



April 1, 2024

Defense Primer: The United States Air Force

An executive order signed by then-President Harry S. Truman in 1947 established the U.S. Air Force as a separate service to be “organized, trained, and equipped primarily for prompt and sustained offensive and defensive air operations ... necessary for the effective prosecution of war except as otherwise assigned.” The National Security Act of 1947 provides statutory authority for the U.S. Air Force.

The Department of the Air Force (DAF) is a single military department that has two military services, the U.S. Air Force and the U.S. Space Force. The DAF is led by a single civilian leader, the Secretary of the Air Force. The four-star military Air Force chief of staff reports to the Air Force Secretary, as does the Space Force’s four-star Chief of Space Operations. The DAF is requesting a \$217.5 billion budget for FY2025.

Air Force Core Missions

The Air Force lists its core missions as air superiority, intelligence surveillance and reconnaissance, rapid global mobility, global strike, and command and control.

Air Superiority

Military experts define air superiority as establishing and maintaining control of the skies over conflict areas. The Air Force achieves air superiority by destroying enemy aircraft and infrastructure to restrict an opponent’s ability to conduct air operations. Air superiority allows air forces to provide direct support for ground forces, helping to identify and destroy targets and to prevent enemy air and missile threats from interfering with operations.

Air Force officials acknowledge that the proliferation of advanced air defense systems and long-range missiles have made consistent air superiority more difficult to achieve. They add that commanders will need to define the scope and duration of required air superiority in the future.

Intelligence, Surveillance, and Reconnaissance (ISR)

Through a mix of technologies and platforms, the Air Force collects, exploits, and disseminates information about adversaries and their capabilities. Air Force leaders contend that emerging technologies, such as cyber and electronic attacks, will threaten future ISR collection. The service is updating its current mix of platforms and systems.

Rapid Global Mobility

The Air Force’s mobility forces move cargo and personnel for a range of operations and missions around the world. Air Force aeromedical transport enables the timely evacuation and treatment those who are injured. Mobility forces support military operations, humanitarian missions,

and disaster-response efforts. And the Air Force’s aerial refueling tanker fleet delivers fuel to other aircraft in flight to enable long-range and long-endurance operations nearly anywhere on the globe.

Global Strike

The Air Force global strike missions are executed by part of the U.S. nuclear deterrent force. The Air Force develops and maintains two legs of the nuclear triad: bombers and land-based intercontinental ballistic missiles. Other global strike missions include providing close-air support for ground forces, interdicting enemy forces, and inserting special operations forces.

Command and Control (C2)

According to the Air Force, command and control systems coordinate joint operations using “centralized command, distributed control and decentralized execution.” To stay ahead of emerging adversary threats, the Air Force maintains it is integrating its command, control, communications and battle management programs, replacing outdated systems, and incorporating artificial intelligence technologies.

Organization

Air Force Secretary Frank Kendall is the service’s civilian leader; Chief of Staff of the Air Force General David Allvin reports to him. Allvin is the Air Force’s senior uniformed leader. In 2019, the National Defense Authorization Act of Fiscal Year 2020 (P.L. 116-92) directed the creation of the U.S. Space Force as a sixth branch of the military, also reporting to the civilian leader of the DAF.

The Air Force has eight function-based major commands and two major commands organized by geographic region. Function-based commands include Air Combat Command, Air Education and Training Command, Air Force Materiel Command, Air Force Reserve Command, Air Force Space Command, Air Force Special Operations Command, and Air Mobility Command. The remaining two geographically oriented commands are Pacific Air Forces and United States Air Forces in Europe-Air Forces Africa.

Numbered air forces are subordinate to major commands. The numbered air forces are supported by wings, which are supported by groups. Groups are supported by squadrons.

