

Cover Photo: [NASA](#)

# U.S. Civil Space Primer

BY Madeleine Chang

**THE CIVIL SPACE ECOSYSTEM** refers to departments, agencies, and organizations of the federal government that have operational, regulatory, policy, or other responsibilities over the space activities of the United States, including private sector space activities, which are non-military in nature. Civil space has its roots in the [National Aeronautics and Space Act of 1958](#), which separated military and civilian space government functions and emphasized the peaceful character of U.S. pursuits in space. The Act also established the National Aeronautics and Space Administration (NASA), the first U.S. government organization dedicated to the civilian use of space. Since the establishment of NASA, many other elements of the federal government have assumed operational, regulatory, policy, or other responsibilities over civil space. This article describes the roles and responsibilities of government organizations with civil space roles and aims to serve as an informational resource for researchers and practitioners.

The roles of the departments, agencies, and offices involved in civil space can be organized into four categories.

- Design and construct space equipment, such as spacecraft, components of spacecraft, and ground telescopes.
- Operate space systems, such as crewed and uncrewed spacecraft and satellites.
- Regulate or license private space activities, such as launches and spacecraft operations.
- Develop national space policy and coordinate with domestic and international government partners and private sector space stakeholders.

These colors appear in each section and describe the role or roles of each organization.

*Madeleine Chang is a Horizon Institute for Public Service Fellow in the Aerospace Security Project at the Center for Strategic and International Studies in Washington, D.C.*



## National Aeronautics and Space Administration (NASA)



**Mission:** “NASA studies Earth, including its climate, our Sun, and our solar system and beyond. We conduct research, testing, and development to advance aeronautics, including electric propulsion and supersonic flight. We develop and fund space technologies that will enable future exploration and benefit life on Earth.”

**Budget:** \$25 billion (FY23)<sup>1</sup>

**Size:** 18,000 employees (2023)

**Organization:** Headquartered in Washington, D.C., NASA runs the U.S. civil space program. NASA’s five mission directorates—Aeronautics, Exploration Systems, Science, Space Operations, and Space Technology—provide direction and prioritization for NASA activities. While NASA’s headquarters and directorates provide overall leadership, ten field centers located around the country manage and execute NASA’s day-to-day work. NASA conducts space launches at two NASA-operated sites and other locations operated by the Department of Defense and private companies.

### Highlights:

- Over 40 satellites [currently orbiting](#) the Earth
- [Six probes](#) exploring the solar system and beyond
- One [space station](#) in low Earth orbit

Below: U.S. Navy divers practice recovering the Orion crewed spacecraft capsule on October 31, 2018.  
Source: [NASA/Kim Shiflett](#).



---

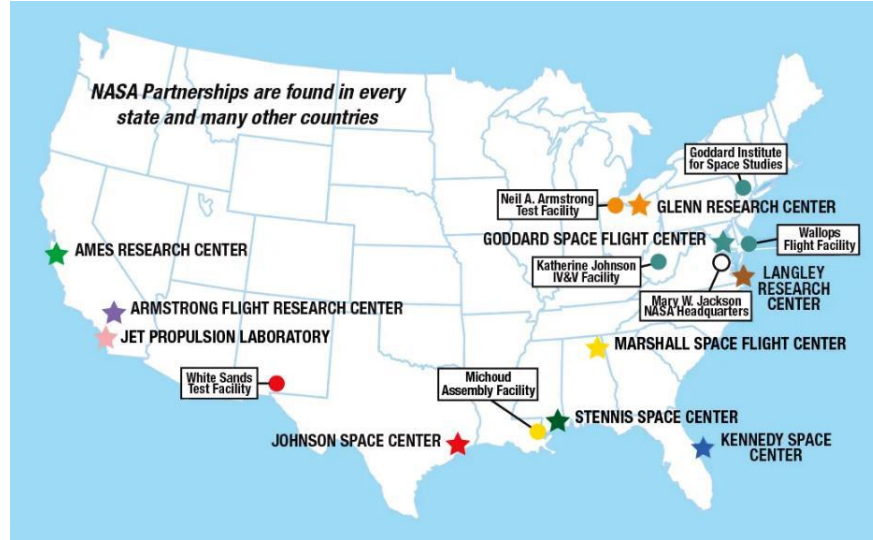
<sup>1</sup> Unless otherwise noted, all budget figures are fiscal year 2023 enacted appropriations.

