

United States Air Force

From Wikipedia, the free encyclopedia

<https://en.wikipedia.org/wiki/United%20States%20Air%20Force>

Licensed under CC BY-SA 3.0:

https://en.wikipedia.org/wiki/Wikipedia:Text_of_Creative_Commons_Attribution-ShareAlike_3.0_Unported_License

United States Air Force

- *Air Force components are assigned, as directed by the Secretary of Defense, to the combatant commands, and neither the Secretary of the Air Force nor the Chief of Staff of the Air Force have operational command authority over them.*
- *The Air Force, through the Department of the Air Force, is headed by the civilian Secretary of the Air Force, who reports to the Secretary of Defense, and is appointed by the President with Senate confirmation.*

The United States Air Force (USAF) is the aerial and space warfare service branch of the United States Armed Forces. It is one of the five branches of the United States Armed Forces, and one of the seven American uniformed services. Initially formed as a part of the United States Army on 1 August 1907, the USAF was established as a separate branch of the U.S. Armed Forces on 18 September 1947 with the passing of the National Security Act of 1947. It is the youngest branch of the U.S. Armed Forces, and the fourth in order of precedence. The USAF is the largest and most technologically advanced air force in the world. The Air Force articulates its core missions as air and space superiority, global integrated intelligence, surveillance, and reconnaissance, rapid global mobility, global strike, and command and control.

The U.S. Air Force is a military service branch organized within the Department of the Air Force, one of the three military departments of the Department of Defense. The Air Force, through the Department of the Air Force, is headed by the civilian Secretary of the Air Force, who reports to the Secretary of Defense, and is appointed by the President with Senate confirmation. The highest-ranking military officer in the Air Force is the Chief of Staff of the Air Force, who exercises supervision over Air Force units and serves as one of the Joint Chiefs of Staff. Air Force components are assigned, as directed by the Secretary of Defense, to the combatant commands, and neither the Secretary of the Air Force nor the Chief of Staff of the Air Force have operational command authority over them.

Along with conducting independent air and space operations, the U.S. Air Force provides air support for land and naval forces and aids in the recovery of troops in the field. As of 2017[update], the service operates more than 5,369 military aircraft, 406 ICBMs and 170

military satellites. It has a \$161 billion budget and is the second largest service branch, with 321,444 active duty airmen, 141,800 civilian personnel, 69,200 reserve airmen, and 105,700 Air National Guard airmen.

Mission, vision, and functions

Missions

- *The stated mission of the USAF today is to "fly, fight, and win...in air, space, and cyberspace".*
- *to preserve the peace and security, and provide for the defense, of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;*

According to the National Security Act of 1947 (61 Stat. 502), which created the USAF:

§8062 of Title 10 US Code defines the purpose of the USAF as:

to preserve the peace and security, and provide for the defense, of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;

to support national policy;

to implement national objectives;

to overcome any nations responsible for aggressive acts that imperil the peace and security of the United States.

The stated mission of the USAF today is to "fly, fight, and win...in air, space, and cyberspace".

Vision

- *We will excel as stewards of all Air Force resources in service to the American people, while providing precise and reliable Global Vigilance, Reach and Power for the nation".*
- *"The United States Air Force will be a trusted and reliable joint partner with our sister services known for integrity in all of our activities, including supporting the joint mission first and foremost.*

"The United States Air Force will be a trusted and reliable joint partner with our sister services known for integrity in all of our activities, including supporting the joint mission first and foremost. We will provide compelling air, space, and cyber capabilities for use by the combatant commanders. We will excel as stewards of all Air Force resources in service to the American people, while providing precise and reliable Global Vigilance, Reach and Power for the nation".

Core missions

- *The five core missions of the Air Force have not changed dramatically since the Air Force became independent in 1947, but they have evolved, and are now articulated as air and space superiority, global integrated intelligence, surveillance, and reconnaissance, rapid global mobility, global strike, and command and control.*

The five core missions of the Air Force have not changed dramatically since the Air Force became independent in 1947, but they have evolved, and are now articulated as air and space superiority, global integrated intelligence, surveillance, and reconnaissance, rapid global mobility, global strike, and command and control. The purpose of all of these core missions is to provide, what the Air Force states as, global vigilance, global reach, and global power.



First F-35 Lightning II of the 33rd Fighter Wing arrives at Eglin AFB



Launch of an Air Force Delta IV heavy rocket carrying a DSP-23 early warning satellite

Air and space superiority

- *Air superiority is "that degree of dominance in the air battle of one force over another which permits the conduct of operations by the former and its related land, sea, air, and special operations forces at a given time and place without prohibitive interference by the opposing force" (JP 1-02).*
- *70% of all satellites currently in orbit belong to and are operated by the Air Force.*
- *The U.S. Air Force currently handles 90% of all military space operations through Air Force Space Command and has been designated the primary service for space.*

Air superiority is "that degree of dominance in the air battle of one force over another which permits the conduct of operations by the former and its related land, sea, air, and special operations forces at a given time and place without prohibitive interference by the opposing force" (JP 1-02).

Offensive Counterair (OCA) is defined as "offensive operations to destroy, disrupt, or neutralize enemy aircraft, missiles, launch platforms, and their supporting structures and systems both before and after launch, but as close to their source as possible" (JP 1-02). OCA is the preferred method of countering air and missile threats since it attempts to defeat the enemy closer to its source and typically enjoys the initiative. OCA comprises attack operations, sweep, escort, and suppression/destruction of enemy air defense.

Defensive Counter air (DCA) is defined as "all the defensive measures designed to detect, identify, intercept, and destroy or negate enemy forces attempting to penetrate or attack through friendly airspace" (JP 1-02). A major goal of DCA operations, in concert with OCA operations, is to provide an area from which forces can operate, secure from air and missile threats. The DCA mission comprises both active and passive defense measures. Active defense is "the employment of limited offensive action and counterattacks to deny a contested area or position to the enemy" (JP 1-02). It includes both ballistic missile defense and air-breathing threat defense, and encompasses point defense, area defense, and high-value airborne asset defense. Passive defense is "measures taken to reduce the probability of and to minimize the effects of damage caused by hostile action without the intention of taking the initiative" (JP 1-02). It includes detection and warning; chemical, biological, radiological, and nuclear defense; camouflage, concealment, and deception; hardening; reconstitution; dispersion; redundancy; and mobility, counter-measures, and stealth.

Airspace control is "a process used to increase operational effectiveness by promoting the safe, efficient, and flexible use of airspace" (JP 1-02). It promotes the safe, efficient, and flexible use of airspace, mitigates the risk of fratricide, enhances both offensive and defensive operations, and permits greater agility of air operations as a whole. It both deconflicts and facilitates integration of joint air operations.

Space superiority is "the degree of dominance in space of one force over another that permits the conduct of operations by the former and its related land, sea, air, space, and special operations forces at a given time and place without prohibitive interference by the opposing force" (JP 1-02). Space superiority may be localized in time and space, or it may be broad and enduring. Space superiority provides freedom of action in space for friendly forces and, when directed, denies the same freedom to the adversary.

Space Force Enhancement is defined as the "combat support operations and force-multiplying capabilities delivered from space systems to improve the effectiveness of military forces as well as support other intelligence, civil, and commercial users. This mission area includes: intelligence, surveillance, and reconnaissance; integrated tactical warning and attack assessment; command, control, and communications; positioning, navigation, and timing; and environmental monitoring" (JP 1-02).

Space Force Application is defined as "combat operations in, through, and from space to influence the course and outcome of conflict. This mission area includes ballistic missile defense and force projection" (JP 1-02).

Space Control is defined as "operations to ensure freedom of action in space for the US and its allies and, when directed, deny an adversary freedom of action in space. This mission area includes: operations conducted to protect friendly space capabilities from attack, interference, or unintentional hazards (defensive space control); operations to deny an adversary's use of space capabilities (offensive space control); and the requisite current and predictive knowledge of the space environment and the operational environment upon which space operations depend (space situational awareness)" (JP 1-02).

