioisotope Power Systems
- Entry, Descent, and Landing on Planetary Surfaces
- Mobility on Planetary Surfaces
- Survival in Extreme Environments
- Advanced Earth, Planetary and/or Astrophysical Remote Sensing
- Space Research and Technology Development

NASA Office of JPL Management and Oversight

The NASA Office of JPL Management and Oversight (NOJMO) reports to NASA Headquarters but resides at JPL as the Government organization providing contract management and on-site Agency oversight, in addition to ensuring regulatory compliance of contractor operations.

More information: https://www.nasa.gov/nasa-office-of-jpl-management-and-oversight/

NOJMO Leadership

Andrea Razzaghi

NOJMO Director

Andrea Razzaghi

Andrea Razzaghi was named the NOJMO Director in January 2022. In this role, Razzaghi oversees contract management at JPL, ensuring that statutory, regulatory, and fiduciary compliance requirements are met. She previously served as NOJMO's Deputy Director starting in September 2019 and did a one-year detail as the Associate Director.

From 2012 to 2018, Razzaghi served as NASA's Deputy Director of Astrophysics for the Science Mission Directorate at NASA Headquarters, where she provided executive leadership, strategic direction, and overall management of the Agency's astrophysics programs and projects. Razzaghi managed a portfolio with over 20 NASA missions and international partnerships, including NASA's first exoplanet mission, Kepler, and the Nation's Great Observatories in space: Hubble, Chandra, and Spitzer.

Extended bio: https://www.nasa.gov/people/andrea-razzaghi-director/

07: NASA Center Profiles

7.10 Federally Funded Research and Development Center: NASA's Jet Propulsion Laboratory

JPL (Caltech) Leadership

Dr. Laurie Leshin

Laboratory Director

Dr. Laurie Leshin

Dr. Laurie Leshin, the Director of the Jet Propulsion Laboratory since May 2022 and a Vice President of Caltech, is a distinguished geochemist and space scientist with extensive leadership experience in academia and government, including senior NASA positions.

Leshin was president of Worcester Polytechnic Institute from 2014 to 2022 and previously served as Rensselaer Polytechnic Institute School of Science dean. At NASA's Goddard Space Flight Center from 2005 to 2008, she served as director of science, then deputy director for science and technology, leading strategy, planning, and implementation of more than 50 Earth and spaceflight projects. In 2010, Leshin became Deputy Associate Administrator of the Exploration Systems Mission Directorate at NASA Headquarters, overseeing future human spaceflight.

Extended bio: https://www.jpl.nasa.gov/who-we-are/executive-council/laurie-leshin-director-of-jpl

08: External Oversight and Advisory Input

8.1 Office of Inspector General

The Office of Inspector General (OIG) conducts audits, investigations, and reviews of NASA programs, personnel, and contractors to prevent and detect fraud, waste, abuse, and mismanagement; OIG also assists NASA leaders and Congress in promoting economy, efficiency, and effectiveness through its oversight role. To accomplish this work, OIG employs auditors, investigators, data analysts, attorneys, and support staff at NASA Headquarters in Washington, DC, and nine locations throughout the United States. The OIG's operational offices consist of the Office of Audits, Office of Investigations, Counsel to the Inspector General, Office of Management and Planning, and Office of Data Analytics.

Active projects: https://oig.nasa.gov/active-projects/

Issued reports: https://oig.nasa.gov/audits/

OIG Leadership

George A. Scott

Deputy Inspector General

George A. Scott became NASA's Deputy Inspector General in June 2018 after over 30 years of experience at the Government Accountability Office (GAO). He assists the Inspector General in managing the full range of OIG activities and supervises the Assistant Inspectors General and Counsel in the development and implementation of the OIG's audit, investigative, legal, and support operations.

Prior to joining NASA, Scott served as Managing Director of GAO's Homeland Security and Justice Team. He oversaw GAO's work on Department of Homeland Security (DHS) and Department of Justice programs and operations.