## Overview

[NASA](#) is an independent federal agency that serves as the primary civil space agency of the United States. In 1958, NASA succeeded the National Advisory Committee for Aeronautics, which focused on aviation research, and [absorbed](#) parts of the Naval Research Laboratory, Army Ballistic Missile Agency, and the California Institute of Technology's Jet Propulsion Laboratory.

NASA manages human spaceflight programs and uncrewed exploration missions designed to study Earth, including its climate, the Sun, and other planets and objects both within and outside the solar system. It also conducts research, development, and testing to advance [aeronautics](#), including supersonic flight, electric air taxis, and efficient wing designs.

NASA also plays an important role in fostering international cooperation around the peaceful uses of outer space. In October 2020, NASA, in partnership with the Department of State, established the [Artemis Accords](#), a set of principles and best practices adhered to by the United States and other government signatories that is intended to guide their individual and collaborative activities in space exploration and the use of space, including the Moon and Mars. As of publication, the Artemis Accords has 39 [signatories](#). These include India, France, Israel, Nigeria, Singapore, and Ecuador but notably do not include Russia or China.



Above: NASA field centers are shown as stars and other sites and locations are circles. Source: [NASA](#).



## Human Spaceflight

The [Exploration Systems](#) and [Space Operations](#) mission directorates manage astronaut missions, including commercial launch services to the International Space Station, lunar orbital and lunar surface, and Mars exploration missions. NASA's human spaceflight efforts also include the [Artemis program](#), which aims to bring humans back to the Moon and explore the lunar surface, and the Moon to Mars program. The [Moon to Mars program](#) oversees the development of the Space Launch System rocket, Orion spacecraft, Gateway cislunar space station, supporting ground systems, human landing systems, and spacesuits and other initiatives related to deep space exploration.

Left: NASA's Space Launch System rocket and Orion spacecraft at Launch Pad 39B at Kennedy Space Center on March 18, 2022.

Source: [NASA/Kim Shiflett](#).



## Uncrewed Exploration and Science Missions

The [Science Mission Directorate](#) leads research efforts on the Earth's climate, the Sun, the solar system, exoplanets, and the origins of the universe. These efforts include the [James Webb Space Telescope](#), launched in December 2021, which orbits the Sun and conducts observations of distant galaxies and the early universe. Other uncrewed exploration missions include its predecessor, the [Hubble Space Telescope](#), a low Earth orbit satellite that collects data for astronomy research on nebulae, galaxies, and stars since 1990; [OSIRIS-REx](#), which returned a sample of the asteroid Bennu to Earth in September 2023; and the [Parker Solar Probe](#), which orbits the Sun to study solar wind and is demonstrating novel heat endurance technology.

Right: Technicians and engineers install the heat shield on NASA's Parker Solar Probe on June 27, 2018.

Source: [NASA/Glenn Benson](#).



## Technology Research and Development

The [Space Technology Mission Directorate](#) develops and demonstrates new space technologies that benefit NASA, commercial, and other government missions, prioritizing new capabilities for exploring the Moon and Mars. The directorate manages [small business research](#) programs, [public prizes](#) and crowdsourcing initiatives, and [partnerships](#) with academia and [industry](#). For example, NASA's [Starling mission](#) – a collaboration led by NASA's Ames Research Center with Blue Canyon Technologies, Rocket Lab, Stanford University, Emergent Space Technologies, CesiumAstro, and L3Harris – involves the launch in July 2023 and operation of four CubeSats in low Earth orbit that are demonstrating robotic swarm technologies in space, including group flight patterns, novel communications systems, positioning without GPS, and autonomous pointing to collect high quality data.



Left: Carina Nebula, released in 2022 as one of James Webb Space Telescope's very first science images. Source: [NASA/ESA/CSA/STScI](#).

# Federal Executive Departments

## Department of Commerce



### National Oceanic and Atmospheric Administration (NOAA)



**Mission:** “To understand and predict changes in climate, weather, ocean, and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine ecosystems and resources.”