Space Support is defined as "operations to deploy and sustain military and intelligence systems in space. This mission area includes: launching and deploying space vehicles; maintaining and sustaining spacecraft on-orbit, rendezvous and proximity operations; disposing of (including de-orbiting and recovering) space capabilities; and reconstitution of space forces, if required" (JP 1-02).

The U.S. Air Force currently handles 90% of all military space operations through Air Force Space Command and has been designated the primary service for space. 70% of all satellites currently in orbit belong to and are operated by the Air Force.



An Air Force RQ-4 strategic reconnaissance aircraft

Global integrated ISR

- *Collection activities span the Range of Military Operations (ROMO).*

Global integrated intelligence, surveillance and reconnaissance (ISR) is the synchronization and integration of the planning and operation of sensors, assets, and processing,

exploitation, dissemination systems across the globe to conduct current and future operations.

Planning and directing is "the determination of intelligence requirements, development of appropriate intelligence architecture, preparation of a collection plan, and issuance of orders and requests to information collection agencies" (JP 2-01, Joint and National Intelligence Support to Military Operations). These activities enable the synchronization and integration of collection, processing, exploitation, analysis, and dissemination activities/resources to meet information requirements of national and military decision makers.

Collection is "the acquisition of information and the provision of this information to processing elements" (JP 2-01). It provides the ability to obtain required information to satisfy intelligence needs (via use of sources and methods in all domains). Collection activities span the Range of Military Operations (ROMO).

Processing and exploitation is "the conversion of collected information into forms suitable to the production of intelligence" (JP 2-01). It provides the ability, across the ROMO, to transform, extract, and make available collected information suitable for further analysis or action.

Analysis and production is "the conversion of processed information into intelligence through the integration, evaluation, analysis, and interpretation of all source data and the preparation of intelligence products in support of known or anticipated user requirements" (JP 2-01). It provides the ability to integrate, evaluate, and interpret information from available sources to create a finished intelligence product for presentation or dissemination to enable increased situational awareness.

Dissemination and integration is "the delivery of intelligence to users in a suitable form and the application of the intelligence to appropriate missions, tasks, and functions" (JP 2-01). It provides the ability to present information and intelligence products across the ROMO enabling understanding of the operational environment to military and national decision makers.



An Air Force KC-46 Pegasus refuels a C-17A Globemaster III

Rapid global mobility

- *Airlift is "operations to transport and deliver forces and materiel through the air in support of strategic, operational, or tactical objectives" (Annex 3–17, Air Mobility Operations).*
- *Air refueling extends presence, increases range, and serves as a force multiplier.*
- *Air refueling is "the refueling of an aircraft in flight by another aircraft" (JP 1-02).*

Rapid global mobility is the timely deployment, employment, sustainment, augmentation, and redeployment of military forces and capabilities across the ROMO. It provides joint military forces the capability to move from place to place while retaining the ability to fulfill their primary mission. Rapid Global Mobility is essential to virtually every military operation, allowing forces to reach foreign or domestic destinations quickly, thus seizing the initiative through speed and surprise.

Airlift is "operations to transport and deliver forces and materiel through the air in support of strategic, operational, or tactical objectives" (Annex 3–17, Air Mobility Operations). The rapid and flexible options afforded by airlift allow military forces and national leaders the ability to respond and operate in a variety of situations and time frames. The global reach capability of airlift provides the ability to apply US power worldwide by delivering forces to crisis locations. It serves as a US presence that demonstrates resolve and compassion in humanitarian crisis.

Air refueling is "the refueling of an aircraft in flight by another aircraft" (JP 1-02). Air refueling extends presence, increases range, and serves as a force multiplier. It allows air assets to more rapidly reach any trouble spot around the world with less dependence on forward staging bases or overflight/landing clearances. Air refueling significantly expands the options available to a commander by increasing the range, payload, persistence, and flexibility of receiver aircraft.

Aeromedical evacuation is "the movement of patients under medical supervision to and between medical treatment facilities by air transportation" (JP 1-02). JP 4-02, Health Service Support, further defines it as "the fixed wing movement of regulated casualties to and between medical treatment facilities, using organic and/or contracted mobility airframes, with aircrew trained explicitly for this mission." Aeromedical evacuation forces can operate as far forward as fixed-wing aircraft are able to conduct airland operations.



An Air Force A-10 demonstrating close air support at Nellis AFB



Test launch of a LGM-30 Minuteman Intercontinental Ballistic Missile from Vandenberg AFB

Global strike

- *Close Air Support is defined as "air action by fixed- and rotary-winged aircraft against hostile targets that are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces" (JP 1-02).*
- *The Air Force may present a credible force posture in either the Continental United States, within a theater of operations, or both to effectively deter the range of potential adversaries envisioned in the 21st century.*

Global precision attack is the ability to hold at risk or strike rapidly and persistently, with a wide range of munitions, any target and to create swift, decisive, and precise effects across multiple domains.

Strategic attack is defined as "offensive action specifically selected to achieve national strategic objectives. These attacks seek to weaken the adversary's ability or will to engage

in conflict, and may achieve strategic objectives without necessarily having to achieve operational objectives as a precondition" (Annex 3-70, Strategic Attack).

Air Interdiction is defined as "air operations conducted to divert, disrupt, delay, or destroy the enemy's military potential before it can be brought to bear effectively against friendly forces, or to otherwise achieve JFC objectives. Air Interdiction is conducted at such distance from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required" (Annex 3-03, Counterland Operations).

Close Air Support is defined as "air action by fixed- and rotary-winged aircraft against hostile targets that are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces" (JP 1-02). This can be as a pre-planned event or on demand from an alert posture (ground or airborne). It can be conducted across the ROMO.

The purpose of nuclear deterrence operations (NDO) is to operate, maintain, and secure nuclear forces to achieve an assured capability to deter an adversary from taking action against vital US interests. In the event deterrence fails, the US should be able to appropriately respond with nuclear options. The sub-elements of this function are:

Assure/Dissuade/Deter is a mission set derived from the Air Force's readiness to carry out the nuclear strike operations mission as well as from specific actions taken to assure allies as a part of extended deterrence. Dissuading others from acquiring or proliferating WMD, and the means to deliver them, contributes to promoting security and is also an integral part of this mission. Moreover, different deterrence strategies are required to deter various adversaries, whether they are a nation state, or non-state/transnational actor. The Air Force maintains and presents credible deterrent capabilities through successful visible demonstrations and exercises which assure allies, dissuade proliferation, deter potential adversaries from actions that threaten US national security or the populations and deployed military forces of the US, its allies and friends.

Nuclear strike is the ability of nuclear forces to rapidly and accurately strike targets which the enemy holds dear in a devastating manner. If a crisis occurs, rapid generation and, if necessary, deployment of nuclear strike capabilities will demonstrate US resolve and may prompt an adversary to alter the course of action deemed threatening to our national interest. Should deterrence fail, the President may authorize a precise, tailored response to terminate the conflict at the lowest possible level and lead to a rapid cessation of hostilities. Post-conflict, regeneration of a credible nuclear deterrent capability will deter further aggression. The Air Force may present a credible force posture in either the Continental United States, within a theater of operations, or both to effectively deter the range of potential adversaries envisioned in the 21st century. This requires the ability to engage targets globally using a variety of methods; therefore, the Air Force should possess the ability to induct, train, assign, educate and exercise individuals and units to rapidly and effectively execute missions that support US NDO objectives. Finally, the Air Force regularly

exercises and evaluates all aspects of nuclear operations to ensure high levels of performance.

