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). 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 John W. “Jay” Raymond, 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 of the United States 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 relies on the Air Force for approximately 75% of the foundational and infrastructure support for the Space Force. Some of these support functions include 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 authorization. Subsequently, an estimated 16,000 military and civilian personnel assigned to the former AFSPC were reassigned to the Space Force. The Air Force personnel who were reassigned to the Space Force and are in space-related positions are to transfer into the new service and become Space Force service members over the first 18 months. DOD’s future plans include consolidating all of the space missions currently residing across all the Armed Forces and placing them within the Space Force.

Mission
The U.S. Space Force organizes, trains, and equips space forces in order to protect U.S. and allied interests in space and to provide space capabilities to the joint force. Its 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.” According to DOD, the Space Force will 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 the military services 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 are 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.
The National Security Space Launch (NSSL) program would provide launch services for the Space Force, Air Force, Navy, the National Reconnaissance Office (NRO), Space Development Agency (SDA), and many other government agencies. DOD is currently developing two or more commercially viable space launch providers intended to meet U.S. NSSL requirements.

The Global Positioning System III and Projects would provide 24-hour-a-day, worldwide coverage, including positioning, navigation, and timing (PNT) for military and civilian users. The mission of the GPS III is to provide PNT coverage to all users around the globe.

The Space Based Overhead Persistent Infrared (OPIR) Systems would aim to provide the initial warning of ballistic missile attacks against the United States homeland, as well as deployed, and allied forces.

The Satellite Communications (SATCOM) Projects would provide SATCOM in three capability areas: strategic aims to provide Nuclear Command, Control, and Communications (NC3); protected is to enable tactical communications in a contested environment; and wideband/narrowband is to provide large amounts of throughput in a less contested environment.

Congressional Reports
The FY2020 NDAA directed the Secretary of the Air Force and the Secretary of Defense to provide various reports and briefings to the congressional defense committees on the establishment of the U.S. Space Force. The first report, Comprehensive Plan for the Organizational Structure of the U.S. Space Force, delivered to Congress in February 2020, provided a status update on implementation of the Space Force. As DOD and DAF continue to refine planning efforts, updates are to be provided accordingly. The next major milestone outlining the Space Force organizational design was due to Congress May 1, 2020. Since then, only a draft report was submitted to the defense committees.

Relevant Laws
Title 10, U.S. Code, Chapter 803 – Department of the Air Force

CRS Products
CRS In Focus IF10547, Defense Primer: The United States Air Force, by Jeremiah Gertler
CRS In Focus IF11326, Military Space Reform: FY2020 NDAA Legislative Proposals, by Stephen M. McCall

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