**Budget:** \$6.5 billion (FY23) total; with \$1.7 billion for the National Environmental Satellite, Data, and Information Service (NESDIS) and \$70 million for the Office of Space Commerce

**Size:** 12,000 employees (2023)

**Organization:** NOAA has several offices:

- National Ocean Service
- National Marine Fisheries Service
- Office of Oceanic and Atmospheric Research
- National Weather Service
- NESDIS
- Office of Marine and Aviation Operations (OMAO)
- Office of Space Commerce (OSC)

**Highlights:** NOAA owns or operates a total of 17 satellites and regulates private remote sensing satellites.

## Overview

The [NOAA](#) scientific and regulatory mission is focused on six main areas: weather forecasting, Earth and climate observation, managing fisheries, maintaining safe and healthy ocean and coastal areas, research and development on environmental technologies, and the operation of ships, aircraft, and satellites that enable NOAA's scientific mission. It was formed in 1970 to bring together the U.S. Commission of Fish and Fisheries, the Weather Bureau, and the U.S. Coast and Geodetic Survey. NOAA owns 11 satellites and operates six more satellites on behalf of other agencies.

## National Environmental Satellite, Data, and Information Service (NESDIS)

[NESDIS](#) operates satellites and provides satellite data and imagery for NOAA's other offices and the public. These satellite missions include the Geostationary Operational Environmental Satellites (GOES)–R Series and the Joint Polar Satellite System (JPSS), both of which monitor global weather and climate conditions. Data provided by NESDIS is used by the National Weather Service, scientists, the commercial sector, and private citizens for weather forecasting and environmental monitoring.



Above: Hurricane Lee and Tropical Storm Margot captured on September 11, 2023, by NOAA's GOES East satellite. Source: [NOAA](#).

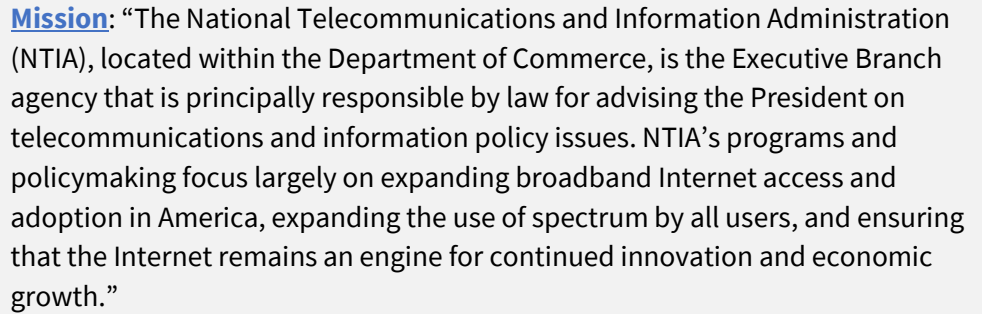
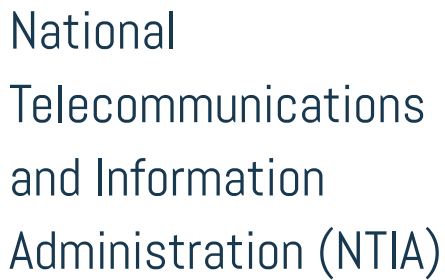
## Office of Space Commerce (OSC)

[OSC](#) oversees and promotes U.S. commercial space activities, leads space commerce policy activities within the Department of Commerce, and [licenses](#) the operation of private on-orbit remote sensing space systems, a recent transfer from NESDIS. Additionally, OSC is developing the [Traffic Coordination System for Space \(TraCSS\)](#) to provide basic space situational awareness (SSA) data and services to civil and private space operators and to support spaceflight safety, space sustainability, and international coordination. The office participates in government-wide discussions on space policy issues as well as internal efforts to increase NOAA's use of commercial space solutions. OSC also hosts the [National Coordination Office for Space-Based Positioning, Navigation, and Timing \(PNT\)](#), an interagency team focusing on GPS policy issues.

## National Geodetic Survey (NGS)

The [NGS](#), an agency within the National Ocean Service, maintains the [Continuously Operating Reference Stations \(CORS\)](#) network of reference stations supporting GPS operations. These stations are located strategically all around the world and have high-precision GPS receivers. Users can determine their positions relative to reference stations' broadcasted coordinates, with an [accuracy](#) of up to "a few centimeters, both horizontally and vertically."