Nuclear surety ensures the safety, security and effectiveness of nuclear operations. Because of their political and military importance, destructive power, and the potential consequences of an accident or unauthorized act, nuclear weapons and nuclear weapon systems require special consideration and protection against risks and threats inherent in their peacetime and wartime environments. The Air Force, in conjunction with other entities within the Departments of Defense or Energy, achieves a high standard of protection through a stringent nuclear surety program. This program applies to materiel, personnel, and procedures that contribute to the safety, security, and control of nuclear weapons, thus assuring no nuclear accidents, incidents, loss, or unauthorized or accidental use (a Broken Arrow incident). The Air Force continues to pursue safe, secure and effective nuclear weapons consistent with operational requirements. Adversaries, allies, and the American people must be highly confident of the Air Force's ability to secure nuclear weapons from accidents, theft, loss, and accidental or unauthorized use. This day-to-day commitment to precise and reliable nuclear operations is the cornerstone of the credibility of the NDO mission. Positive nuclear command, control, communications; effective nuclear weapons security; and robust combat support are essential to the overall NDO function.



Combined Air and Space Operations Center at Al Udeid Air Base

Command and control

- *This core function includes all of the C2-related capabilities and activities associated with air, space, cyberspace, nuclear, and agile combat support operations to achieve strategic, operational, and tactical objectives.*
- *At the operational level command and control, campaigns and major operations are planned, conducted, sustained, and assessed to accomplish strategic goals within theaters or areas of operations.*

Command and control is "the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission" (JP 1-02). This core function includes all of the C2-related capabilities and activities associated with air, space, cyberspace, nuclear, and agile combat support operations to achieve strategic, operational, and tactical objectives.

At the strategic level command and control, the US determines national or multinational security objectives and guidance, and develops and uses national resources to accomplish these objectives. These national objectives in turn provide the direction for developing overall military objectives, which are used to develop the objectives and strategy for each theater.

At the operational level command and control, campaigns and major operations are planned, conducted, sustained, and assessed to accomplish strategic goals within theaters or areas of operations. These activities imply a broader dimension of time or space than do tactics; they provide the means by which tactical successes are exploited to achieve strategic and operational objectives.

Tactical Level Command and Control is where individual battles and engagements are fought. The tactical level of war deals with how forces are employed, and the specifics of how engagements are conducted and targets attacked. The goal of tactical level C2 is to achieve commander's intent and desired effects by gaining and keeping offensive initiative.

History

- *The National Security Act of 1947 was signed on 26 July 1947 by President Harry S Truman, which established the Department of the Air Force, but it was not until 18 September 1947, when the first secretary of the Air Force, W. Stuart Symington, was sworn into office that the Air Force was officially formed as an independent service branch.*

The U.S. War Department created the first antecedent of the U.S. Air Force, as a part of the U.S. Army, on 1 August 1907, which through a succession of changes of organization, titles, and missions advanced toward eventual independence 40 years later. In World War II, almost 68,000 U.S. airmen died helping to win the war, with only the infantry suffering

more casualties. In practice, the U.S. Army Air Forces (USAAF) was virtually independent of the Army during World War II, and in virtually all ways functioned as an independent service branch, but airmen still pressed for formal independence. The National Security Act of 1947 was signed on 26 July 1947 by President Harry S Truman, which established the Department of the Air Force, but it was not until 18 September 1947, when the first secretary of the Air Force, W. Stuart Symington, was sworn into office that the Air Force was officially formed as an independent service branch.

The act created the National Military Establishment (renamed Department of Defense in 1949), which was composed of three subordinate Military Departments, namely the Department of the Army, the Department of the Navy, and the newly created Department of the Air Force. Prior to 1947, the responsibility for military aviation was shared between the Army Air Forces and its predecessor organizations (for land-based operations), the Navy (for sea-based operations from aircraft carriers and amphibious aircraft), and the Marine Corps (for close air support of Marine Corps operations). The 1940s proved to be important for military aviation in other ways as well. In 1947, Air Force Captain Chuck Yeager broke the sound barrier in his X-1 rocket-powered aircraft, beginning a new era of aeronautics in America.

Antecedents

- *U.S. Army Air Forces (20 June 1941 to 18 September 1947)*
- *U.S. Army Air Corps (2 July 1926 to 20 June 1941) and*
- *U.S. Army Air Service (24 May 1918 to 2 July 1926)*
- *The predecessor organizations in the Army of today's Air Force are:*

The predecessor organizations in the Army of today's Air Force are:

Aeronautical Division, Signal Corps (1 August 1907 – 18 July 1914)

Aviation Section, Signal Corps (18 July 1914 – 20 May 1918)

Division of Military Aeronautics (20 May 1918 to 24 May 1918)

U.S. Army Air Service (24 May 1918 to 2 July 1926)

U.S. Army Air Corps (2 July 1926 to 20 June 1941) and

U.S. Army Air Forces (20 June 1941 to 18 September 1947)

21st century

- *Air Force intends to deploy a Sixth-generation jet fighter by the mid-2030s.*
- *To put more emphasis on nuclear assets, the USAF established the nuclear-focused Air Force Global Strike Command on 24 October 2008, which later assumed control of all USAF bomber aircraft.*

- *On 5 June 2008, Secretary of Defense Robert Gates accepted the resignations of both the Secretary of the Air Force, Michael Wynne, and the Chief of Staff of the Air Force, General T. Michael Moseley.*

During the early 2000s, the USAF fumbled several high-profile aircraft procurement projects, such as the missteps on the KC-X and F-35 program. As a result, the USAF aviation force is setting new records for average aircraft age and needs to replace its force of fighters, bombers, tankers, and airborne warning aircraft, a task made all the more difficult in an age of restrictive defense budgets.

Since 2005, the USAF has placed a strong focus on the improvement of Basic Military Training (BMT) for enlisted personnel. While the intense training has become longer, it also has shifted to include a deployment phase. This deployment phase, now called the BEAST, places the trainees in a simulated combat environment that they may experience once they deploy. While the trainees do tackle the massive obstacle courses along with the BEAST, the other portions include defending and protecting their base of operations, forming a structure of leadership, directing search and recovery, and basic self aid buddy care. During this event, the Military Training Instructors (MTI) act as mentors and opposing forces in a deployment exercise.

In 2007, the USAF undertook a Reduction-in-Force (RIF). Because of budget constraints, the USAF planned to reduce the service's size from 360,000 active duty personnel to 316,000. The size of the active duty force in 2007 was roughly 64% of that of what the USAF was at the end of the first Gulf War in 1991. However, the reduction was ended at approximately 330,000 personnel in 2008 in order to meet the demand signal of combatant commanders and associated mission requirements. These same constraints have seen a sharp reduction in flight hours for crew training since 2005 and the Deputy Chief of Staff for Manpower and Personnel directing Airmen's Time Assessments.

On 5 June 2008, Secretary of Defense Robert Gates accepted the resignations of both the Secretary of the Air Force, Michael Wynne, and the Chief of Staff of the Air Force, General T. Michael Moseley. In his decision to fire both men Gates cited "systemic issues associated with... declining Air Force nuclear mission focus and performance". Left unmentioned by Gates was that he had repeatedly clashed with Wynne and Moseley over other important non-nuclear related issues to the service. This followed an investigation into two embarrassing incidents involving mishandling of nuclear weapons: specifically a nuclear weapons incident aboard a B-52 flight between Minot AFB and Barksdale AFB, and an accidental shipment of nuclear weapons components to Taiwan. To put more emphasis on nuclear assets, the USAF established the nuclear-focused Air Force Global Strike Command on 24 October 2008, which later assumed control of all USAF bomber aircraft.

On 26 June 2009, the USAF released a force structure plan that cut fighter aircraft and shifted resources to better support nuclear, irregular and information warfare. On 23 July 2009, The USAF released their Unmanned Aerial System (UAS) Flight Plan, detailing Air Force UAS plans through 2047. One third of the planes that the USAF planned to buy in the

future were to be unmanned. According to Air Force Chief Scientist, Dr. Greg Zacharias, the USAF anticipates having hypersonic weapons by the 2020s, hypersonic RPAs by the 2030s and recoverable hypersonic RPAs aircraft by the 2040s. Air Force intends to deploy a Sixth-generation jet fighter by the mid-2030s.



The SR-71 Blackbird was a Cold War reconnaissance plane.



The F-117 Nighthawk was a stealth attack aircraft (retired from service in April 2008).

