



Updated June 23, 2025

Defense Primer: U.S. Space Command (SPACECOM)

U.S. Space Command (USSPACECOM or SPACECOM) is one of 11 *unified combatant commands* (CCMDs) within the Department of Defense (DOD) and is responsible for U.S. military operations in space. The term *unified combatant command* refers to “a military command which has broad, continuing missions and which is composed of forces from two or more military departments,” according to 10 U.S.C. §161. SPACECOM is distinct from, and complementary to, the U.S. Space Force (USSF), which is an armed service under the Department of the Air Force (DAF).

Background

SPACECOM was initially established in 1985. In 2002, Congress approved a broad reorganization of the CCMDs to facilitate DOD’s shift in focus to counterterrorism and homeland defense. This reorganization included the disestablishment of SPACECOM, and its responsibilities and assets were transferred to U.S. Strategic Command (STRATCOM). Driven by the increase in adversary space and counterspace capabilities, Congress, in the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (FY2019 NDAA; P.L. 115-232, §169), reconstituted SPACECOM as a subordinate unified command under STRATCOM. In 2019, the first Trump Administration elevated SPACECOM to a unified CCMD, citing space’s importance to U.S. national security.

Mission and Organization

According to SPACECOM, the command “plans, executes, and integrates military spacepower into multi-domain global operations in order to deter aggression, defend national interests, and when necessary, defeat threats.” The command is responsible for conducting space operations, sensor management, satellite communications management, and trans-regional missile defense. While DOD refers to SPACECOM as a geographic combatant command, the command’s area of responsibility (AOR) is astrographic in nature, beginning at the Kármán Line, 62 miles, or 100 km, above mean sea-level and extending to the moon and beyond (see **Figure 1**). SPACECOM is led by a four-star general or admiral; the current SPACECOM commander is USSF General Stephen Whiting. The command is currently headquartered at Peterson Space Force Base (SFB) in Colorado.

SPACECOM receives personnel and equipment from each of the military services to execute its mission. It is composed of five *service component commands*: U.S. Army Space and Missile Defense Command, U.S. Navy Space Command, U.S. Marine Corps Forces Space Command, Air Forces Space, and Space Forces—Space; and one *functional component command*: Combined Joint Space Force Component Command. Approximately 1,700

personnel are directly assigned to SPACECOM headquarters. Approximately 18,000 joint force personnel are assigned to the command’s service and functional component commands, which are based in six states.

Space Challenges and Threats

Space is an increasingly contested domain. The People’s Republic of China (PRC), the Russian Federation, and other adversaries have, or are developing, offensive space capabilities. In its 2025 annual threat assessment, the Defense Intelligence Agency (DIA) provided an overview of such capabilities, some of which are capable of harming or interfering with DOD and U.S. commercial assets in all orbits. These capabilities range from offensive cyber and electronic warfare platforms to ground- and space-based anti-satellite weapons.

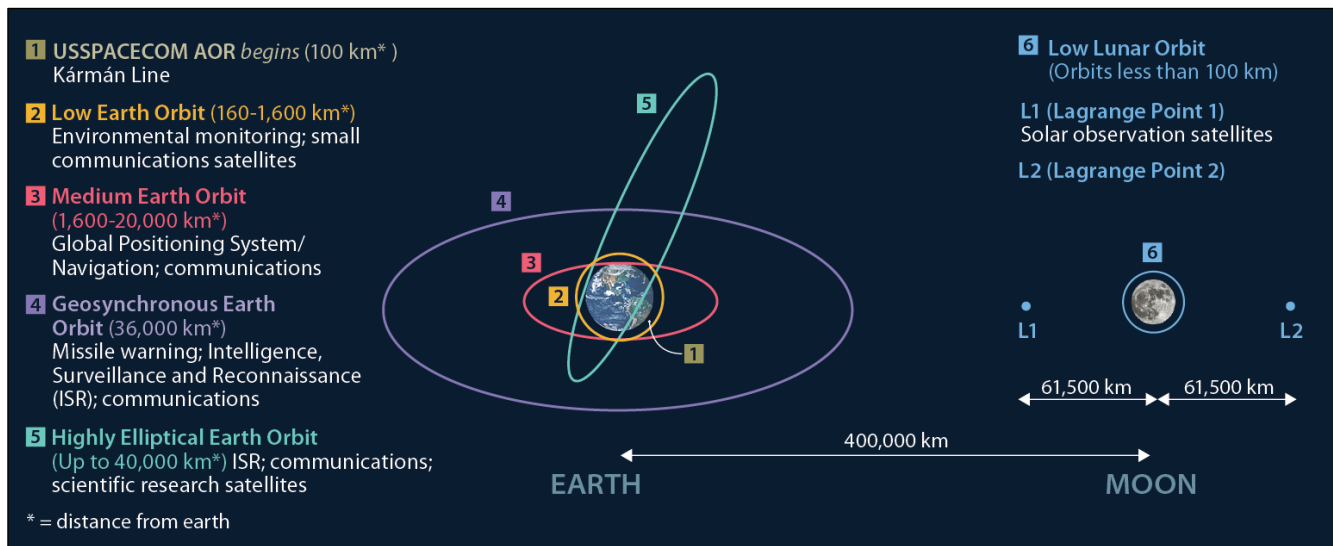
SPACECOM officials have raised concerns about adversary space capabilities. In February 2024, General Whiting testified to the Senate Armed Services Committee that the PRC and Russia seek to exploit perceived U.S. reliance on space systems through the development of military counterspace capabilities aimed at severely degrading U.S., allied, and partner space and terrestrial systems. In June 2025, a Member of the House Armed Services Committee expressed concerns regarding Russian preparations to deploy an on-orbit nuclear anti-satellite weapon in the near future.