**Size:** 290 employees (2023)

- Spectrum Management
- Internet Connectivity and Growth
- International Affairs
- Policy Analysis and Development
- Institute for Telecommunication Sciences
- Public Safety Communications

## Overview

NTIA is [responsible](#) for managing spectrum for federal use, advising the president on telecommunications and information policy issues, expanding broadband adoption and use of spectrum by all users, and encouraging the use of the Internet for innovation and economic growth. NTIA activities related to civil space include spectrum allocation for federal government satellites and space missions, identifying spectrum for commercial use, and conducting telecommunications research and engineering.

The chair of the FCC, who manages spectrum use for non-federal government users, and the NTIA administrator (also the assistant secretary of Commerce for communications and information) [meet](#) at least biannually to conduct joint spectrum planning. The NTIA also receives input on spectrum policy decisions from the Interdepartment Radio Advisory Committee, private sector spectrum experts, and NASA's Spectrum Policy and Planning Division.



Source: [NTIA](#).

## Others

Other offices in the Department of Commerce also [contribute](#) to aspects of civil space.

- The [National Institute of Standards and Technology \(NIST\)](#) maintains U.S. standards for [calibrating](#) satellites and other instruments. NIST has also issued [guidance](#) for space cybersecurity best practices.
- The [International Trade Administration](#) promotes U.S. aerospace companies exporting to international markets.
- The [Bureau of Industry and Security](#) enforces export controls on commercial space technologies and activities, as part of its responsibility to implement Export Administration Regulations (EAR), and conducts assessments of the U.S. space industrial base.
- The [Bureau of Economic Analysis](#) produces statistics on the U.S. space economy.



Above: Then-NOAA Office of Space Commerce Director Kevin O’Connell speaks at a space commerce workshop hosted by NTIA, NIST, NOAA, and the University of Colorado Boulder on September 12, 2019. Source: [NOAA/Office of Space Commerce](#).



# Department of Transportation



## Federal Aviation Administration (FAA)



**Mission:** “Our continuing mission is to provide the safest, most efficient aerospace system in the world.”

**Budget:** \$11.9 billion (FY23), including \$37.85 million specifically for commercial space transportation activities

**Size:** 39,500 employees (2023)

**Organization:** The FAA operates five main lines of business: Airports, Air Traffic Organization, Aviation Safety, Commercial Space Transportation, and Security & Hazardous Materials Safety. These functions are supported by fourteen offices within FAA headquarters in Washington, D.C., and other field and regional offices located around the country.

**Highlights:** Commercial space safety, licensing for launches, reentries, and spaceports, and regulations are done through the Office of Commercial Space Transportation.

## Overview

The FAA was [established in 1958](#) through the [Federal Aviation Act](#). The FAA certifies aircraft operation, maintenance, and manufacturing, maintains safe air traffic through control towers and airspace usage regulations, and conducts research on new systems and procedures for pilot, passenger, and public safety. While the FAA has historically been in charge of regulating civil aviation, it has only overseen commercial space transportation since 1995.

## Office of Commercial Space Transportation (AST)

AST was established in 1984 by the [Commercial Space Launch Act](#) and moved from the Office of the Secretary of Transportation into the FAA in 1995. AST [grants authorization](#) for non-U.S. government space launches, reentries, and the associated launch and reentry sites. The licensing process involves environmental and [safety](#) evaluations, as well as payload reviews. There are three categories of licenses: [vehicle operator](#) licenses for managing space launches and reentries, [experimental permits](#) for suborbital and reusable launch vehicles specifically for research and development, and [site operator licenses](#) for managing space launch and reentry sites.

Within AST, the Office of Spaceports supports site operator licensing and leads the [National Spaceport Interagency Working Group](#), which aims to develop a national spaceport strategy to support spaceport infrastructure, establish common standards for spaceport operation, and promote collaboration between federal and commercial spaceports. The working group includes the Department of State, the Department of Commerce, the Office of the Secretary of Defense, the U.S. Space Force, and NASA.

# Department of Energy



## Office of Nuclear Energy



**Mission:** “The Office of Nuclear Energy mission is to advance nuclear energy science and technology to meet U.S. energy, environmental, and economic needs.”