Conflicts

- *The United States Air Force has been involved in many wars, conflicts and operations using military air operations.*
- *World War I as Aviation Section, U.S. Signal Corps and United States Army Air Service*
- *World War II as United States Army Air Forces*

The United States Air Force has been involved in many wars, conflicts and operations using military air operations. The USAF possesses the lineage and heritage of its predecessor organizations, which played a pivotal role in U.S. military operations since 1907:

Mexican Expedition as Aviation Section, U.S. Signal Corps

World War I as Aviation Section, U.S. Signal Corps and United States Army Air Service

World War II as United States Army Air Forces

Cold War

Korean War

Vietnam War

Operation Eagle Claw (1980 Iranian hostage rescue)

Operation Urgent Fury (1983 US invasion of Grenada)

Operation El Dorado Canyon (1986 US Bombing of Libya)

Operation Just Cause (1989–1990 US invasion of Panama)

Operations Desert Shield and Desert Storm (1990–1991 Persian Gulf War)

Operation Southern Watch (1992–2003 Iraq no-fly zone)

Operation Deliberate Force (1995 NATO bombing in Bosnia and Herzegovina)

Operation Northern Watch (1997–2003 Iraq no-fly zone)

Operation Desert Fox (1998 bombing of Iraq)

Operation Allied Force (1999 NATO bombing of Yugoslavia)

Operation Enduring Freedom (2001–2014 Afghanistan War)

Operation Iraqi Freedom (2003–2010 Iraq War)

Operation New Dawn (2010–2011 Iraq War)

Operation Odyssey Dawn (2011 Libyan no-fly zone)

Operation Inherent Resolve (2014–present: intervention against the Islamic State of Iraq and the Levant)

Operation Freedom's Sentinel (2015–present Afghanistan War)

In addition since the USAF dwarfs all other U.S. and allied air components, it often provides support for allied forces in conflicts to which the United States is otherwise not involved, such as the 2013 French campaign in Mali.

Humanitarian operations

- *The USAF has also taken part in numerous humanitarian operations.*
- *Operations Babylift, New Life, Frequent Wind, and New Arrivals, 1975*

The USAF has also taken part in numerous humanitarian operations. Some of the more major ones include the following:

Berlin Airlift (Operation Vittles), 1948–1949

Operation Safe Haven, 1956–1957

Operations Babylift, New Life, Frequent Wind, and New Arrivals, 1975

Operation Provide Comfort, 1991

Operation Sea Angel, 1991

Operation Provide Hope, 1992–1993

Operation Provide Promise, 1992–1996

Operation Unified Assistance, December 2004 – April 2005

Operation Unified Response, 14 January 2010–present

Operation Tomodachi, 12 March 2011 – 1 May 2011

Organization

Administrative organization

- *The Department of the Air Force is one of three military departments within the Department of Defense, and is managed by the civilian Secretary of the Air Force, under the authority, direction, and control of the Secretary of Defense.*
- *The senior uniformed leadership in the Air Staff is made up of the Chief of Staff of the Air Force and the Vice Chief of Staff of the Air Force.*

The Department of the Air Force is one of three military departments within the Department of Defense, and is managed by the civilian Secretary of the Air Force, under the authority, direction, and control of the Secretary of Defense. The senior officials in the Office of the Secretary are the Under Secretary of the Air Force, four Assistant Secretaries of the Air Force and the General Counsel, all of whom are appointed by the President with the advice and consent of the Senate. The senior uniformed leadership in the Air Staff is made up of the Chief of Staff of the Air Force and the Vice Chief of Staff of the Air Force.

The directly subordinate commands and units are named Field Operating Agency (FOA), Direct Reporting Unit (DRU), and the currently unused Separate Operating Agency.

The Major Command (MAJCOM) is the superior hierarchical level of command. Including the Air Force Reserve Command, as of 30 September 2006, USAF has ten major commands. The Numbered Air Force (NAF) is a level of command directly under the MAJCOM, followed by Operational Command (now unused), Air Division (also now unused), Wing, Group, Squadron, and Flight.

Air Force structure and organization

- *The USAF, including its Air Reserve Component (e.g., Air Force Reserve + Air National Guard), possesses a total of 302 flying squadrons.*
- *Headquarters, United States Air Force (HQAf):*
- *The major components of the U.S. Air Force, as of 28 August 2015, are the following:*
- *Air Force Reserve Command*
35 flying wings, one space wing

four flying groups
67 flying squadrons, six space squadrons

Headquarters, United States Air Force (HQAF):

The major components of the U.S. Air Force, as of 28 August 2015, are the following:

Active duty forces

57 flying wings, eight space wings, and 55 non-flying wings

nine flying groups, eight non-flying groups

134 flying squadrons, 43 space squadrons

Air Force Reserve Command

35 flying wings, one space wing

four flying groups

67 flying squadrons, six space squadrons

Air National Guard

87 flying wings

101 flying squadrons, four space squadrons

Civil Air Patrol

eight regional commands and 52 wings

The USAF, including its Air Reserve Component (e.g., Air Force Reserve + Air National Guard), possesses a total of 302 flying squadrons.

Operational organization

- *When required to support operational missions, the Secretary of Defense (SECDEF) directs the Secretary of the Air Force (SECAF) to execute a Change in Operational Control (CHOP) of these units from their administrative alignment to the operational command of a Regional Combatant commander (CCDR).*

The organizational structure as shown above is responsible for the peacetime organization, equipping, and training of aerospace units for operational missions. When required to support operational missions, the Secretary of Defense (SECDEF) directs the Secretary of the Air Force (SECAF) to execute a Change in Operational Control (CHOP) of these units from their administrative alignment to the operational command of a Regional Combatant commander (CCDR). In the case of AFSPC, AFSOC, PACAF, and USAFE units, forces are normally employed in-place under their existing CCDR. Likewise, AMC forces operating in support roles retain their componentcy to USTRANSCOM unless chopped to a Regional CCDR.

Air and Space Expeditionary Task Force

- *Each C-NAF consists of a Commander, Air Force Forces (COMAFFOR) and AFFOR/A-staff, and an Air Operations Center (AOC).*
- *If the Air Force possesses the preponderance of air forces in a JFC's area of operations, the COMAFFOR will also serve as the Joint Forces Air Component Commander (JFACC).*
- *The AETF is the Air Force presentation of forces to a CCDR for the employment of Air Power.*

"Chopped" units are referred to as forces. The top-level structure of these forces is the Air and Space Expeditionary Task Force (AETF). The AETF is the Air Force presentation of forces to a CCDR for the employment of Air Power. Each CCDR is supported by a standing Component Numbered Air Force (C-NAF) to provide planning and execution of aerospace forces in support of CCDR requirements. Each C-NAF consists of a Commander, Air Force Forces (COMAFFOR) and AFFOR/A-staff, and an Air Operations Center (AOC). As needed to support multiple Joint Force Commanders (JFC) in the CCMD's Area of Responsibility (AOR), the C-NAF may deploy Air Component Coordinate Elements (ACCE) to liaise with the JFC. If the Air Force possesses the preponderance of air forces in a JFC's area of operations, the COMAFFOR will also serve as the Joint Forces Air Component Commander (JFACC).

Commander, Air Force Forces

- *The Commander, Air Force Forces (COMAFFOR) is the senior USAF officer responsible for the employment of air power in support of JFC objectives.*

The Commander, Air Force Forces (COMAFFOR) is the senior USAF officer responsible for the employment of air power in support of JFC objectives. The COMAFFOR has a special staff and an A-Staff to ensure assigned or attached forces are properly organized, equipped, and trained to support the operational mission.

Air Operations Center

- *Several AOCs have been established throughout the Air Force worldwide.*
- *The Air Operations Center (AOC) is the JFACC's Command and Control (C2) center.*
- *These centers are responsible for planning and executing air power missions in support of JFC objectives.*

The Air Operations Center (AOC) is the JFACC's Command and Control (C2) center. Several AOCs have been established throughout the Air Force worldwide. These centers are responsible for planning and executing air power missions in support of JFC objectives.

