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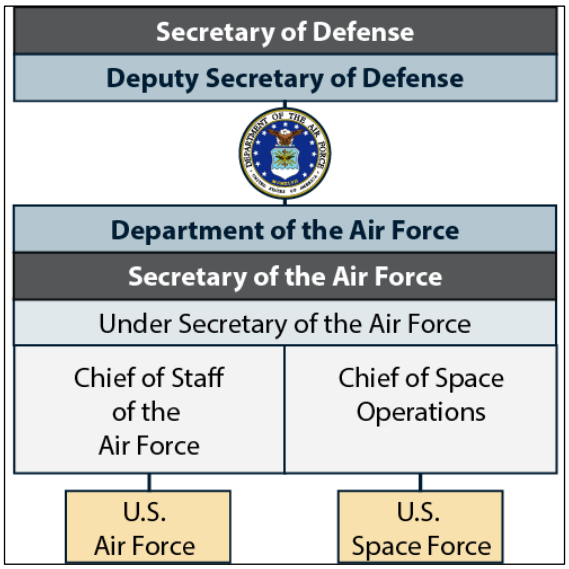
# Defense Primer: The United States Space Force

On December 20, 2019, the United States Space Force (USSF) became the sixth branch of the Armed Forces. The Space Force was established within the Department of the Air Force (DAF) with the enactment of the FY2020 National Defense Authorization Act ([NDAA], P.L. 116-92). The Secretary of the Air Force is responsible for organizing, training, and equipping the Space Force and the United States Air Force (USAF), two separate and distinct military uniformed services (see **Figure 1**). The current Chief of Space Operations (CSO) is General Chance Saltzman, who serves as the principal uniformed advisor for all space activities to the Secretary of the Air Force.

**Figure 1. Space Force Within DOD and DAF**




**Source:** Comprehensive Plan on the Organizational Structure of USSF (Department of the Air Force, report to congressional committees).

## Overview

The FY2020 NDAA assigned the Space Force the following duties: (1) protect the interests of the United States in space; (2) deter aggression in, from, and to space; and (3) conduct space operations. The military space forces provide freedom of operation in, from, and to the space domain. This includes both combat and space-focused combat support functions intended to enable the United States to promptly conduct offensive and defensive space operations to protect U.S. and allied interests in all war-fighting domains.

Except for functions unique to the space domain, in order to reduce cost and avoid duplication, the Space Force initially relied on the Air Force for approximately 75% of its enabling functions; for example, logistics, base operating support, civilian personnel management, IT support, and financial management.

## Space Force Stand-Up

The FY2020 NDAA redesignated Air Force Space Command (AFSPC), located at Peterson Air Force Base, CO, as the U.S. Space Force with Title 10 authorities. Subsequently, an estimated 16,000 military and civilian personnel assigned to the former AFSPC were reassigned to the Space Force. According to DOD, space-related Air Force personnel are to transfer into the Space Force and become Space Force Guardians in a deliberate manner. DOD also plans to consolidate space missions from across the Armed Forces into the Space Force as appropriate and consistent with law.

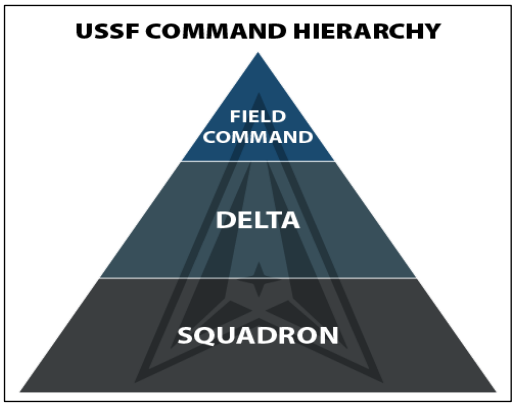
## Mission

The U.S. Space Force is responsible for organizing, training, and equipping Space Guardians to conduct global space operations that enhance the way joint and coalition forces fight, while also offering decisionmakers military options to achieve national objectives. Other responsibilities include "developing military space professionals, acquiring military space systems, maturing the military doctrine for space power, and organizing space forces to present to our Combatant Commands." DOD has said that the Space Force was formed to be lean, agile, and mission-focused in order to remove the traditional layers of bureaucracy. Some of the Space Force missions include Space Superiority; Space Domain Awareness (military, civil, and commercial); Offense and Defensive Space Control; Command and Control of Space Forces & Satellite Operations; Space Support Nuclear Command, Control, Communications; and Missile Warning/Defense Operations.