Extended bio: https://oig.nasa.gov/people/nasa-deputy-inspector-general/?people=nasa-deputy-inspector-general

George A. Scott

8.2 Advisory Committees and External Oversight

NASA has 11 active Federal advisory committees that operate in full compliance with the Federal Advisory Committee Act (FACA); the Government in the Sunshine Act; and related Federal statutes, regulations, and policies.

NASA's top two Federal advisory committees, the NASA Advisory Council (NAC) and Aerospace Safety Advisory Panel (ASAP), are key sources of external independent advice to the Agency from nationally and internationally recognized aeronautics and space experts.

NASA Advisory Council

The NAC was created in 1977 by combining two preexisting Agency-level advisory committees into a larger, more comprehensive body of experts. The NAC reports directly to the NASA Administrator and is the most senior body charged with developing findings and recommendations across the breadth and depth of NASA's programs, policies, and plans for consideration by the NASA Administrator and Agency senior leadership. All formal recommendations to NASA are carefully considered and receive a formal Agency response.

More information: https://www.nasa.gov/nac/

Aerospace Safety Advisory Panel

Congress directed NASA to establish ASAP following the 1967 Apollo 1 fire on the launch pad that resulted in the death of three NASA astronauts. The purpose of ASAP is to advise the NASA Administrator and Congress on matters related to safety in NASA's aerospace programs through the submission of an annual report. All formal ASAP recommendations are carefully considered and receive a formal response from the Agency. ASAP's charter is renewed every two years, and the Panel typically holds four quarterly meetings and makes several focused "insight" visits each year to NASA Centers or the Agency's key contractors.

More information: https://oiir.hq.nasa.gov/asap/

Previous annual reports: https://oiir.hq.nasa.gov/asap/reports.html

Other Advisory Groups

National Academies

NASA has a longstanding tradition of seeking external independent technical assessments, studies, and expert advice from the National Academies of Sciences, Engineering, and Medicine (the National Academies). The National Academies provide independent, objective analysis and advice to the Nation and conduct other activities to solve complex problems and inform public policy decisions.

The National Academies manage two key independent advisory bodies from which NASA seeks input: the Space Studies Board and the Aeronautics and Space Engineering Board.

In addition, the National Academies produce decadal surveys that are consensus reports prepared by the scientific community to identify the most pressing and promising areas of research. There are separate reports on the key scientific domains of Astrophysics, Planetary Science, Earth Science, Heliophysics, and Biological and Physical Sciences. Each report is updated every 10 years.

More information: https://www.nationalacademies.org/

Decadal surveys: https://science.nasa.gov/about-us/science-strategy/decadal-surveys/

National Space Council and Users' Advisory Group

The National Space Council (NSpC) is an advisory body to the President of the United States chaired by the Vice President and consisting of several Cabinet officials. It is charged with the coordination of U.S. national space policy across all relevant departments and agencies and in all segments (civil, commercial, national security, international, etc.) to strengthen U.S. leadership in space.

The NSpC Users' Advisory Group (UAG) was established in 2017 to ensure that the interests of industry and other non-Federal entities involved in space activities would be adequately represented in the NSpC. Administratively, the UAG is one of NASA's chartered FACA committees.

More information: https://www.nasa.gov/content/national-space-council-users-advisory-group

External Oversight

Government Accountability Office

The Government Accountability Office (GAO) is an independent, nonpartisan agency that works for Congress. GAO examines how taxpayer dollars are spent and provides Congress, Federal agencies, and the general public with objective, reliable information to help the Government save money and work more efficiently.

At the start of each new session of Congress, the GAO produces a High-Risk List of programs and operations that are "high risk" due to their vulnerabilities to fraud, waste, abuse, and mismanagement or that need transformation. NASA's Acquisition Management process has been on GAO's High-Risk List since the first report in 1990. GAO contends that NASA's historically weak cost and schedule estimation process introduces risk to NASA's complex portfolio of major projects.