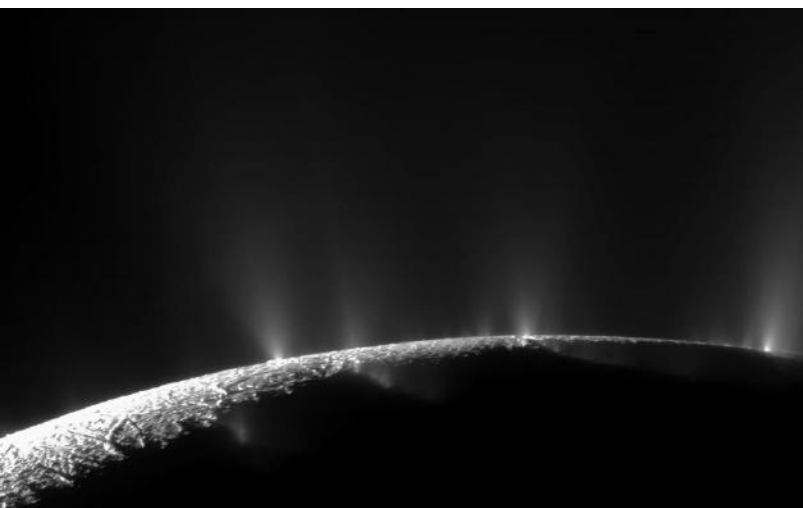
**Budget:** \$1.78 billion (FY23)

**Size:** 300 employees (2023)

**Highlights:** Delivers spacecraft power systems.

### Overview

The Office of Nuclear Energy within the Department of Energy (DOE) supports the research, development, and demonstration of nuclear energy technology, including advanced reactors, reactor infrastructure, and nuclear waste management. It also oversees the development and production of [radioisotope power systems](#), which use nuclear energy from radioactive decay to power probes, satellites, and rovers. The DOE also maintains responsibility for nuclear safety throughout all aspects of these space missions. This program is formalized by an official [memorandum of understanding](#) between the DOE and NASA. The radioisotope power systems are not funded by the DOE’s congressional appropriation but rather through [payments](#) from NASA and the Department of Defense (DOD).



Left: Geyser spray from Saturn’s moon Enceladus, imaged by NASA’s radioisotope-powered Cassini mission in 2009. Source: [NASA/JPL-Caltech-Space Science Institute](#).

## Department of the Interior



### U.S. Geological Survey (USGS)



**Mission:** “The USGS monitors, analyzes, and predicts current and evolving Earth-system interactions and delivers actionable information at scales and timeframes relevant to decision makers.”

**Budget:** \$1.5 billion (FY23)

**Size:** 8,960 employees (2023)

**Structure:** The USGS is a science bureau within the Department of the Interior. The director of the USGS reports to the Department of the Interior assistant secretary for water and science.

**Highlights:** Operates earth observation satellites.

### Overview

[Created](#) by an act of Congress in 1879, the [USGS](#) is the science arm of the Department of the Interior (DOI). The USGS develops and analyzes an array of earth, water, biological, and mapping data in support of decision-making on environmental, resource, and public safety issues.

The joint NASA-USGS [Landsat program](#) has provided a continuous space-based record of Earth’s land since the launch of Landsat 1 (then ERTS-1) in 1972. Landsat imaging has been crucial in informing decisions about Earth’s resources and environment. The eight operational Landsat satellites were built by NASA and are operated by the USGS. In FY 2023, the National Land Imaging Program (through which Landsat is [funded](#)) had a budget of [\\$116 million](#), compared to \$1.50 billion for USGS in total. NASA also contributes to Landsat program funding.



Right: Forest fires in Guatemala imaged by Landsat 8 on February 25, 2024.  
Source: [USGS/NASA Landsat](#).



# Department of State



**Mission:** “To protect and promote U.S. security, prosperity, and democratic values and shape an international environment in which all Americans can thrive.”

**Budget:** \$18.2 billion (FY23)

**Highlights:** Conducts diplomacy related to space through its Bureau of Oceans and International Environmental and Scientific Affairs (OES), Bureau of Arms Control, Deterrence, and Stability (ADS), and Bureau of Cyberspace and Digital Policy (CDP); manages export controls for space technology through the Bureau of Political-Military Affairs.