## Space Force Organization

The Office of the Chief of Space Operations and the Space Force Headquarters are located at the Pentagon. According to the Space Force, "this staff will focus on establishing a fully-functioning headquarters; preparing to execute the full scope of its organize, train, and equip responsibilities; and, in conjunction with the U.S. Air Force, developing a detailed plan to transfer forces into the U.S. Space Force." To pursue its goal of being lean, agile, and mission-focused and to remove the traditional layers of bureaucracy, the Space Force created a command hierarchy (see **Figure 2**) that consists of three levels: Field Commands led by a three-star general officer; Deltas, by a Colonel; and Squadrons, by field grade officers. The career tracks within the Space Force include space-specific operations, intelligence, engineering, acquisition, science, and cyber/communications.

**Figure 2. Space Force Organizational Structure**




**Source:** Figure created by CRS using data from U.S. Space Force.

## FY2024 Budget Request

Space Force requested $30.1 billion in FY2024, up from its FY2023 request of $24.5 billion. The FY2024 request included $19.2 billion for research, development, test, and evaluation; $5.0 billion for operations and maintenance; $4.7 billion for procurement; and $1.3 billion for military personnel (MILPERS). The FY2024 MILPERS request supports an end-strength of 9,400.

DOD's FY2024 budget included six major investment areas—totaling $25.8 billion—for space-based systems, as shown in **Table 1**.

**Table 1. FY2024 Space-Based Systems Request**

| Type | $ in billions |
|---|---|
| Space Procurement (Space Force) | $4.7 |
| System Development | $6.0 |
| Communications and Electronics | $0.4 |
| Advanced Component Development | $4.7 |
| Support | $2.8 |
| Operational System Development | $7.2 |
| **Total** | **$25.8** |

**Source:** *Program Acquisition Cost By Weapon System* (Department of Defense Fiscal Year 2024 Budget Request).

## Major Space Acquisition Programs

The FY2024 budget request for space-based systems included funding for the development and procurement of space-based spacecraft, launch vehicles, space command and control systems, and terrestrial satellite terminals and equipment. The major acquisition programs include the following:

- The **National Security Space Launch (NSSL)** program provides launch services for the Space Force, Air Force, Navy, the National Reconnaissance Office, Space Development Agency, and many other government agencies. This program provides assured access to space for the nation.
- The **Global Positioning System Enterprise** provides 24-hour-a-day, worldwide coverage, including all-weather 3-dimensional positioning, navigation, and timing for military and civilian users.
- The **Space Based Missile Warning Systems**—including Next Generation Overhead Persistent Infrared and Resilient Missile Warning and Missile Tracking—provide the initial warning of strategic missile attacks against the U.S. homeland, as well as deployed and allied forces.
- The **Satellite Communications (SATCOM) Projects** provide SATCOM in three capability areas: s*trategic* provides Nuclear Command, Control, and Communications (NC3); *protected* enables tactical communications in contested environments; and *wideband/narrowband* provides large amounts of throughput (i.e., data transfer) in less contested environments.

## Potential Issues for Congress

### Space National Guard

Some analysts and organizations, including the National Guard Association of the United States (NGAUS), have argued that DOD should establish a Space National Guard (SNG). In support of this position, NGAUS has stated that the lack of an SNG has "orphaned space professionals and operational missions that exist in the Air National Guard, disconnecting them from their parent service, the USSF, making their future unclear and undefined." The Biden Administration has opposed the establishment of an SNG, arguing that it would create an additional layer of bureaucracy, impede the Air Force's oversight duties, and fail to provide meaningful gains in capability. Furthermore, the Congressional Budget Office estimates that an SNG would cost around $500 million annually.

### Space Acquisitions

Congress has made repeated efforts to consolidate space acquisition authorities with the Assistant Secretary of the Air Force for Space Acquisition and Integration, who serves as the Service Acquisition Executive for Space Systems and Programs (see, for example, Section 957 of the FY2020 NDAA, Section 1601 of the FY2021 NDAA [P.L. 116-283], and Sections 1602 and 1603 of the FY2022 NDAA [P.L. 117-81]). Nonetheless, the Senate report accompanying the Senate version of the FY2023 NDAA (S.Rept. 117-130) notes that "when senior acquisition leadership presents space acquisition efforts to the congressional defense committees, they refer to decision making process as a 'unity of effort'" between various space-related organizations. The report directs the Defense Business Board and the Defense Innovation Board to review this unity of effort and make recommendations for the structure of space acquisitions. Congress may consider the findings of this review.

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