DIA has outlined PRC and Russian pursuit of legally binding international space arms control agreements to curb what Russia “sees as U.S. strength in outer space.” Congress has oversight and accountability mechanisms available to influence such international agreements.

Potential Issues for Congress

SPACECOM Headquarters. Congress may consider whether or not to provide funding to build a permanent headquarters in Colorado Springs, CO, where it has been provisionally based; or whether to move the command to another location. In January 2021, the DAF selected Redstone Arsenal, in Huntsville, AL, to host SPACECOM headquarters, moving the command from its provisional location at Peterson SFB in Colorado Springs. The Biden Administration reversed that decision in July 2023.

Congress, in the FY2024 NDAA (P.L. 118-31, §2889), limited funds for headquarters construction in Colorado until June 30, 2024, when the DOD Inspector General (IG) and the U.S. Comptroller General were expected to complete new reviews of the decision. In April 2025, the DOD IG released its report. In May 2025, the Government Accountability Office released its report.

Figure 1. USSPACECOM Area of Responsibility

Source: CRS figure based on information from National Aeronautics and Space Administration and Air University.

The reports provide more detail on the timelines and criteria used to initially select Huntsville as the headquarters and to subsequently select Colorado Springs. The reports also raise questions regarding former President Joseph R. Biden's role in deciding to base SPACECOM in Colorado Springs. The GAO report states that the command "requires military construction of a permanent, purpose-built facility that is better suited to meet its unique power, information technology, square footage, and security needs." The reports' releases fulfill the congressional requirements necessary to release construction funding.

Some Members of Congress have reportedly stated that President Donald J. Trump would seek to move SPACECOM headquarters to Huntsville, perhaps using an executive order. Should the Trump Administration propose moving the location of the headquarters, or elements thereof, Congress may consider whether to support, oppose, or condition such a relocation.

Space Launch Infrastructure and Providers. Space launch capabilities are key to SPACECOM's ability to augment, reconstitute, and replenish satellites supporting military space missions. The CCMD relies on commercial providers to access space through the National Security Space Launch Program (NSSL), which is conducted by USSF. These launches largely occur at the federal space ranges located at Cape Canaveral Space Force Station in Florida, and Vandenberg SFB in California; these ranges are also used in an array of purely commercial operations. Some Members have expressed concerns regarding the ability of federal launch facilities to meet projected defense and commercial space launch demands. In accompanying its version of the FY2025 NDAA (H.R. 8070; H.Rept. 118-529, p. 316), HASC directed the Chief of Space Operations provide a briefing on the feasibility of expanding NSSL and payload processing programs to other federal space ranges.

The bulk of launch vehicles used for defense space missions are provided by two companies—United Launch Alliance and SpaceX. Some Members have expressed concerns about the Pentagon's reliance on SpaceX; the company provides the majority of NSSL support. Congress

could consider whether or not to adopt or encourage certain contracting approaches to promote more competition among launch providers.

Space Superiority. As a deterrent to space-based threats posed by the PRC and Russia, DOD is seeking to develop and deploy space-based weapons. In April 2025, General Whiting outlined a framework for fighting war in space. Some analysts have said improving U.S. space capabilities and China's own reliance on space were two factors likely to deter China from pursuing a conflict in space. Some add that the United States should bolster international efforts to improve space traffic management to limit the spread of orbital debris that could restrict safe operations in space. Members may consider plans to fund military space capabilities or not. Members may consider the extent to which increased military activity in space could put at risk civil, commercial, and military assets on orbit.

Golden Dome. The House-passed One Big Beautiful Bill Act (H.Rept. 119-106, §20003) would provide funding for Golden Dome-related programs. Members may consider requesting additional information on Golden Dome architecture from SPACECOM, which, according to the command, is helping draft an initial capabilities document to define Golden Dome requirements. Members may also seek information about the projected operational demands of Golden Dome on SPACECOM personnel and resources. The bill proposed funding for "space-based and boost phase intercept capabilities," for integrated air and missile defense. Some analysts have said fielding space-based interceptors may signal a shift in U.S. willingness to use kinetic counterspace weapons. Some Members have expressed concerns that these capabilities could destabilize nuclear deterrence. Members may seek to better understand the technical challenges, projected cost, and strategic implications of various potential space-based intercept architecture options.

Robert Switzer, U.S. Air Force Fellow
Jennifer DiMascio, Analyst in U.S. Defense Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.