## Overview

The Department of State (DOS) leads U.S. foreign policy. In May 2023, the department released its first [Strategic Framework for Space Diplomacy](#), illustrating the United States’ commitment to cooperating with international partners on space activities and stopping destructive anti-satellite missile tests.

## Bureau of Oceans and International Environmental and Scientific Affairs (OES)

OES was [created](#) by Congress in 1974, combining the duties of former DOS offices related to science, technology, wildlife, oceans, and environmental affairs. It focuses on diplomacy related to science and technology issues, including signing treaties and issuing joint statements with international partners on the exploration and use of outer space for peaceful purposes.

## Office of Space Affairs

The Office of Space Affairs leads [U.S. diplomatic efforts](#) pertaining to space. The [responsibilities](#) of the office include:

- Leading the U.S. delegation to the [United Nations Committee on the Peaceful Uses of Outer Space](#).
- Maintaining the United States’ [registry of objects](#) launched into outer space.
- Overseeing international cooperation on the [International Space Station](#).
- Leading [consultations](#) with international partners on space policy and law.
- Leading interagency coordination on all civil space-related international agreements, including cooperation between NASA, NOAA, USGS, and other space agency partners.

## Bureau of Arms Control, Deterrence, and Stability (ADS)

ADS leads U.S. [diplomatic efforts](#) related to space security, including space cybersecurity, and space situational awareness. It was created in [November 2023](#), evolving from the Bureau of Arms Control, Verification and Compliance (AVC) established in 2010. ADS collaborates closely with the DOD, OES, NASA, the FAA, the Department of Commerce, and other agencies involved in space activity. For example, the leadership of OES and ADS [co-lead](#) the U.S. delegation to the 12th U.S. – European Union Space Dialogue in June 2023, with ADS leading the security discussions and OES leading the civil space portion.

## Bureau of Cyberspace and Digital Policy (CDP)

CDP, [established](#) in April 2022, conducts diplomacy related to cyberspace and the digital economy, including advocating for U.S. telecommunications services and infrastructure in international fora. CDP [helped lead](#) the U.S. delegation to the [International Telecommunications Union \(ITU\)](#) World Radiocommunication Conference 2023, at which participants discussed topics including international telecommunications standards and practices affecting inter-satellite links and large constellation regulation. The U.S. delegation included representatives from the Department of Commerce, the DOD, the FCC, NASA, the FAA, the DOE, the National Science Foundation, the White House Office of Science and Technology Policy, and private companies.

## Bureau of Political-Military Affairs (PM)

PM leads diplomatic efforts related to international and national security issues. The bureau's [Directorate of Defense Trade Controls \(DDTC\)](#) manages the implementation of the International Traffic in Arms Regulations (ITAR), which regulate exports of technologies with defense applications, including [spacecraft components](#).



Left: Members of the U.S. delegation at the World Radio Conference 2023.

Source: [ITU](#).

# Independent Executive Branch Organizations

---



## Federal Communications Commission (FCC)



**Mission:** “The Federal Communications Commission regulates interstate and international communications by radio, television, wire, satellite, and cable in all 50 states, the District of Columbia and U.S. territories. An independent U.S. government agency overseen by Congress, the Commission is the federal agency responsible for implementing and enforcing America’s communications law and regulations.”

**Budget:** \$390 million (FY23)

**Size:** 1,890 employees (2023)

**Highlights:** Allocates spectrum for non-federal satellites; creates and enforces policies for mitigating orbital debris.

## Overview

The [FCC](#) operates under a public interest mandate first laid out in the [1927 Radio Act](#) and is responsible for implementing and enforcing America’s communications law. It regulates interstate and international communications, including commercial spectrum use, across the United States, while [coordinating](#) closely with the ITU. [Created](#) in April 2023, the FCC’s [Space Bureau](#) leads policy and licensing for commercial communications [satellites](#), [ground stations](#), and other space-based communications and activities. The Space Bureau also coordinates with other federal agencies on space policy and works with the FCC’s Office of International Affairs on international and multilateral collaborations that involve satellite and space policy issues.