In response to NASA's continued presence on the list, NASA leadership has approved a series of Corrective Action Plans (CAPs) that commits NASA to pursuing mature Agency program and project management policies and processes, as well as related surveillance of contractors through appropriate insight and oversight. Significant progress was made on the 2007, 2018, and 2020 CAPs, and, in August 2022 and October 2024, renewed CAPs were put into place. Initiatives in the most recent 2024 CAP continue building on topics such as acquisition and program management, probabilistic programmatic policy, ensuring schedule capability, advancing the state of maturity of independent assessment, ensuring realism in early formulation, and firm fixed-price data collection. In its most recent 2023 High-Risk List report, GAO identified NASA's Acquisition Management as an area that has made progress overall against the five criteria for removal from the High-Risk List. NASA fully meets four of the five criteria—for leadership commitment, capacity, action plan, and monitoring—and partially meets the final criterion, for demonstrated progress.

GAO also conducts an annual assessment of NASA's major projects, known as the "Quick Look" engagement. The congressionally directed report evaluates how NASA is planning and executing its major acquisitions in formulation and development with an estimated life-cycle cost of at least $250 million. The most recent study was published in June 2024, marking the 17th report.

08: External Oversight and Advisory Input

NASA Corrective Action Plan (CAP) in Response to Recent Programmatic Performance and NASA's Designation on GAO's High-Risk List:

- 2018 CAP: https://www.nasa.gov/wp-content/uploads/2018/06/nasa_high_risk_corrective_action_plan_2018_0.pdf
- 2020 CAP: https://www.nasa.gov/wp-content/uploads/2015/01/nasa_high_risk_corrective_action_plan_2020.pdf
- 2022 CAP: https://www.nasa.gov/wp-content/uploads/2020/11/nasa_high_risk_corrective_action_plan_2022.pdf

2023 GAO High-Risk List—NASA Acquisition Management: https://files.gao.gov/reports/GAO-23-106203/index.html?_gl=1*mip7ge*_ga*MTQyMDQ3Nzk2NS4xNzI0OTUyNzgy*_ga_V393SNS3SR*MTcyNDk1Mjc4Mi4xLjEuMTcyNDk1Mjk0NC4wLjAuMA..#appendix32

2024 GAO Assessments of NASA's Major Projects (Quick Look): https://www.gao.gov/products/gao-24-106767

09: Reference Links

NASA Home Page: http://www.nasa.gov

NASA Online Directives Information System (NODIS): https://nodis3.gsfc.nasa.gov/main_lib.cfm

Strategic Plan: https://smd-cms.nasa.gov/wp-content/uploads/2023/04/fy_22_strategic_plan-1.pdf

Budget: https://www.nasa.gov/budgets-plans-and-reports/

NASA Multimedia: https://www.nasa.gov/multimedia/

NASA Morning Briefing: http://nasa.bulletinintelligence.com/

NASA Newsletter: subscribe at https://lp.constantcontactpages.com/su/hHN32CZ/nasagov