Air Expeditionary Wings/Groups/Squadrons

- *These units are responsible for receiving combat forces from Air Force MAJCOMs, preparing these forces for operational missions, launching and recovering these forces, and eventually returning forces to the MAJCOMs.*
- *The AETF generates air power to support CCMD objectives from Air Expeditionary Wings (AEW) or Air Expeditionary Groups (AEG).*

The AETF generates air power to support CCMD objectives from Air Expeditionary Wings (AEW) or Air Expeditionary Groups (AEG). These units are responsible for receiving combat forces from Air Force MAJCOMs, preparing these forces for operational missions, launching and recovering these forces, and eventually returning forces to the MAJCOMs. Theater Air Control Systems control employment of forces during these missions.

Personnel

- *Second Air Force, a part of Air Education and Training Command, is responsible for nearly all enlisted technical training.*
- *General of the Air Force Henry "Hap" Arnold is the only individual in the history of the US Air Force to attain the rank of five-star general.*
- *The classification of any USAF job for officers or enlisted airmen is the Air Force Specialty Code (AFSC).*

The classification of any USAF job for officers or enlisted airmen is the Air Force Specialty Code (AFSC).

AFSCs range from officer specialties such as pilot, combat systems officer, space operations, special tactics, nuclear and missile operations, intelligence, cyberspace operations, judge advocate general (JAG), medical doctor, nurse or other fields, to various enlisted specialties. The latter range from flight combat operations such as loadmaster, to working in a dining facility to ensure that Airmen are properly fed. There are additional occupational fields such as computer specialties, mechanic specialties, enlisted aircrew, communication systems, cyberspace operations, avionics technicians, medical specialties, civil engineering, public affairs, hospitality, law, drug counseling, mail operations, security forces, and search and rescue specialties.

Beyond combat flight crew personnel, other combat USAF AFSCs are Special Tactics Officer, Explosive Ordnance Disposal (EOD), Combat Rescue Officer, Pararescue, Security Forces, Combat Control, Combat Weather, Tactical Air Control Party, Special Operations Weather Technician, and AFOSI agents.

Nearly all enlisted career fields are "entry level", meaning that the USAF provides all training. Some enlistees are able to choose a particular field, or at least a field before actually joining, while others are assigned an AFSC at Basic Military Training (BMT). After BMT, new enlisted airmen attend a technical training school where they learn their

particular AFSC. Second Air Force, a part of Air Education and Training Command, is responsible for nearly all enlisted technical training.

Training programs vary in length; for example, 3M0X1 (Services) has 31 days of tech school training, while 3E8X1 (Explosive Ordnance Disposal) is one year of training with a preliminary school and a main school consisting of over 10 separate divisions, sometimes taking students close to two years to complete. Officer technical training conducted by Second Air Force can also vary by AFSC, while flight training for aeronautically-rated officers conducted by AETC's Nineteenth Air Force can last well in excess of one year.

USAF rank is divided between enlisted airmen, non-commissioned officers, and commissioned officers, and ranges from the enlisted Airman Basic (E-1) to the commissioned officer rank of General (O-10), however in times of war officers may be appointed to the higher grade of General of the Air Force. Enlisted promotions are granted based on a combination of test scores, years of experience, and selection board approval while officer promotions are based on time-in-grade and a promotion selection board. Promotions among enlisted personnel and non-commissioned officers are generally designated by increasing numbers of insignia chevrons. Commissioned officer rank is designated by bars, oak leaves, a silver eagle, and anywhere from one to five stars. General of the Air Force Henry "Hap" Arnold is the only individual in the history of the US Air Force to attain the rank of five-star general.

Commissioned officers

- *During the board process an officer's record is reviewed by a selection board at the Air Force Personnel Center at Randolph Air Force Base in San Antonio, Texas.*
- *Air Force officer promotions are governed by the Defense Officer Personnel Management Act of 1980 and its companion Reserve Officer Personnel Management Act (ROPMA) for officers in the Air Force Reserve and the Air National Guard.*

The commissioned officer ranks of the USAF are divided into three categories: company grade officers, field grade officers, and general officers. Company grade officers are those officers in pay grades O-1 to O-3, while field grade officers are those in pay grades O-4 to O-6, and general officers are those in pay grades of O-7 and above.

Air Force officer promotions are governed by the Defense Officer Personnel Management Act of 1980 and its companion Reserve Officer Personnel Management Act (ROPMA) for officers in the Air Force Reserve and the Air National Guard. DOPMA also establishes limits on the number of officers that can serve at any given time in the Air Force. Currently, promotion from second lieutenant to first lieutenant is virtually guaranteed after two years of satisfactory service. The promotion from first lieutenant to captain is competitive after successfully completing another two years of service, with a selection rate varying between 99% and 100%. Promotion to major through major general is through a formal selection board process, while promotions to lieutenant general and general are contingent upon nomination to specific general officer positions and subject to U.S. Senate approval.

During the board process an officer's record is reviewed by a selection board at the Air Force Personnel Center at Randolph Air Force Base in San Antonio, Texas. At the 10 to 11-year mark, captains will take part in a selection board to major. If not selected, they will meet a follow-on board to determine if they will be allowed to remain in the Air Force. Promotion from major to lieutenant colonel is similar and occurs approximately between the thirteen year (for officers who were promoted to major early "below the zone") and the fifteen year mark, where a certain percentage of majors will be selected below zone (i.e., "early"), in zone (i.e., "on time") or above zone (i.e., "late") for promotion to lieutenant colonel. This process will repeat at the 16-year mark (for officers previously promoted early to major and lieutenant colonel) to the 21-year mark for promotion to full colonel.

The Air Force has the largest ratio of general officers to total strength of all of the U.S. Armed Forces and this ratio has continued to increase even as the force has shrunk from its Cold War highs.

Warrant officers

- *The Air Force inherited warrant officer ranks from the Army at its inception in 1947.*
- *Although provision is made in Title 10 of the United States Code for the Secretary of the Air Force to appoint warrant officers, the Air Force does not currently use warrant officer grades, and is the only one of the U.S. Armed Services not to do so.*

Although provision is made in Title 10 of the United States Code for the Secretary of the Air Force to appoint warrant officers, the Air Force does not currently use warrant officer grades, and is the only one of the U.S. Armed Services not to do so. The Air Force inherited warrant officer ranks from the Army at its inception in 1947. The Air Force stopped appointing warrant officers in 1959, the same year the first promotions were made to the new top enlisted grade, Chief Master Sergeant. Most of the existing Air Force warrant officers entered the commissioned officer ranks during the 1960s, but small numbers continued to exist in the warrant officer grades for the next 21 years.

The last active duty Air Force warrant officer, CWO4 James H. Long, retired in 1980 and the last Air Force Reserve warrant officer, CWO4 Bob Barrow, retired in 1992. Upon his retirement, he was honorarily promoted to CWO5, the only person in the Air Force ever to hold this grade. Since Barrow's retirement, the Air Force warrant officer ranks, while still authorized by law, are not used.



Pararescuemen and a simulated "survivor" watch as an HH-60G Pave Hawk helicopter comes in for a landing.

Enlisted airmen

- *The Air Force mirrored the Army from 1976 to 1991 with an E-4 being either a Senior Airman wearing three stripes without a star or a Sergeant (referred to as "Buck Sergeant"), which was noted by the presence of the central star and considered an NCO.*

Enlisted Airmen have pay grades from E-1 (entry level) to E-9 (senior enlisted). While all USAF personnel, enlisted and officer, are referred to as Airmen, in the same manner that all Army personnel, enlisted and officer, are referred to as Soldiers, the term also refers to the pay grades of E-1 through E-4, which are below the level of non-commissioned officers (NCOs). Above the pay grade of E-4 (i.e., pay grades E-5 through E-9) all ranks fall into the category of NCO and are further subdivided into "NCOs" (pay grades E-5 and E-6) and "Senior NCOs" (pay grades E-7 through E-9); the term "Junior NCO" is sometimes used to refer to staff sergeants and technical sergeants (pay grades E-5 and E-6).