## Orbital Debris Regulation

While its primary role is spectrum regulation, the FCC expanded its remit to include orbital debris mitigation. The FCC released its [first report](#) on mitigating orbital debris in 2002, which stated that the FCC has the authority to address orbital debris and satellite systems under the [Communications Act](#), and its [2004 report](#) adopted rules on minimizing debris and post-mission disposal. The FCC released a [new report](#) in 2022 introducing a five-year requirement for deorbiting satellites based on the 2019 U.S. Government [Orbital Debris Mitigation Standard Practices](#). In October 2023, the FCC took its [first space debris enforcement action](#) when its [Enforcement Bureau](#) announced a settlement of \$150,000 and a compliance plan with DISH after the company failed to safely dispose of a direct broadcast satellite.





**Mission:** “The NRC licenses and regulates the Nation's civilian use of radioactive materials to provide reasonable assurance of adequate protection of public health and safety and to promote the common defense and security and to protect the environment.”

**Budget:** \$911 million (FY23)

**Size:** 3,000 employees

**Highlights:** Regulates nuclear power used in space systems.

## Overview

The [NRC](#) was created by Congress in 1974, succeeding the Atomic Energy Agency as the primary regulatory body for civilian nuclear technology. It licenses and regulates nuclear reactors, nuclear materials, and nuclear waste. Along with NASA, the DOD, the DOE, the DOS, the Department of Transportation, and the Environmental Protection Agency, the NRC is a member of the Interagency Nuclear Safety Review Board (INSRB), the government body [responsible](#) for assessing the safety of U.S. government launches that involve nuclear power sources. As an INSRB member, the NRC participates in nuclear-powered space missions in an advisory role. For example, NRC staff [conducted](#) a safety analysis on NASA’s Mars 2020 mission, which involved the launch and deployment of the radioisotope generator-equipped *Perseverance* rover.



Left: A selfie taken by NASA’s Perseverance Mars rover on January 22, 2023.

Source: [NASA/JPL-Caltech/MSSS](#).



## National Science Foundation (NSF)

**Mission:** “NSF was established in 1950 by Congress to:

- Promote the progress of science,
- Advance the national health, prosperity, and welfare, and
- Secure the national defense.”

**Budget:** \$9.5 billion (FY23)

**Size:** 1,500 employees

**Highlights:** Manages ground-based telescopes and funds space research.

### Overview

The [NSF](#) supports science and engineering, mainly through research grants, throughout the United States. It was [created](#) in 1950 by President Truman. The NSF supports astronomy research by issuing research grants and operating ground-based telescopes, including the [Laser Interferometer Gravitational-wave Observatory \(LIGO\)](#), which made the first observation of gravitational waves in 2015. Its other [telescopes](#) are located in Antarctica, Chile, and several U.S. states. Its civil space research portfolio includes the [effects of microgravity on the International Space Station](#) and the [analysis and development of communication networks used by satellites](#).



Right: LIGO’s gravitational wave detection facility in Livingston, Louisiana. LIGO also has a sister facility in Hanford, Washington. Source: [Caltech/MIT/LIGO Lab](#).

# Smithsonian Institution



## Smithsonian Astrophysical Observatory (SAO)



**Mission:** “The mission of the SAO is to advance the public’s knowledge and understanding of the universe through research and education in astronomy and astrophysics.”

**Budget:** \$26.4 million (FY23 estimate)

**Highlights:** Operates both ground-based telescopes and satellite instrumentation.

### Overview

The SAO is a [research bureau](#) within the Smithsonian Institution and, as of 1973, half of the Harvard-Smithsonian Center for Astrophysics. The Smithsonian Institution is about [62 percent](#) federally funded through congressional appropriations, with additional funding from donations, sales, and other programs. SAO scientists collaborate closely with the [NSF](#), [NASA](#), and the [DOE](#) to develop and operate space science missions.

The SAO operates ground-based telescope facilities, including the [Fred Lawrence Whipple Observatory](#) in Arizona and the [Submillimeter Array Telescope](#) in Hawaii. The SAO also operates instruments on NASA satellites and probes. These notably include the [High Resolution Camera](#) (HRC) on the Chandra X-ray Observatory and the [Solar Wind Electrons Alphas and Protons](#) (SWEAP) instruments on the Parker Solar Probe, which measure ions and electrons in the solar wind and solar corona.



Left: The Submillimeter Array of eight radio telescopes on Mauna Kea, Hawaii.

Source: [European Southern Observatory/J. Weintraub](#).