NASA Press Releases: https://www.nasa.gov/news/all-news/

NASA Launch Schedule: https://www.nasa.gov/event-type/launch-schedule/

NASA Missions: https://www.nasa.gov/nasa-missions/

NASA Ombuds Program: https://www.nasa.gov/ombuds-office/

NASA History Home Page: http://history.nasa.gov

Headquarters Archives: https://www.nasa.gov/archives/hq-archives/

Records Management Program: https://www.nasa.gov/nasa-records-management/

10: Acronyms

AA	Associate Administrator
AAVP	Advanced Air Vehicles Program
ABS	Agency Business Solutions
ACE	Advanced Composition Explorer
ADR	Alternative Dispute Resolution
AES	Advanced Exploration Systems
AETC	Aerosciences Evaluation and Test Capabilities
AFRC	Armstrong Flight Research Center
AI	artificial intelligence
AIAA	American Institute of Aeronautics and Astronautics
AOSP	Airspace Operations and Safety Program
APMC	Agency Program Management Council
APPEL KS	Academy of Program/Project and Engineering Leadership Knowledge Services
ARC	Ames Research Center
ARMD	Aeronautics Research Mission Directorate
ASAP	Aerospace Safety Advisory Panel
ASC	Acquisition Strategy Council
ASCEND	Accelerating Space Commerce, Exploration, and New Discovery
ASM	Acquisition Strategy Meeting
BMD	Business Management Division
BPR	Baseline Performance Review
BPS	Biological and Physical Sciences
Caltech	California Institute of Technology
CAO	Chief Acquisition Officer
CAP	Cross-Agency Priority; Corrective Action Plan
CAPSTONE	Cislunar Autonomous Positioning System Technology Operations and Navigation Experiment
CCP	Commercial Crew Program
CDM	Continuous Diagnostics and Mitigation
CECR	Construction and Environmental Compliance and Restoration
CFO	Chief Financial Officer
CHCO	Chief Human Capital Officer
CIO	Chief Information Officer
CJS	Subcommittee on Commerce, Justice, Science, and Related Agencies

10: Acronyms

CNSA	China National Space Administration
COLTS	Combined Loads Test System
COMSEC	communications security
COPUOS	Committee on the Peaceful Uses of Outer Space
CR	Continuing Resolution
CSBF	Columbia Scientific Balloon Facility
CSD	Commercial Spaceflight Development
CSPD	Cybersecurity and Privacy Division
CVO	Chief Veterinary Officer
DAA	Deputy Associate Administrator
DART	Double Asteroid Redirection Test
DATR	Dryden Aeronautical Test Range
DCOI	Data Center Optimization Initiative
DEIA	diversity, equity, inclusion, and accessibility
DHS	Department of Homeland Security
DOD	Department of Defense
DSN	Deep Space Network
DT	Digital Transformation
EC	Executive Council
EEO	Equal Employment Opportunity
EGS	Exploration Ground Systems
EHP	Extravehicular Activity (xEVA) and Human Surface Mobility (HSM) Program
EPP	Enterprise Protection Program
ESA	European Space Agency
ESD	Exploration Systems Development; Earth Science Division
ESDMD	Explorations Systems Development Mission Directorate
ESID	Enterprise Services and Integration Division
ESIP	Early Stage Innovations and Partnerships
ETA	Engineering Technical Authority
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
EVP	Employee Value Proposition
FAA	Federal Aviation Administration
FC-STEM	Federal Coordination in STEM Education
FDCCI	Federal Data Center Consolidation Initiatives
FEVS	Federal Employee Viewpoint Survey

10: Acronyms

FFRDC	Federally Funded Research and Development Center
FISMA	Federal Information Security Management Act
FITARA	Federal Information Technology Acquisition Reform Act
FOIA	Freedom of Information Act
FSSI	Federal Strategic Sourcing Initiative
FTE	full-time-equivalent
FY	fiscal year
GAO	Government Accountability Office
GISS	Goddard Institute for Space Studies
GRC	Glenn Research Center
GSFC	Goddard Space Flight Center
GTAS	Governmentwide Treasury Account Symbol Adjusted Trial Balance System
HALO	Habitation and Logistics Outpost
HLS	Human Landing System
HMTA	Health and Medical Technical Authority
HRP	Human Research Program
HSM	Human Surface Mobility
HTT	High Temperature Tunnel
IASP	Integrated Aviation Systems Program
IG	Inspector General
IMO	Integration and Management Office
ISEB	International Space Education Board
ISS	International Space Station
IT	information technology
IV&V	Independent Verification and Validation
JASD	Joint Agency Satellite Division
JAXA	Japan Aerospace Exploration Agency
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
JWST	James Webb Space Telescope
KSC	Kennedy Space Center
LAL	Langley Aerothermodynamics Laboratory
LaRC	Langley Research Center
LEO	low-Earth orbit
LSP	Launch Services Program