The USAF is the only branch of the U.S. military where NCO status is achieved when an enlisted person reaches the pay grade of E-5. In all other branches, NCO status is generally achieved at the pay grade of E-4 (e.g., a Corporal in the Army and Marine Corps, Petty Officer Third Class in the Navy and Coast Guard). The Air Force mirrored the Army from 1976 to 1991 with an E-4 being either a Senior Airman wearing three stripes without a star or a Sergeant (referred to as "Buck Sergeant"), which was noted by the presence of the

central star and considered an NCO. Despite not being an NCO, a Senior Airman who has completed Airman Leadership School can be a supervisor according to the AFI 36-2618.

Uniforms

- *Airmen who are assigned to Air Force Special Operations Command, deployed to Air Forces Central Command AOR, certain Global Strike Command Security Forces, and other Air Force ground combat forces wear the Airman Combat Uniform (ACU) in the Operational Camouflage Pattern.*
- *The Air Force will replace the ABU with the OCP uniform, starting on 1 October 2018.*

The first USAF dress uniform, in 1947, was dubbed and patented "Uxbridge Blue" after "Uxbridge 1683 Blue", developed at the former Bachman-Uxbridge Worsted Company. The current Service Dress Uniform, which was adopted in 1994, consists of a three-button, pocketless coat, with silver "U.S." pins on the lapels for officers or with a silver ring surrounding on those of enlisted Airmen, matching trousers, and either a service cap or flight cap, all in Shade 1620, "Air Force Blue" (a darker purplish-blue). This is worn with a light blue shirt (Shade 1550) and Shade 1620 herringbone patterned necktie. Enlisted Airmen wear sleeve rank on both the jacket and shirt, while officers wear metal rank insignia pinned onto the epaulet loops on the coat, and Air Force Blue slide-on epaulet loops on the shirt. USAF personnel assigned to Base Honor Guard duties wear, for certain occasions, a modified version of the standard service dress uniform, but with silver trim on the sleeves and trousers, with the addition of a ceremonial belt (if necessary), service cap with silver trim and Hap Arnold Device, and a silver aiguillette placed on the left shoulder seam and all devices and accoutrement.

The Airman Battle Uniform (ABU) became the sole authorized combat and utility uniform (except the flight duty uniform for aviation and missile airmen) of the USAF on 1 November 2011. The ABU replaced the Battle Dress Uniform (BDU) previously worn by all U.S. military forces. Airmen who are assigned to Air Force Special Operations Command, deployed to Air Forces Central Command AOR, certain Global Strike Command Security Forces, and other Air Force ground combat forces wear the Airman Combat Uniform (ACU) in the Operational Camouflage Pattern. The Air Force will replace the ABU with the OCP uniform, starting on 1 October 2018.

Awards and badges

- *In addition to basic uniform clothing, various badges are used by the USAF to indicate a billet assignment or qualification-level for a given assignment.*

In addition to basic uniform clothing, various badges are used by the USAF to indicate a billet assignment or qualification-level for a given assignment. Badges can also be used as merit-based or service-based awards. Over time, various badges have been discontinued and are no longer distributed.

Training

- *OTS, located at Maxwell Air Force Base in Montgomery, Alabama since 1993, in turn encompasses two separate commissioning programs: Basic Officer Training (BOT), which is for officer candidates for the Regular Air Force and the Air Force Reserve; and the Academy of Military Science (AMS), which is for officer candidates of the Air National Guard.*
- *Officers may be commissioned upon graduation from the United States Air Force Academy, upon graduation from another college or university through the Air Force Reserve Officer Training Corps (AFROTC) program, or through the Air Force Officer Training School (OTS).*

All enlisted Airmen attend Basic Military Training (BMT) at Lackland Air Force Base in San Antonio, Texas for 8 1/2 weeks. Individuals who have prior service of over 24 months of active duty in the other service branches who seek to enlist in the Air Force must go through a 10-day Air Force familiarization course rather than enlisted BMT, however prior service opportunities are severely limited.

Officers may be commissioned upon graduation from the United States Air Force Academy, upon graduation from another college or university through the Air Force Reserve Officer Training Corps (AFROTC) program, or through the Air Force Officer Training School (OTS). OTS, located at Maxwell Air Force Base in Montgomery, Alabama since 1993, in turn encompasses two separate commissioning programs: Basic Officer Training (BOT), which is for officer candidates for the Regular Air Force and the Air Force Reserve; and the Academy of Military Science (AMS), which is for officer candidates of the Air National Guard.

The Air Force also provides Commissioned Officer Training (COT) for officers of all three components who are direct-commissioned into medicine, law, religion, biological sciences, or healthcare administration. COT is fully integrated into the OTS program and today encompasses extensive coursework as well as field exercises in leadership, confidence, fitness, and deployed-environment operations.



USAF Airmen training at Lackland AFB

Air Force Fitness Test

- *The US Air Force Fitness Test (AFFT) is designed to test the abdominal circumference, muscular strength/endurance and cardiovascular respiratory fitness of airmen in the USAF.*

The US Air Force Fitness Test (AFFT) is designed to test the abdominal circumference, muscular strength/endurance and cardiovascular respiratory fitness of airmen in the USAF. As part of the Fit to Fight program, the USAF adopted a more stringent physical fitness assessment; the new fitness program was put into effect on 1 June 2010. The annual ergo-cycle test which the USAF had used for several years had been replaced in 2004. In the AFFT, Airmen are given a score based on performance consisting of four components: waist circumference, the sit-up, the push-up, and a 1.5-mile (2.4 km) run. Airmen can potentially earn a score of 100, with the run counting as 60%, waist circumference as 20%, and both strength test counting as 10% each. A passing score is 75 points. Effective 1 July 2010, the AFFT is administered by the base Fitness Assessment Cell (FAC), and is required twice a year. Personnel may test once a year if he or she earns a score above a 90%. Additionally, only meeting the minimum standards on each one of these tests will not get you a passing score of 75%, and failing any one component will result in a failure for the entire test.

Aircraft inventory

- *Until 1962, the Army and Air Force maintained one system of aircraft naming, while the U.S. Navy maintained a separate system.*
- *The U.S. Air Force has over 5,638 aircraft in service as of September 2012.*
- *The various aircraft of the Air Force include:*

The U.S. Air Force has over 5,638 aircraft in service as of September 2012. Until 1962, the Army and Air Force maintained one system of aircraft naming, while the U.S. Navy maintained a separate system. In 1962, these were unified into a single system heavily reflecting the Army/Air Force method. For more complete information on the workings of this system, refer to United States Department of Defense aerospace vehicle designation. The various aircraft of the Air Force include:



A-10 Thunderbolt II ground-attack aircraft

A – Attack

- *Current USAF attack aircraft are operated by Air Combat Command, Pacific Air Forces, and Air Force Special Operations Command.*
- *The Air Force is currently running the OA-X experiment, with the intent to procure an off-the-shelf light attack aircraft.*

The attack aircraft of the USAF are designed to attack targets on the ground and are often deployed as close air support for, and in proximity to, U.S. ground forces. The proximity to friendly forces require precision strikes from these aircraft that are not always possible with bomber aircraft. Their role is tactical rather than strategic, operating at the front of the

battle rather than against targets deeper in the enemy's rear. The Air Force is currently running the OA-X experiment, with the intent to procure an off-the-shelf light attack aircraft. Current USAF attack aircraft are operated by Air Combat Command, Pacific Air Forces, and Air Force Special Operations Command.

A-10C Thunderbolt II

AC-130J Ghost Rider

AC-130U Spooky II

AC-130W Stinger II



B-2 Spirit stealth bomber

B – Bombers

- *US Air Force bombers are strategic weapons, primarily used for long range strike missions with either conventional or nuclear ordinance.*
- *All Air Force bombers are under Global Strike Command.*

US Air Force bombers are strategic weapons, primarily used for long range strike missions with either conventional or nuclear ordinance. Traditionally used for attacking strategic targets, today many bombers are also used in the tactical mission, such as providing close air support for ground forces and tactical interdiction missions. All Air Force bombers are under Global Strike Command.

