Congressional Research Service
Informing the legislative debate since 1914

IN FOCUS

Updated September 12, 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 is astrographic in nature, beginning at the Kármán Line, 62 miles, or 100 km, above mean sea-level and extending beyond the moon (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), CO.

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 two *functional component commands*: Combined Joint Force Space Component Command and Joint Functional Component Command for Integrated Missile Defense. 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, located in Alabama, California, Colorado, Maryland, Nebraska, and New Mexico.

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.

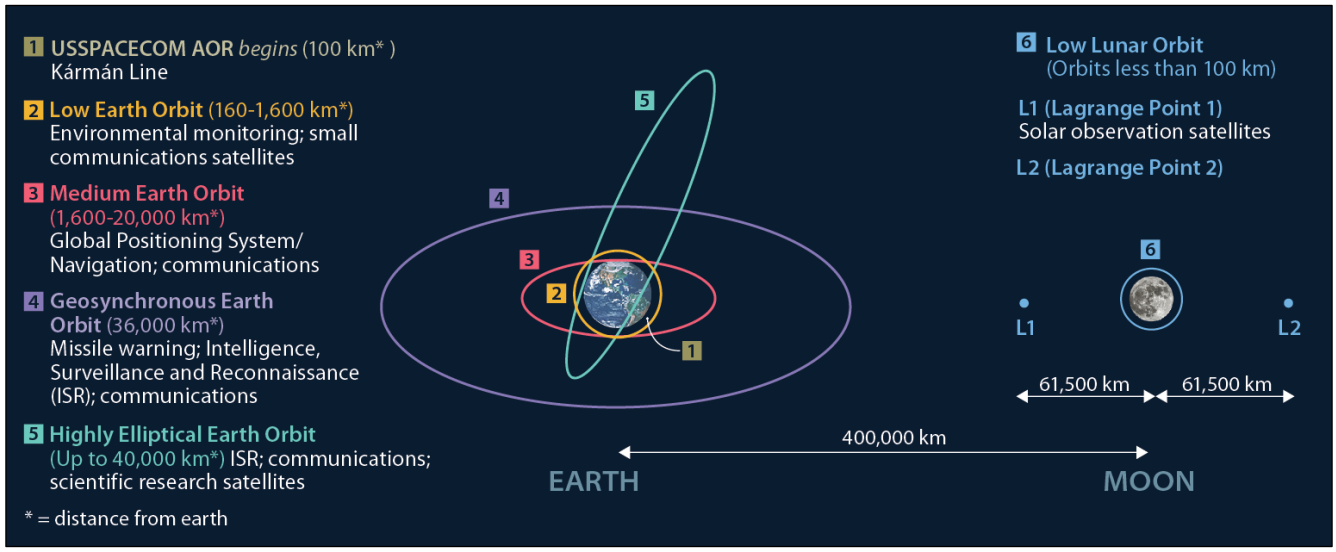
Potential Issues for Congress

SPACECOM Headquarters. The location of SPACECOM headquarters has been of interest to some Members. On September 2, 2025, President Donald J. Trump announced he would seek to move SPACECOM headquarters to Huntsville.

At its creation, SPACECOM was provisionally based at Peterson SFB in Colorado Springs. In January 2021, the DAF selected Redstone Arsenal, in Huntsville, AL, to host SPACECOM headquarters. The Biden Administration reversed that decision in July 2023, and sought to permanently base SPACEOM in Colorado Springs.

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 (GAO) released its report.

Figure 1. SPACECOM 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." The reports' releases fulfill the congressional requirements necessary to release construction funding.

The House and Senate Armed Services Committees, in reported guidance to DOD, identified $30 million of funding provided by the FY2025 reconciliation act (P.L. 119-21, §20009) for the design of Space Command Headquarters in Huntsville. Congress may consider whether to support, oppose, or condition further funding for such a relocation.

Space Launch Infrastructure and Providers. Space launch capabilities are key to SPACECOM's ability to augment, reconstitute, and replenish military satellites. 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. Some Members have expressed concerns regarding the ability of federal launch facilities to meet projected defense and commercial space launch demands. The House Armed Services Committee version of an FY2026 NDAA (H.R. 3838, §1605) and the Senate Armed Services Committee version (S. 2296, §1502) would direct reports regarding federal launch capacity.

Two companies—SpaceX and the United Launch Alliance—provide the bulk of launch vehicles for national security space missions. Some Members have expressed concerns about the Pentagon's reliance on SpaceX. 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 FY2025 reconciliation act (P.L. 119-21, §20003) provided 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 seek information about the projected operational demands of Golden Dome on SPACECOM personnel and resources. P.L. 119-21 provided funding for "space-based and boost phase intercept capabilities," for integrated air and missile defense. Some analysts have said fielding such 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 space-based intercept architecture options.

Robert Switzer, a former National Defense Fellow with CRS, contributed to this product.

Jennifer DiMascio, Analyst in U.S. Defense Policy

IF12840

Disclaimer