10: Acronyms

MCMC	Mars Climate Modeling Center
MD	Mission Directorate
MESSENGER	MErcury Surface, Space ENvironment, GEochemistry and Ranging
MOU	Memorandum of Understanding
MSC	Mission Support Council
MSD	Mission Support Directorate
MSFC	Marshall Space Flight Center
NAC	NASA Advisory Council
NAI	NASA Astrobiology Institute
NARI	NASA Aeronautics Research Institute
NESC	NASA Engineering and Safety Center
NextGen	Next Generation Air Transportation System
NGO	nongovernmental organization
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NODIS	NASA Online Directives Information System
NOJMO	NASA Office of JPL Management and Oversight
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
NSC	National Security Council
NSDC	National Space Defense Center
NSF	National Science Foundation
NSpC	National Space Council
NSSC	NASA Shared Services Center
NTF	National Transonic Facility
OCE	Office of the Chief Engineer
OCFO	Office of the Chief Financial Officer
OCHCO	Office of the Chief Human Capital Officer
OCHMO	Office of the Chief Health and Medical Officer
OCIO	Office of the Chief Information Officer
OCOMM	Office of Communications
OCS	Office of the Chief Scientist
OCT	Office of the Chief Technologist
ODEO	Office of Diversity and Equal Opportunity
OES	Office of the Executive Secretariat

10: Acronyms

OFT	Orbital Flight Test
OGC	Office of the General Counsel
OIG	Office of Inspector General
OIIR	Office of International and Interagency Relations
OLIA	Office of Legislative and Intergovernmental Affairs
OMB	Office of Management and Budget
OP	Office of Procurement
OPF	Orbiter Processing Facility
OPM	Office of Personnel Management
OPS	Office of Protective Services
OPSEC	Operations Security
ORA	Office of Research Assurance
OSBP	Office of Small Business Programs
OSI	Office of Strategic Infrastructure
OSMA	Office of Safety and Mission Assurance
OSTEM	Office of Science, Technology, Engineering, and Mathematics (STEM) Engagement
OSTP	Office of Science and Technology Policy
OTPS	Office of Technology, Policy, and Strategy
PAMO	Portfolio Analysis and Management Office
PBR	President's Budget Request
PIV	Personal Identity Verification
PMIO	Program Management Improvement Officer
PPBE	Planning, Programming, Budgeting, and Execution
PPE	Power and Propulsion Element
QuAIL	Quantum Artificial Intelligence Laboratory
QueSST	Quiet Supersonic Transport
R&D	research and development
Roscosmos	Russia's space agency
S3VI	Small Spacecraft Systems Virtual Institute
SAO	Strategy and Architecture Office
SBIR	Small Business Innovation Research
SCaN	Space Communications and Navigation
SEP	solar electric propulsion
SLF	Shuttle Landing Facility
SLS	Space Launch System

10: Acronyms

SMA TA	Safety and Mission Assurance Technical Authority
SMD	Science Mission Directorate
SOFIA	Stratospheric Observatory for Infrared Astronomy
SOMD	Space Operations Mission Directorate
SPG	Strategic Programming Guidance
SSC	Stennis Space Center
SSERVI	Solar System Exploration Research Virtual Institute
SSMS	Safety, Security, and Mission Services
STEM	Science, Technology, Engineering, and Mathematics
STM	Space Traffic Management
STMD	Space Technology Mission Directorate
STTR	Small Business Technology Transfer
TACP	Transformative Aeronautics Concepts Program
TDD	Transformation and Data Division
TDT	Transonic Dynamics Tunnel
UAG	Users' Advisory Group
ULI	University Leadership Initiative
USCG	U.S. Coast Guard
USSF	United States Space Force
VAB	Vehicle Assembly Building
VST	Vertical Spin Tunnel
WFF	Wallops Flight Facility
WSTF	White Sands Test Facility
xEVA	Extravehicular Activity