The service's B-2A aircraft entered service in the 1990s, its B-1B aircraft in the 1980s and its current B-52H aircraft in the early 1960s. The B-52 Stratofortress airframe design is over

60 years old and the B-52H aircraft currently in the active inventory were all built between 1960 and 1962. The B-52H is scheduled to remain in service for another 30 years, which would keep the airframe in service for nearly 90 years, an unprecedented length of service for any aircraft. The B-21 is projected to replace the B-52 and parts of the B-1B force by the mid-2020s.

B-1B Lancer

B-2A Spirit

B-52H Stratofortress



C-17 Globemaster III, the USAF's newest and most versatile transport plane

C – Transport

- *Transport aircraft are operated by Air Mobility Command, Air Force Special Operations Command, and United States Air Forces in Europe – Air Forces Africa.*
- *Although most of the US Air Force's cargo aircraft were specially designed with the Air Force in mind, some aircraft such as the C-12 Huron (Beechcraft Super King Air) and C-146 (Dornier 328) are militarized conversions of existing civilian aircraft.*
- *The CV-22 is used by the Air Force for special operations.*

Transport aircraft are typically used to deliver troops, weapons and other military equipment by a variety of methods to any area of military operations around the world,

usually outside of the commercial flight routes in uncontrolled airspace. The workhorses of the USAF airlift forces are the C-130 Hercules, C-17 Globemaster III, and C-5 Galaxy. The CV-22 is used by the Air Force for special operations. It conducts long-range, special operations missions, and is equipped with extra fuel tanks and terrain-following radar. Some aircraft serve specialized transportation roles such as executive/embassy support (C-12), Antarctic Support (LC-130H), and AFSOC support (C-27J, C-145A, and C-146A). Although most of the US Air Force's cargo aircraft were specially designed with the Air Force in mind, some aircraft such as the C-12 Huron (Beechcraft Super King Air) and C-146 (Dornier 328) are militarized conversions of existing civilian aircraft. Transport aircraft are operated by Air Mobility Command, Air Force Special Operations Command, and United States Air Forces in Europe – Air Forces Africa.

C-5B, C-5C and C-5M Galaxy

C-12C, C-12D, C-12F and C-12J Huron

C-17A Globemaster III

C-27J Spartan

C-130H, LC-130H, and WC-130H Hercules

C-130J and C-130J-30 Super Hercules

C-144

C-145A Skytruck

C-146A Wolfhound

CV-22B Osprey



E-3 Sentry airborne warning and control system

E – Special Electronic

- *Electronic warfare aircraft are used to keep airspaces friendly, and send critical information to anyone who needs it.*
- *The roles of the aircraft vary greatly among the different variants to include Electronic Warfare/Jamming (EC-130H), Psychological Operations/Communications (EC-130J), Airborne Early Warning and Control (E-3), Airborne Command Post (E-4B), ground targeting radar (E-8C), range control (E-9A), and communications relay (E-11A, EQ-4B).*

The purpose of electronic warfare is to deny the opponent an advantage in the EMS and ensure friendly, unimpeded access to the EM spectrum portion of the information environment. Electronic warfare aircraft are used to keep airspaces friendly, and send critical information to anyone who needs it. They are often called "The Eye in the Sky". The roles of the aircraft vary greatly among the different variants to include Electronic Warfare/Jamming (EC-130H), Psychological Operations/Communications (EC-130J), Airborne Early Warning and Control (E-3), Airborne Command Post (E-4B), ground targeting radar (E-8C), range control (E-9A), and communications relay (E-11A, EQ-4B).

E-3B, E-3C and E-3G Sentry

E-4B "Nightwatch"

E-8C JSTARS

E-9A Widget

E-11A

EC-130H Compass Call

EC-130J Commando Solo

EQ-4B Global Hawk

F – Fighter

- *The F-16 is currently used by the USAF Air Demonstration squadron, the Thunderbirds, while a small number of both man-rated and non-man-rated F-4 Phantom II are retained as QF-4 aircraft for use as Full Scale Aerial Targets (FSAT) or as part of the USAF Heritage Flight program.*
- *The fighter aircraft of the USAF are small, fast, and maneuverable military aircraft primarily used for air-to-air combat.*

The fighter aircraft of the USAF are small, fast, and maneuverable military aircraft primarily used for air-to-air combat. Many of these fighters have secondary ground-attack capabilities, and some are dual-ruled as fighter-bombers (e.g., the F-16 Fighting Falcon); the term "fighter" is also sometimes used colloquially for dedicated ground-attack aircraft, such as the F-117 Nighthawk. Other missions include interception of bombers and other fighters, reconnaissance, and patrol. The F-16 is currently used by the USAF Air Demonstration squadron, the Thunderbirds, while a small number of both man-rated and non-man-rated F-4 Phantom II are retained as QF-4 aircraft for use as Full Scale Aerial Targets (FSAT) or as part of the USAF Heritage Flight program. These extant QF-4 aircraft are being replaced in the FSAT role by early model F-16 aircraft converted to QF-16 configuration. The USAF has 2,025 fighters in service as of September 2012.

F-15C and F-15D Eagle

F-15E Strike Eagle

F-16C and F-16D Fighting Falcon

F-22A Raptor

F-35A Lightning II

H – Search and rescue

- *HH-60U are replacement aircraft for "G" models that have been lost in combat operations or accidents.*
- *The HC-130N/P aircraft are being replaced by newer HC-130J models.*
- *These aircraft are used for search and rescue and combat search and rescue on land or sea.*

These aircraft are used for search and rescue and combat search and rescue on land or sea. The HC-130N/P aircraft are being replaced by newer HC-130J models. HH-60U are replacement aircraft for "G" models that have been lost in combat operations or accidents. New HH-60W helicopters are under development to replace both the "G" and "U" model Pave Hawks.

HC-130N and HC-130P Combat King

HC-130J Combat King II

HH-60G and HH-60U Pave Hawk



KC-10 Extender tri-jet air-to-air tanker

K – Tanker

- *This makes these aircraft an essential part of the Air Force's global mobility and the U.S. force projection.*

The USAF's KC-135 and KC-10 aerial refueling aircraft are based on civilian jets. The USAF aircraft are equipped primarily for providing the fuel via a tail-mounted refueling boom, and can be equipped with "probe and drogue" refueling systems. Air-to-air refueling is extensively used in large-scale operations and also used in normal operations; fighters, bombers, and cargo aircraft rely heavily on the lesser-known "tanker" aircraft. This makes these aircraft an essential part of the Air Force's global mobility and the U.S. force projection. The KC-46A Pegasus began to be delivered to USAF units starting in 2019.

KC-10A Extender

Boeing KC-46A Pegasus

KC-135R and KC-135T Stratotanker



MC-12W Liberty at Beale AFB



MQ-9 unmanned aerial vehicle

M – Multi-mission

- *Specialized multi-mission aircraft provide support for global special operations missions.*
- *The MC-130J is currently being fielded to replace "H" and "P" models used by U.S. Special Operations Command.*

Specialized multi-mission aircraft provide support for global special operations missions. These aircraft conduct infiltration, exfiltration, resupply, and refueling for SOF teams from improvised or otherwise short runways. The MC-130J is currently being fielded to replace "H" and "P" models used by U.S. Special Operations Command. The MC-12W is used in the Intelligence, Surveillance, and Reconnaissance (ISR) role.

Initial generations of RPAs were primarily surveillance aircraft, but some were fitted with weaponry (such as the MQ-1 Predator, which used AGM-114 Hellfire air-to-ground missiles). An armed RPA is known as an unmanned combat aerial vehicle (UCAV).

MC-12W Liberty

MC-130H Combat Talon II

MC-130J Commando II

MC-130P Combat Shadow

MQ-1B Predator

MQ-9B Reaper

O – Observation

- *These aircraft are modified to observe (through visual or other means) and report tactical information concerning composition and disposition of forces.*

These aircraft are modified to observe (through visual or other means) and report tactical information concerning composition and disposition of forces. The OC-135 is specifically designed to support the Treaty on Open Skies by observing bases and operations of party members under the 2002 signed treaty.