# Executive Office of the President



## National Space Council

The [National Space Council](#) is responsible for creating space policies that guide all U.S. space activities. Chaired by the vice president, the National Space Council advises and assists the president on the development and implementation of space policy and strategy and is composed of cabinet-level secretaries and other senior executive branch officials.

## Office of Management and Budget (OMB)

[OMB](#) oversees executive departments and agencies. This is the White House office that develops and releases the president's yearly budget request, including budget documents for NASA and all of the departments listed above. The director of OMB sits on the National Space Council.

## Office of Science and Technology Policy (OSTP)

[OSTP](#) advises the president on science and technology matters and coordinates federal policies to advance innovation, research, and development across many sectors. Its space policy documents include guidance on the [use of low earth orbit, in-space servicing, assembly, and manufacturing, aeronautics, and a cislunar strategy](#). The director of OSTP sits on the National Space Council.



Above: Vice President Kamala Harris delivers opening remarks at the Biden Administration's first meeting of its National Space Council on December 1, 2021. Source: [NASA/Joel Kowsky](#).

# Legislative Branch

---

## Congress ●

Congressional committees introduce legislation that governs and funds civil space activities, organizations, and personnel. They also oversee agencies within their subject areas.

The [Senate Committee on Commerce, Science, and Transportation](#) oversees the FAA, the FCC, NTIA, NOAA, NASA, NIST, and the NSF. The [Senate Committee on Energy and Natural Resources](#) oversees the DOE and DOI, while the [Senate Committee on Environment and Public Works](#) oversees the NRC. The [Senate Committee on Foreign Relations](#) oversees the DOS. Finally, the [Senate Committee on Rules and Administration](#) oversees the Smithsonian Institution

House oversight of civil space is divided between multiple committees. The [House Committee on Science, Space, and Technology](#) has broad jurisdiction over all commercial space, energy, astronautical, civil aviation, environmental, and marine research and the control of outer space, including NASA, the NSF, NIST, and most of NOAA's research and weather forecasting. The [House Committee on Transportation and Infrastructure](#) is responsible for reauthorization of the FAA, as well as NOAA's navigation and flood forecasting services, and the [House Committee on Energy and Commerce](#) oversees the FCC, NTIA, the DOE, and the NRC. The [House Foreign Affairs Committee](#) has jurisdiction over most DOS activities, including public diplomacy, international law, arms control issues, and export controls for dual-use equipment and technology. The [House Committee on Natural Resources](#) has jurisdiction over the DOI and NOAA's resource management programs. The [Committee on House Administration](#) oversees the Smithsonian Institution.

The [Senate](#) and [House Committees on Appropriations](#) and their subcommittees are in charge of appropriating congressional funds annually to each executive branch agency.

## Acknowledgements

---

The author would like to thank Kari Bingen, Clayton Swope, Laura Delgado Lopez, Louis Gleason, Stephanie Songer, Joel Burke, Di Cooke, Felipe Calero Forero, Jack Titus, Matthew Burtell, Nikhil Mulani, Thomas Woodside, and Kevin Li for their contributions.

## About CSIS

---

Established in Washington, D.C., over 50 years ago, the Center for Strategic and International Studies (CSIS) is a bipartisan, nonprofit policy research organization dedicated to providing strategic insights and policy solutions to help decisionmakers chart a course toward a better world.

In late 2015, Thomas J. Pritzker was named chairman of the CSIS Board of Trustees. Mr. Pritzker succeeded former U.S. senator Sam Nunn (D-GA), who chaired the CSIS Board of Trustees from 1999 to 2015. CSIS is led by John J. Hamre, president and chief executive officer since April 2000.

Founded in 1962 by David M. Abshire and Admiral Arleigh Burke, CSIS is one of the world's preeminent international policy institutions focused on defense and security; regional study; and transnational challenges ranging from energy and trade to global development and economic integration. For the past six years consecutively, CSIS has been named the world's number one think tank for international security by the University of Pennsylvania's "GoTo Think Tank Index."

The Center's 220 full-time staff and large network of affiliated scholars conduct research and analysis and develop policy initiatives that look to the future and anticipate change. CSIS is regularly called upon by Congress, the executive branch, and the media to explain the day's events and offer bipartisan recommendations to improve U.S. strategy.