Personnel

The DAF’s FY2025 requested end strength, the number of authorized personnel for the service on September 30, 2024, is 504,500 military personnel and 183,100 civilians:

- 320,000 in the active Air Force,

- 9,800 in the active Space Force,
- 67,000 in the Air Force Reserve,
- 107,700 in the Air National Guard,
- 177,800 Air Force civilians, and
- 5,300 Space Force civilians.

Basing

The DAF has indicated that it uses a standard process for basing decisions that result from numeric changes in personnel or weapons systems, as well as movement of units, missions, or weapons systems to DAF property. The service considers mission and strategic factors, installation capacity, and environmental impacts. The Secretary of the Air Force makes decisions about weapons systems changes and any action involving more than 200 personnel. The service briefs Congress after the secretary has approved basing criteria, validated candidates, approved a preferred location, and issued a final decision.

Air Force Aircraft Inventory

As of September 30, 2022, the Air Force reported an inventory of 5,519 aircraft:

Table 1. Air Force Aircraft

Type	Number
Bomber	141
Fighter/Attack	2,214
Rotorcraft	192
Special Mission Aircraft	504
Special Operations	143
Tanker	498
Training	1,180
Transport	647

Source: Air Force & Space Force Almanac 2023 | Air & Space Forces Magazine (airandspaceforces.com).

Notes: Special Mission Aircraft includes platforms conducting intelligence, surveillance and reconnaissance, battle management, and command, control and communications missions. Some are unmanned aerial vehicles (UAVs).

Great Power Competition

Secretary Kendall has described the strategic environment facing the United States as an “era of Great Power Competition” with China and Russia. Kendall asserts that the People’s Republic of China is “the Air Force’s most formidable competitor since the Soviet Union and perhaps in its history.” Over the past 20 years, China has developed long-range missiles that may threaten U.S. military installations across the Pacific and more sophisticated air defenses and cyber, nuclear, and space capabilities. The Air Force has seemingly oriented its future plans for modernization and organization to meet those threats. For example, the Air Force has indicated that it is integrating

network systems, conducting more large-scale military exercises, and continuing modernization investment plans.

Major Investment Programs

The Air Force is undertaking several research and development efforts to aid integrated deterrence and future security challenges, including the following:

- The **LGM-35 Sentinel** program to design, develop, produce, and deploy a new intercontinental ballistic missile to replace the Minuteman III. The service’s budget documents state it will eventually request the purchase of 634 of these weapons.
- The **Next-Generation Air Dominance (NGAD)** fighter program to replace the F-22 Raptor. The Air Force is proposing to award an engineering and manufacturing development contract as soon as summer 2024.
- The **Collaborative Combat Aircraft** program to develop uncrewed aircraft to fly alongside NGAD or F-35 fighters or other traditionally piloted aircraft. The service has started an active competition.
- The **Advanced Battle Management System**, a network intended to link data across domains and allow disparate platforms to work together.

The Air Force is also continuing several major procurement programs, including the following:

- The **B-21 Raider** stealth bomber made its first flight on November 10, 2023. Air Force budget documents state that the bomber will be delivered to operational bases in the mid-2020s. Air Force officials add that the service intends to purchase at least 100 B-21 bombers.
- The **F-35A Lightning II** fighter is the Air Force’s leading strike fighter. The U.S. Navy and Marine Corps operate variants of this fighter, and the aircraft has been sold to 17 nations. The Air Force’s F-35 program of record calls for an eventual fleet of 1,763 F-35As.
- The **KC-46A** tanker would replace aging KC-135 aircraft. The Air Force signed a contract in 2011 with Boeing for the development and purchase of 179 KC-46A tankers. It is increasing the program of record to 183 aircraft.

Issues for Congress

The Air Force has again proposed divesting fighter aircraft to invest in future fighter research. Congress may consider the appropriate level of investment, if any, for each platform; what the future fighter force mix could potentially include; and how retirements could affect individual bases. In addition, Secretary Kendall has proposed reorganizing the service. Congress has requested more detail before approving funding transfers for initial changes and may conduct oversight of the plan in more detail for FY2025.

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