OC-135B Open Skies



Lockheed U-2 spy plane

R – Reconnaissance

- *The reconnaissance aircraft of the USAF are used for monitoring enemy activity, originally carrying no armament.*
- *Although the U-2 is designated as a 'utility' aircraft, it is a reconnaissance platform.*
- *Several unmanned remotely controlled reconnaissance aircraft (RPAs), have been developed and deployed.*

The reconnaissance aircraft of the USAF are used for monitoring enemy activity, originally carrying no armament. Although the U-2 is designated as a 'utility' aircraft, it is a reconnaissance platform. The roles of the aircraft vary greatly among the different variants to include general monitoring (RC-26B), Ballistic missile monitoring (RC-135S), Electronic Intelligence gathering (RC-135U), Signal Intelligence gathering (RC-135V/W), and high altitude surveillance (U-2)

Several unmanned remotely controlled reconnaissance aircraft (RPAs), have been developed and deployed. Recently, the RPAs have been seen to offer the possibility of cheaper, more capable fighting machines that can be used without risk to aircrews.

RC-26B

RC-135S Cobra Ball

RC-135U Combat Sent

RC-135V and RC-135W Rivet Joint

RQ-4B Global Hawk

RQ-11 Raven

RQ-170 Sentinel

U-2S "Dragon Lady"

T – Trainer

- *The Air Force's trainer aircraft are used to train pilots, combat systems officers, and other aircrew in their duties.*

The Air Force's trainer aircraft are used to train pilots, combat systems officers, and other aircrew in their duties.

T-1A Jayhawk

T-6A Texan II

T-38A, T-38B, T-38C, and AT-38B Talon

TG – Trainer gliders

- *Several gliders are used by the USAF, primarily used for cadet flying training at the U.S. Air Force Academy.*

Several gliders are used by the USAF, primarily used for cadet flying training at the U.S. Air Force Academy.

TG-15A

TG-15B

TG-16

U – Utility

- *These aircraft are all around use aircraft.*

Utility aircraft are used basically for what they are needed for at the time. For example, a Huey may be used to transport personnel around a large base or launch site, while it can also be used for evacuation. These aircraft are all around use aircraft.

U-28A

UH-1N Iroquois

UV-18B Twin Otter



VC-25A (Air Force One)

V – VIP staff transport

- VC-25A (two used as Air Force One)

These aircraft are used for the transportation of Very Important Persons (VIPs). Notable people include the President, Vice President, Cabinet secretaries, government officials (e.g., senators and representatives), the Joint Chiefs of Staff, and other key personnel.

VC-25A (two used as Air Force One)

C-20A, C20B, C20C, C-20G and C20H

C-21A Learjet

C-32A and C-32B

C-37A and C-37B

C-38A Courier

C-40B and C-40C



A WC-130J Hercules from the 53rd Weather Reconnaissance Squadron

W – Weather reconnaissance

- *These aircraft are used to study meteorological events such as hurricanes and typhoons.*

These aircraft are used to study meteorological events such as hurricanes and typhoons.

WC-130J Hurricane Hunter

WC-135C and WC-135W Constant Phoenix



An unarmed Minuteman III ICBM shoots out of the silo during an operational test launch

Undesignated foreign aircraft

- *CN-235-100 (427th Special Operations Squadron)*

CN-235-100 (427th Special Operations Squadron)

LGM – Ballistic missile

- *LGM-30G Minuteman III Intercontinental Ballistic Missile*

LGM-30G Minuteman III Intercontinental Ballistic Missile

Culture

- *In response to the 2007 United States Air Force nuclear weapons incident, Secretary of Defense Robert Gates accepted in June 2009 the resignations of Secretary of the Air Force Michael Wynne and the Chief of Staff of the Air Force General T. Michael Moseley.*
- *Many of the U.S. Air Force's formal and informal traditions are an amalgamation of those taken from the Royal Air Force (e.g., dining-ins/mess nights) or the experiences of its predecessor organizations such as the U.S. Army Air Service, U.S. Army Air Corps and the U.S. Army Air Forces.*

The culture of the United States Air Force is primarily driven by pilots and so the pilots of various aircraft types have driven its priorities over the years. At first there was a focus on bombers (driven originally by the Bomber Mafia), followed by a focus on fighters (Fighter Mafia and following).

In response to the 2007 United States Air Force nuclear weapons incident, Secretary of Defense Robert Gates accepted in June 2009 the resignations of Secretary of the Air Force Michael Wynne and the Chief of Staff of the Air Force General T. Michael Moseley. Moseley's successor, General Norton A. Schwartz, a former airlift and special operations pilot was the first officer appointed to that position who did not have a background as a fighter or bomber pilot. The Washington Post reported in 2010 that General Schwartz began to dismantle the rigid class system of the USAF, particularly in the officer corps.

In 2014, following morale and testing/cheating scandals in the Air Force's missile launch officer community, Secretary of the Air Force Deborah Lee James admitted that there remained a "systemic problem" in the USAF's management of the nuclear mission.

Daniel L. Magruder, Jr defines USAF culture as a combination of the rigorous application of advanced technology, individualism and progressive airpower theory. Major General Charles J. Dunlap, Jr. adds that the U.S. Air Force's culture also includes an egalitarianism bred from officers perceiving themselves as their service's principal "warriors" working with small groups of enlisted airmen either as the service crew or the onboard crew of their aircraft. Air Force officers have never felt they needed the formal social "distance" from their enlisted force that is common in the other U.S. armed services. Although the paradigm is changing, for most of its history, the Air Force, completely unlike its sister services, has been an organization in which mostly its officers fought, not its enlisted force, the latter being primarily a rear echelon support force. When the enlisted force did go into harm's way, such as crew members of multi-crewed aircraft, the close comradeship of shared risk in tight quarters created traditions that shaped a somewhat different kind of officer/enlisted relationship than exists elsewhere in the military.

Cultural and career issues in the U.S. Air Force have been cited as one of the reasons for the shortfall in needed UAV operators. In spite of an urgent need for UAVs or drones to provide round the clock coverage for American troops during the Iraq War, the USAF did not establish a new career field for piloting them until the last year of that war and in 2014 changed its RPA training syllabus again, in the face of large aircraft losses in training, and in

response to a GAO report critical of handling of drone programs. Paul Scharre has reported that the cultural divide between the USAF and US Army has kept both services from adopting each other's drone handling innovations.

Many of the U.S. Air Force's formal and informal traditions are an amalgamation of those taken from the Royal Air Force (e.g., dining-ins/mess nights) or the experiences of its predecessor organizations such as the U.S. Army Air Service, U.S. Army Air Corps and the U.S. Army Air Forces. Some of these traditions range from "Friday Name Tags" in flying units to an annual "Mustache Month". The use of "challenge coins" dates back to World War I when a member of one of the aero squadrons bought his entire unit medallions with their emblem, while another cultural tradition unique to the Air Force is the "roof stomp", practiced by Airmen to welcome a new commander or to commemorate another event, such as a retirement.

See also

References

External links

Official

- *Air Force Live official blog*
- *Air Force Blue Tube page on youtube.com*

Official USAF site

Official USAF Recruiting site

Air Force Blue Tube page on youtube.com

Air Force Live official blog

Other

- *National Commission on the Structure of the Air Force: Report to the President and the Congress of the United States*
- *Searchable database of Air Force historical reports*
- *Members of the US Air Force on RallyPoint*
- *Works by or about United States Air Force at Internet Archive*

Searchable database of Air Force historical reports

USAF emblems

USAF Communications Troops

Members of the US Air Force on RallyPoint

Aircraft Investment Plan, Fiscal Years (FY) 2011–2040, Submitted with the FY 2011 Budget

National Commission on the Structure of the Air Force: Report to the President and the Congress of the United States

Works by or about United States Air Force at Internet Archive